UNIVERSAL REGISTRATION DOCUMENT 2023

Including annual financial report

ENGIE

SUMMARY

***Information disclosed in the Annual Financial Report is indicated in the contents by the pictogram* AFR**

On cover: The Hazelwood Battery Energy Storage System was commissioned in July 2023 on the site of a former coal-fired power station and mine, and showcases ENGIE's growing BESS activities. The BESS and surrounding rehabilitation project demonstrates the Group's commitment to retire from coal-based electricity production and repurpose these sites for new energy technologies. The rehabilitation of the mine void (at the centre of picture) will deliver a safe, stable, sustainable and non-polluting site that enables productive future uses. More infos on www.hazelwoodrehabilitation.com.au

Universal registration document 2023

INCLUDING ANNUAL FINANCIAL REPORT

This Universal Registration Document was filed on March 7, 2024, with the AMF (n° D.24-0085), in its capacity as competent authority under Regulation (EU) 2017/1129, without prior approval pursuant to Article 9 of the aforementioned regulation. The Universal Registration Document may be used for the purposes of a public offering of securities or admission of securities to trading on a regulated market if it is supplemented by a prospectus and, if applicable, a summary of any amendments to the Universal Registration Document. This package of documents is approved by the AMF in accordance with Regulation (EU) 2017/1129.

This is a translation into English of the Universal Registration Document original report issued in French and it is available on www.engie.com. This translation is provided solely for the convenient of English speaking readers. The annual financial report is a reproduction of the official version of the annual financial report which has been prepared in ESEF (European Single Electronic Format) and is available also on www.engie.com/en.

MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS & THE CHIEF EXECUTIVE OFFICER

How do you view the transformation of the global energy landscape?

Jean-Pierre Clamadieu: A new world energy order has taken shape, driven by the need to simultaneously secure our supply and decarbonize our economies. 2023 was a record year for the energy transition, both in terms of the additional renewable electricity production capacity installed around the world (+510 GW!) and investments in clean energy (€1.7 trillion). However, these transition-accelerating trends are set against a backdrop of uncertainty, marked by heightened geopolitical tension and a shift in regional alliances. The energy markets remain volatile, in a macroeconomic environment that is characterized by low growth and high interest rates. There is increasing international competition around these transition activities, with the implementation of the Inflation Reduction Act (IRA) in the United States as a notable example. Europe is mobilizing to provide a strong regulatory response to the risk of deindustrialization. This is a vital debate to which we are actively contributing. Finally, we are seeing an increasing polarization in how stakeholders are responding to the climate crisis, with varying levels of support for the energy transition.

What do these transformations mean for Europe and its energy mix?

Jean-Pierre Clamadieu: The challenge we are facing is threefold: we must decarbonize our energy mix, ensure that our economies remain competitive and secure our energy supply. We are convinced that accelerating the energy transition is key to success on all three counts. This is borne out by our 2050 decarbonization scenario for Europe. A Net Zero Carbon trajectory that meets these three objectives is within our grasp. It is based on a balanced energy mix, which guarantees the reliability and resilience of the system while minimizing its costs. We can draw five specific conclusions from this scenario. First, we need to action all the potential drivers of decarbonization. Second, the combination of the electron and the molecule is key to the success of the energy transition. Third, we need to massively scale up renewable electricity, with a sixfold increase in our solar and wind electricity production. Fourth, we must make ready the major flexibility capacity (batteries, hydroelectricity, etc.) that we will need in order to balance our networks. Finally, energy saving and efficiency will also be essential to achieving our objectives, with an expected reduction in energy demand of 34% by 2050.

How does ENGIE's integrated model ensure that it is uniquely positioned to lead the transition?

Catherine MacGregor: ENGIE's integrated model is based primarily on the complementarity of our activities, with our four GBUs developing all the components of a low-carbon energy mix, and GEMS, our energy management entity, at the heart of this model. We are one of the global leaders in renewable energy with a platform that we are continually expanding: 41.4 GW of installed capacity. We operate the infrastructures necessary to the security of our supply, both electricity and gas: 5,720 km of power lines along with a biomethane injection capacity of 11 TWh on our networks. We are developing our portfolio of flexibility solutions in addition to renewables, with, in particular, 1.3 GW of battery storage in operation at the start of 2024. We are also developing the decentralized networks needed for the decarbonization of our customers, such as our portfolio of heating networks (20.2 GW in operation). But above all, and beyond the sum of these activities, we stand out thanks to our ability to integrate them into effective and optimized energy management, ensuring that electrons and molecules are available in the right place, at the right time. We have a portfolio of complementary assets, optimally managed thanks to our thorough understanding of the markets. This is what enables ENGIE to make a difference. In 2023, thanks to the strength of this model, we achieved excellent operational and financial performance.

How is minimizing the cost of the transition essential to its social acceptability and success?

Catherine MacGregor: If the energy transition is not accepted by society, we will not be able to implement it – and this battle has not yet been won, far from it. The main argument against the transition is its cost, since people's standard of living and geographical location affects their ability to support the energy transition. As such, proving that we can achieve an energy transition that is affordable, socially equitable and in everyone's best interest is vital. I am convinced that the energy transition will bring about major opportunities for our economies. It will be a key generator of stable and local employment. According to the International Energy Agency's Net Zero Carbon scenario, 17 million jobs will be created in the energy sector by 2030. Moreover, the energy transition will not fuel rising energy prices. Renewables are now more competitive than thermal gas or coal assets, and they are less dependent on the geopolitical context, which means they provide price assurance in times of crisis. Compared to the devastating cost of inaction, which would lead to huge economic losses and deepen existing inequalities – 68 to 135 million people could be pushed into poverty by 2030 because of climate change – the energy transition paves the way to a brighter future and protects our prosperity and social cohesion.

> "...an energy transition that is affordable, socially equitable and in everyone's best interest is vital."

What progress has the Group made regarding its ESG commitments?

Jean-Pierre Clamadieu: First of all, we met our climate commitments in 2023. We continued to reduce our greenhouse gas emissions, with 52 million tons of emissions from energy production. In terms of renewable capacity, we have achieved our target of an additional 3.9 GW installed, with the share of renewables in our energy mix now at 41%. In addition, in 2023 we issued green bonds worth nearly €5.99 billion, more than any other company in the world. At the same time, we launched ambitious initiatives to contribute to the decarbonization of our suppliers. We strengthened our commitment to nature conservation, as part of the Act4nature initiative. This included our commitment to reducing the freshwater consumption related to our energy production activities by 70% by 2030 compared to 2019. Finally, we have made progress on our societal commitments, in particular by achieving our 2023 target of 31% female managers.

In terms of its strategy, what are the Group's priorities for transforming its industrial culture?

Catherine MacGregor: If we are to lead the energy transition, we need to become an increasingly integrated, industrial and digital group, with all the expertise and skills necessary for the jobs of tomorrow. Transformation therefore continues to be at the heart of our operational priorities. Our top priority remains health and safety, and we are continuing to roll out our ENGIE One Safety plan. This is a new safety culture that we are integrating, across all Group entities and geographic areas, which has made significant progress. In 2024, we will step up our efforts to achieve our goal of zero fatal accidents. We will also accelerate the deployment of our digital plan, to develop our solutions at Group level – particularly with regard to data management and generative AI. Finally, in a talent war and transformation of energy professions context, we are prioritizing the skills development of our employees.

ENGIE IS A WORLD LEADER IN ENERGY TRANSITION

OUR PURPOSE

To accelerate the transition to a carbon-neutral economy

Enshrined in the Group's bylaws, "the purpose ("Raison d'être") of ENGIE is to act to accelerate the transition to a carbon-neutral economy, through low-energy solutions that are more respectful of the environment. This purpose brings together the company, its employees, customers and shareholders, and reconciles economic performance and positive impact on people and the planet. ENGIE's action is assessed in its entirety and over time."

ENGIE IN FIGURES [1]

97,300
employees

302,774 km
of gas and electricity transmission and distribution networks

4.3 GW
of nuclear electricity production installed capacity

41.4 GW
of total installed capacity in Renewables (+3.9 GW in 2023)

58.5 GW
of thermal electricity production installed capacity

1.3 GW
of battery storage in operation

190,000
B2B customers

25.3 GW
of decentralized energy production installed capacity (heating, cooling, electricity, etc.) [2]

22.5 M
B2C energy supply and service contracts

€20.9bn
green bonds issued since 2014

2023 FINANCIAL RESULTS

€82.6bn
in revenues

€5.4bn
in net recurring income Group share from continuing operations

Economic net debt / EBITDA ratio
3.1 x

€9.5bn
in EBIT excluding Nuclear

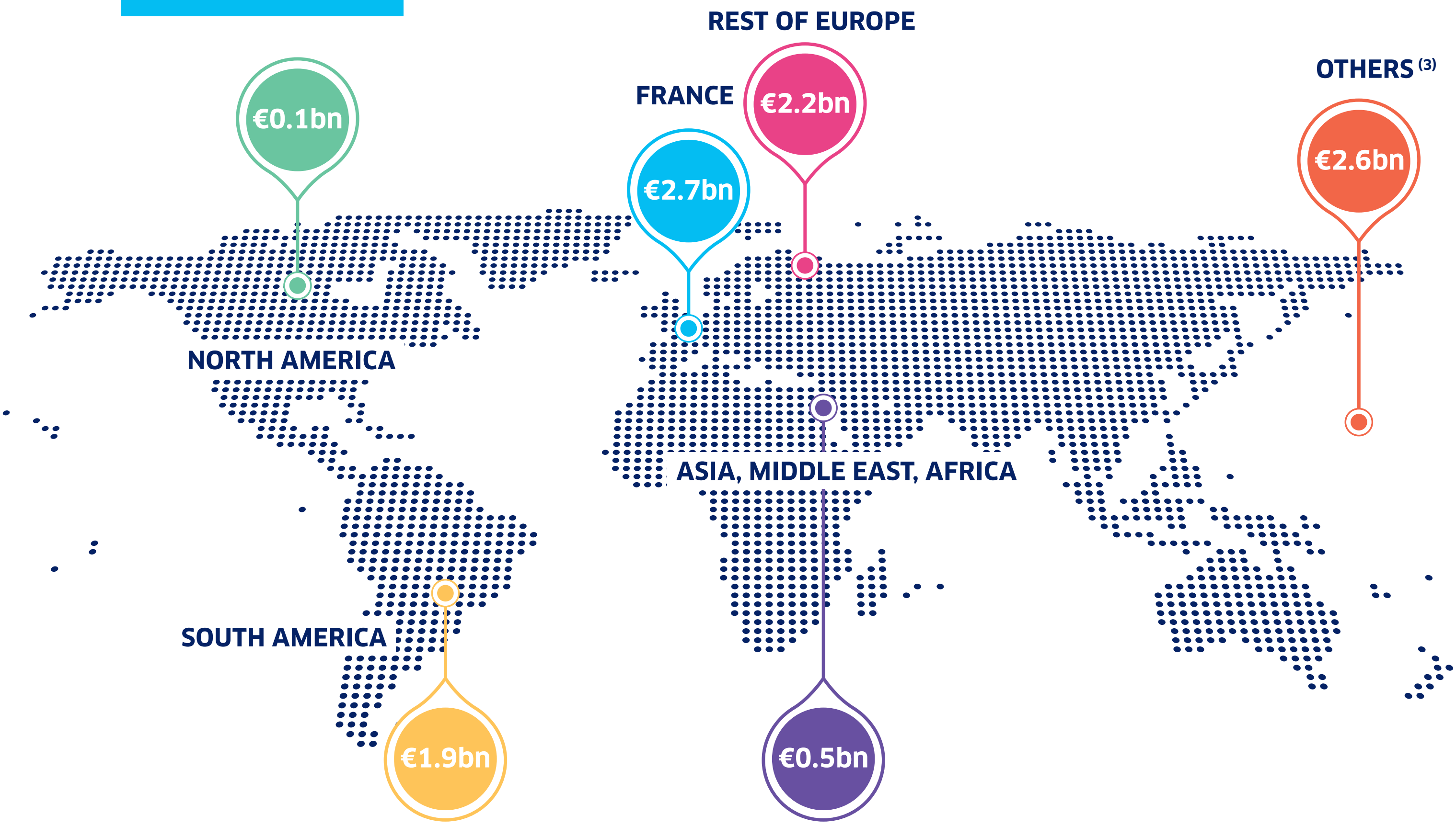
€8.1bn
in growth CAPEX

Proposed 2023 dividend of
€1.43 per share

Rating
Strong investment grade

1) *Rounded figures at December 31, 2023*
2) *At 100%.*

EBIT WORLDWIDE



OUR BUSINESSES:

- RENEWABLES
- NETWORKS
- ENERGY SOLUTIONS
- FLEXGEN & RETAIL
- NUCLEAR
- OTHERS (including GLOBAL ENERGY MANAGEMENT & SALES)

2030 CSR OBJECTIVES

43 Mt CO_2 eq.
of greenhouse gas emissions from power generation

Between 40 and 60%
of female managers within the Group (31.2% in 2023)

58%
renewable electricity production capacity

3) Encompassing in particular GEMS and holding compagnies and Corporate activities.

Annual Financial Report, Management Report, Board of Directors' Report on corporate governance and other special Report

This Universal Registration Document includes:

- all the items of the Annual Financial Report mentioned in Section I of Article L.451-1-2 of the French Monetary and Financial Code, and in Article 222-3 of the General Regulations of the Autorité des Marchés Financiers (AMF), the French Financial Markets Authority;
- all the mandatory information included in the Management Report of the Board of Directors to the Annual Shareholders' Meeting of April 26, 2023, as stipulated in Article L.225-100 of the French Commercial Code;
- all the information included in the Board of Directors' Report on corporate governance as provided for in Article L.225-37 of the French Commercial Code, and
- the special Report on free share allocations provided for in Article L.225-197-4 of the French Commercial Code.

A comparison table between the documents mentioned in these texts and the corresponding headings in this document can be found in Section 7.11 of this Universal Registration Document.

Incorporation by reference

In accordance with Article 19 of Regulation (EU) No. 2017/1129 of June 14, 2017, this Universal Registration Document incorporates by reference the following information, to which the reader should refer:

- for the ENGIE fiscal year ended December 31, 2022: the Management Report, consolidated financial statements prepared according to IFRS and the related Statutory Auditors' report appearing on pages 225 to 244 and 245 to 368 of the Universal Registration Document filed with the AMF on March 9, 2023, under number D. 23-0082;
- for the ENGIE fiscal year ended December 31, 2021: the Management Report, consolidated financial statements prepared according to IFRS and the related Statutory Auditors' report appearing on pages 203 to 222 and 223 to 346 of the Universal Registration Document filed with the AMF on March 9, 2022, under number D. 22-0079;

The information included in these documents, along with the information mentioned above, is replaced or updated by the information included in this Universal Registration Document. These documents are available under the conditions described in Section 7.4 "Documents available to the public" of this Universal Registration Document.

Forward-looking information and market data

This Universal Registration Document contains forward-looking information, particularly in Section 1.1 "History and organization," Section 1.6 "Description of the Group's activities," and Section 6.1.1.1.2 "2024-2026 outlook and guidance." This information is not historical data and therefore should not be construed as a guarantee that the events and data mentioned will occur or that the targets will be achieved, since these are by nature subject to unpredictable events and external factors, such especially as those described in Chapter 2 "Risk factors and internal control."

Unless otherwise stated, the market data included in this Universal Registration Document comes from internal estimates by ENGIE based on publicly available data.

Note

In this Universal Registration Document, the terms "ENGIE," the "Company," the "Issuer," and the "Enterprise" refer to public limited company ENGIE. The term "Group" refers to ENGIE and its subsidiaries.

A conversion table, a list of units of measurement, abbreviations and acronyms, a glossary of the most frequently used technical terms and a thematic index are featured in Sections 7.6, 7.7, 7.8, 7.9 and 7.10 of this Universal Registration Document.

Copies of this Universal Registration Document are available at no cost on the Company website (www.engie.com/en), on the website of the AMF (www.amf-france.org/en), as well as from ENGIE, 1 place Samuel de Champlain – 92400 Courbevoie (France).

1

PRESENTATION OF THE GROUP

1.1 HISTORY AND ORGANIZATION

1.1.1 PRESENTATION

"The purpose ("Raison d'être") of ENGIE is to act to accelerate the transition to a carbon-neutral economy, through low-energy solutions that are more respectful of the environment. This purpose brings together the company, its employees, customers and shareholders and reconciles economic performance and positive impact on people and the planet. ENGIE's action is assessed in its entirety and over time."

ENGIE is a European and world leader [(1)] in renewable energy production, centralized and decentralized energy networks and associated services, flexible electricity production and gas and electricity supply:

- **renewable energy production**: ENGIE is the second-largest hydropower operator, the number one wind and solar energy [(2)] company in France and the second-largest developer in Europe. It is one of the global leaders in long-term green energy supply contracts for companies (Corporate Power Purchase Agreements – Corporate PPA), the largest independent hydropower producer in Brazil [(1)], a player in wind power and a pioneer in floating offshore wind, developed through its joint venture with EDP Renovàveis, Ocean Winds;
- **centralized energy networks:** the Group is the leading gas network operator in Europe [(1)], particularly through independent subsidiaries, with a portfolio that includes transmission networks, distribution networks, and LNG storage and terminals. It is also a major player in Latin America, particularly Mexico, Brazil and Chile, operating gas and electricity transmission networks;
- **decentralized energy networks and energy services:** ENGIE is one of the global leaders [(1)] which supports cities, local authorities, industrial and service sector customers in the decarbonization of their energy networks. Energy Solutions' activities are divided into three main categories: local energy networks (notably heating and cooling networks, low-carbon mobility), on-site energy production (heating, cooling, electricity production using solar power, energy storage, etc.) and energy performance and management services (consulting, engineering, energy performance services);
- **flexible electricity production and gas and electricity supply**: the Group is one of the leading power producers in Europe, notably supplying solutions that provide flexibility to the network via its gas-fired power plants. It also invests in the development of battery capacities to bring the necessary flexibility to the electricity grid. Moreover it is the benchmark operator in nuclear energy in Belgium. ENGIE provides gas and electricity to end-customers worldwide, with almost 20 million contracts. Nearly half of its customers are located outside France. In Europe, ENGIE is one of the top gas sellers and importers. In France, ENGIE is the historic leader of gas marketing and the second-largest producer and supplier of electricity. In Belgium, ENGIE, through its subsidiary Electrabel, is the leading producer and supplier of electricity as well as the leading supplier of natural gas [(1)].

1.1.2 HISTORY AND EVOLUTION OF THE COMPANY

The Company is the result of the merger of SUEZ into Gaz de France, following the decisions of the Ordinary and Extraordinary Shareholders' Meetings of Gaz de France and SUEZ of July 16, 2008. The merger took effect on July 22, 2008.

Gaz de France was initially incorporated in 1946 as an EPIC (French public industrial and commercial enterprise). It became a limited liability company with a 99-year term under Law 2004-803 of August 9, 2004, on the public service of electricity and gas and electricity and gas companies (amending Law 46-628 of April 8, 1946).

On July 7, 2005, Gaz de France publicly floated its shares on the stock market. The Company's shares were first listed on July 7, 2005.

Law 2004-803 of August 9, 2004, as amended by Law 2006-1537 of December 7, 2006, governing the energy sector and Decree 2007-1784 of December 19, 2007, authorized the transfer of the Company from the public to the private sector. On July 22, 2008, Gaz de France absorbed SUEZ in a merger which entailed transferring the majority of the Company's share capital to the private sector. The new Company took the name GDF SUEZ.

SUEZ itself was the result of the merger in 1997 of Compagnie de Suez and Lyonnaise des Eaux. SUEZ became an international industrial and services group whose objective was to meet essential requirements in electricity, gas, energy and industry services, water and waste management.

The deregulation of European energy markets in the early 1990s accelerated the international development of both Gaz de France and SUEZ, which progressively expanded their activities beyond their respective traditional markets, both in Europe and internationally. This development continued with GDF SUEZ.

Thus, on February 3, 2011, GDF SUEZ completed a merger with International Power. In 2012, it reaffirmed its strategy to become a leading player on the global energy market, finalizing the purchase of shares held by the minority shareholders of International Power on June 29.

The SUEZ Environnement Company shareholders' agreement expired on July 22, 2013, and was not renewed. The cooperation and shared functions agreement and the financing agreement between the Company and SUEZ Environnement Company have also come to an end. The Company then used the equity method to consolidate SUEZ Environnement Company's activities, rather than full consolidation.

(1) Competitive positions established on the basis of specialist work within the Group, carried out using available information published by stakeholders or entities providing external analysis (Bloomberg and Global Data). They are established within the scope of the Group as at 12/31/2023.

(2) Source BNEF.

On July 29, 2015, the Extraordinary Shareholders' Meeting of GDF SUEZ approved the change of company name to "ENGIE."

In early March 2016, the two companies signed an agreement providing for the contribution by ENGIE to SUEZ of all of the share capital of SUEZ IP, which owned all intellectual property rights related to the SUEZ brand. On October 5, 2020, ENGIE sold the majority of its stake in SUEZ, i.e. 29.9% of the capital, to VEOLIA. On January 18, 2022, ENGIE contributed its remaining 1.8% stake in SUEZ to the public tender offer initiated by VEOLIA.

On October 4, 2022, ENGIE completed the disposal to the Bouygues group of EQUANS, the operating entity in charge of multi-technical services, which represented a major step in the implementation of the Group's strategic plan.

1.1.3 ORGANIZATION OF THE GROUP

At the end of 2023, ENGIE comprised four Global Business Units (GBU), two operating entities and a group of support functions coordinated at Group level and pooled at regional level (see Section 1.6 "Description of the Group's activities"). One last group contains the holding company and Corporate activities, mainly including the entities responsible for the Group's centralized financing.

The Group is thus organized around the following components:

- **the Group's four key business lines are organized into Global Business Units**, responsible for their results at the global level and the implementation of the strategy within their business segments: GBU Renewables, GBU Networks, GBU Energy Solutions and GBU FlexGen & Retail. Activities related to nuclear and energy management have been organized into dedicated operating entities, separate from the GBU (respectively, Nuclear and Global Energy Management & Sales, or GEMS);
- **the Group's functional departments guide the support functions, in support of Executive Management** and in coordination with the GBU, draw up and roll out Group policies, and guide financial and non-financial performance. The functional departments are organized into four areas;
- **the support functions are organized by geographic area (regional hubs) and at the individual country level.** They have a key role in terms of support for the GBU's activities and the development of synergies. All of the regional hubs are managed at the Group level by a specific Department named Transformation & Geographies.

The structure works on the principle of a matrix between the business line entities and the functional departments, structured into different geographic areas.

1.1.3.1 Description of the Global Business Units and operating entities

The four GBU are responsible for their results within their respective business segments, at the global level.

They are, therefore, responsible, within their respective scopes and the framework established by the Executive Management [(1)] for:

- development strategy definition, decisions and arbitrage related to investments;
- industrial assets management, operational excellence, safety and security;
- performance processes, resources, expertise and the roll-out of digital tools.

The operating activities in the countries report to the corresponding GBU.

The activities of the different GBU are as follows:

- GBU Renewables develops and operates electricity production assets based on solar power, onshore and offshore wind and hydroelectric power, with connection to batteries where appropriate;
- GBU Networks delivers the energy in particular through independent subsidiaries. In order to do this, it develops and operates gas transmission and distribution networks, storage and LNG terminals, as well as electricity transmission lines. It is also responsible for biomethane production;
- GBU Energy Solutions develops decentralized, low-carbon networks (heating and cooling networks, decentralized low-carbon energy supply, mobility, etc.), and associated energy efficiency services;
- GBU FlexGen & Retail produces and sells energy. It operates and develops flexibility solutions by producing electricity from thermal power plants and developing battery-powered electricity storage and hydrogen production capacities. It also provides gas and electricity to individual customers.

The Nuclear and GEMS operating entities have similar responsibilities to the GBU in their respective business segments. They are positioned as follows:

- the Nuclear operating entity is dedicated to the operational management of nuclear production units in Belgium and the rights held in the French power plants;
- the GEMS operating entity is responsible, at the global level, for the supply of energy and the management of risks and optimization of assets on the markets. It sells energy to companies and offers energy management solutions to support the decarbonization of the Group and its customers.

Each GBU and operating entity is overseen by an Executive Vice President, who is a member of the Executive Committee. These GBU and entities are therefore in charge, under a single authority, of managing the entire business division at the global level.

(1) Within the limits of the provisions of the Energy Code and the regulatory constraints applicable to entities forming part of GBU Networks.

1.1.3.2 Description of support functions and geographical structure

The support functions contribute to the Group's performance, by supporting the performance of the GBU and the operating entities. They are managed by the Corporate Group's functional departments and are structured regionally and nationally.

The Group's functional departments are responsible, within their respective areas, for drawing up and rolling out Group policies and guiding financial and non-financial performance. They are structured into four areas:

- Corporate Secretariat, Strategy, Research & Innovation, and Communication;
- Finance, Corporate Social Responsibility, and procurement;
- Digital and Information Systems; and
- Human Resources.

Stronger and structured coordination of the division at the Group level ensures the operational efficiency of the processes and the implementation of the policies drawn up by the Group.

Each of these areas is overseen by an Executive Vice President, who is a member of the Executive Committee (see Section 4.1.3 "Executive Management").

At the geographical level, the support functions are pooled in four regional hubs: Europe (excluding France); North America; South America; and Asia, the Middle East and Africa. The aim of the regional hubs is to support the activity of the GBU in the region, overseeing the coordination of all of the support functions.

In the countries, the country managers are responsible for the support functions and for relations with local stakeholders.

An Executive Vice President, who is a member of the Executive Committee, is responsible for supervising the geographic areas and the Group's transformation.

In addition to the management of the Group's regional hubs, the Transformation and Geographies Department is also responsible for:

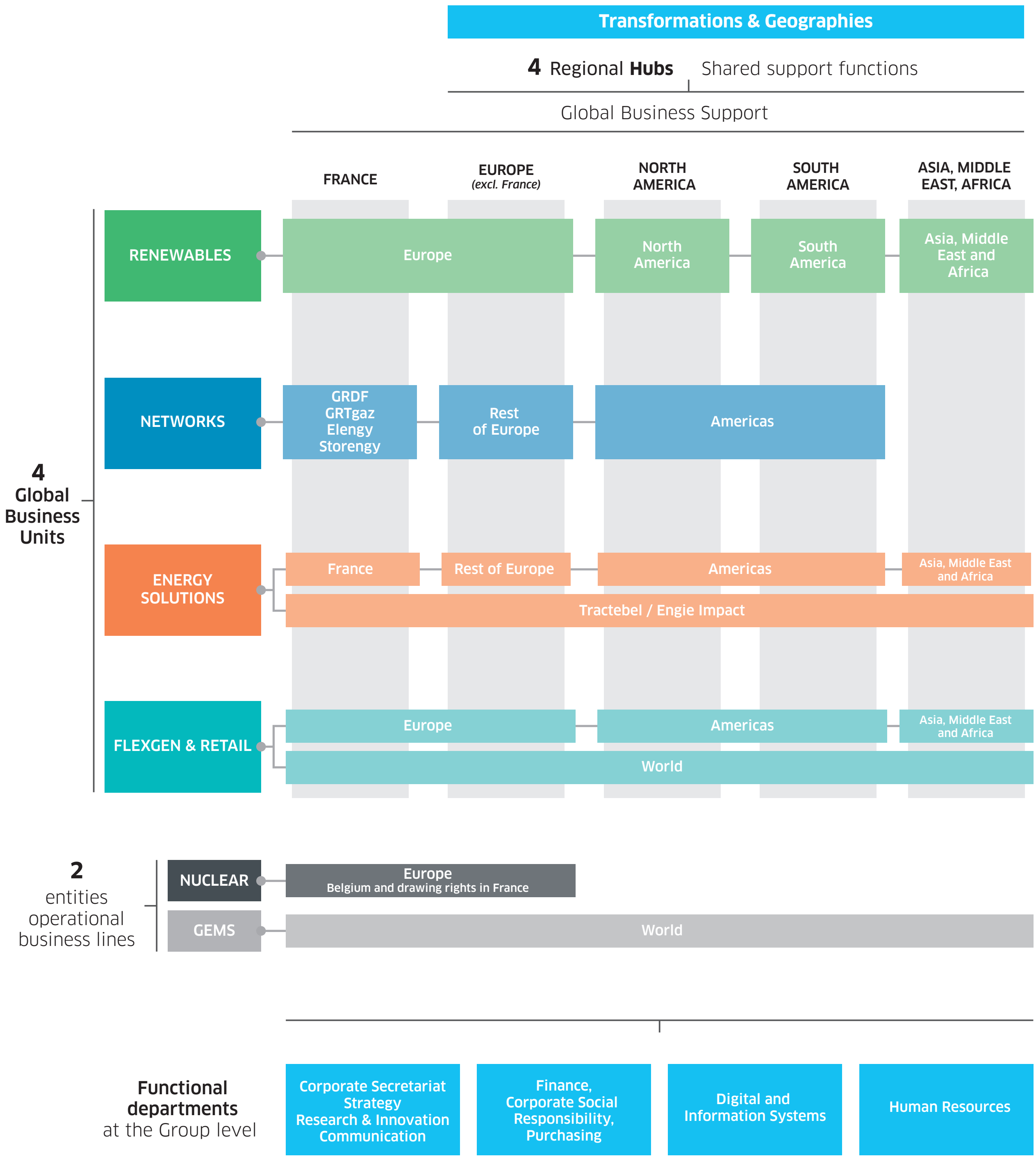
- supervising and managing the Group's transformation projects;
- supervising and supporting the Group's industrial projects;
- all activities relating to the health & safety of individuals (employees, temporary workers and subcontractors) and industrial assets safety in terms of objectives set by the Group in this area (No Life at Risk – No Mind at Risk – No Asset at Risk, see Section 3.4.6 "Health & safety policy" and Section 3.9.1.2 "Prevent and manage risks related to health & safety in the workplace").

The Company operates its own business. The number of subsidiaries directly or indirectly controlled by the Company was 2,443 at the end of 2023. In addition to the lists provided in Section 6.2.2 "Notes to the consolidated financial statements" – Note 2, "Main subsidiaries at December 31, 2023" and Section 6.4.2 "Notes to the parent company financial statements" – Note 4.4 "Subsidiaries and affiliates," a list of subsidiaries can be found on the Group's website (https://www.engie.com/en/finance-area, regulated information section).

The presentation of the Company's activities and the strategic economic assets of its main subsidiaries as well as their geographical location are presented in Section 1.6 "Description of the Group's activities."

SIMPLIFIED ORGANIZATION FOCUSED ON STRATEGY IMPLEMENTATION

Activities structured around four business lines



Pooling of support functions and operationnal management

1.2 STRATEGY AND OBJECTIVES

Over the past three years, the Group has transformed itself while also fulfilling its responsibilities, against the backdrop of an unprecedented energy crisis in Europe, particularly in terms of security of supply and the operation of its networks and generation resources. The implementation of the strategic road map developed in May 2021 allows it to focus on becoming a more integrated industrial Group and the leader of the energy transition.

1.2.1 ONGOING IMPLEMENTATION OF THE STRATEGIC ROAD MAP

Over the past three years, the Group's commitment to its transformation and the implementation of its strategy has been reflected in a series of achievements:

- significant progress on the path to Net Zero Carbon, ensured by the consistency of activities with the Group's purpose, with SBTi well below 2°C certification and a commitment to reach Net Zero Carbon in four countries by 2030;
- a strategic vision of the energy transition embodied by a decarbonization scenario for Europe and for France, which has positioned the Group in the public debate;
- a more industrial and integrated Group, thanks to the implementation of the GBU-based organization and a successful refocusing, with a high level of employee commitment;
- significantly improved financial performance, with stronger cash and value generation, which doubled growth investments and generated sustainable returns for shareholders.

ENGIE primarily focused its development on renewable energy (electricity and gas) and on decentralized networks to decarbonize its customers. Moreover, the Group pursued its aim of refocusing its activities (geography and activities, particularly for Energy Solutions), to further improve its focus and strengthen its presence in key countries. During 2024, the Group is expected to meet its target of reducing the number of Group countries to less than 30.

1.2.2 AN EFFECTIVE COMMITMENT TO THE ENERGY TRANSITION

In line with the purpose adopted in 2020, the Group aims to be a leader in the carbon-neutral energy transition.

The Group was certified "well-below 2°C" by SBTi in 2023. ENGIE has set its carbon neutrality target for 2045 on Scopes 1, 2 and 3 [(1)], and has set a carbon neutrality target in four countries by 2030. The Group aims to halve the carbon-intensity of the energy it produces between 2017 and 2030, and to avoid the emission of 45 million tons of CO_2 by its customers. Each of the Group's activities must have a carbon trajectory assigned to them, with carbon budgets and operational monitoring of carbon performance, as they do for financial performance. Exit from coal is scheduled for 2025 in Europe and 2027 worldwide, with the emphasis on closing and reconverting power plants and helping industry actors with their transition plans. The performance share plans allocated primarily to executives are, in part, conditional upon achieving carbon targets.

In addition to energy efficiency and saving measures, and the electrification of a certain number of uses, the success of the energy transition depends on the development of renewable gases (low-carbon hydrogen, biomethane, synthetic methane) and heating, which are essential for industrial uses and heavy mobility in particular. In terms of green gases, ENGIE has expertise that enables it to develop positions throughout the entire value chain: production, networks, mobility ecosystems and purchases and sales. By 2030, the Group aims to produce 10 TWh of biomethane per year in Europe and is working toward commissioning 4 GW of hydrogen production capacity.

Driven by the acceleration in decarbonization and demand for low-carbon energy, ENGIE is very well positioned to step up and meet the demand of citizens, politicians and industrial players. Being able to mobilize additional energy drivers to serve the transition, the Group has core competencies throughout the value chain, from production, transmission, distribution, and services through to the end-consumer. Its integrated model, strong positions in renewable energy, and both centralized and decentralized networks, allow it to roll out ambitious decarbonization programs to its customers. It can also mobilize its cross-functional capacity in financial structuring, project design and management, as well as its global digital platforms, to benefit the two drivers of the transition: a greener energy supply and more efficient and smarter energy usage.

1.2.3 STRATEGIC OBJECTIVES STRUCTURED BY BUSINESS LINE

The Group's commitment to the energy transition is structured through strategic objectives for each business line, which focus on operational excellence and industrial know-how:

- **Renewables: to develop green power generation resources within an integrated system.** The acceleration of investments in renewable energy has resulted in a medium-term target of an average addition of 4 GW between 2022 and 2025 and an average of 6 GW per year between 2026 and 2030, in order to become a leader in renewables. Investments in onshore wind, solar power and offshore wind will continue. ENGIE is a major player in hydropower generation, particularly in Brazil, France and Portugal. The development of these capacities is being carried out in synergy with the Group's BtoB energy supply activities, via Power Purchase Agreements (PPAs).

(1) Scopes 1, 2, and 3 cover all of the Group's direct and indirect greenhouse gas emissions.

- **Networks: to invest in high-performance networks, supporting balanced, carbon-neutral energy mixes.** The high-performance operation of the French gas networks through independent subsidiaries and their adaptation to the development of biomethane and hydrogen will be prioritized. The Group is also continuing to develop electrical networks abroad. Finally, production of green gas (biomethane) is a priority with a production target of 10 TWh in Europe by 2030. At the global level, the energy transition will require massive investments in the coming years in electricity and also gas networks where action can be taken to decarbonize the energy system. These needs respond to the challenges of access to energy in emerging countries, and throughout the world, and of adaptation to the injection and delivery of renewable energy.
- **Customer decarbonization: to propose large-scale integrated decarbonization solutions based on long-term contracts.** The Group is focusing on the development of decentralized energy networks (district heating and cooling networks, on-site customer utilities production, decentralized solar, urban networks and low-carbon mobility) and on associated services. The ambition is to produce 20 TWh of Green Distributed Heat, Cooling and Power by 2030 for its DHCand on-site production activities. ENGIE offers its customers integrated solutions to meet their decarbonization needs, based on long-term contracts, that provide visibility and resilience as well as attractive growth potential.
- **FlexGen & Retail: to develop and operate activities with low carbon content and support the transition of current electricity systems.** Besides investments in renewables, the Group is pursuing the targeted development of thermal capacity, in line with its established carbon footprint reduction trajectory. The withdrawal of the coal capacity has been confirmed for 2027, and the decarbonization of gas-fired power plants using biomethane and hydrogen is in development. With a view to supporting the transition of electricity systems, the Group has also set itself the target of installing 10 GW of battery storage by 2030. The Group is also developing complementary activities, such as desalination, electricity storage by pumped storage and is interested in carbon capture and storage. Production of green gas (hydrogen) is also a priority. Faced with growing demand for the supply of carbon-free energy and management of consumption, new offerings are also being developed for individual and business customers.
- **Energy management and sale to key industrial accounts:** management of the energy markets remains a strong point of the Group and is based on recognized financial and market expertise. GEMS optimizes the value of the Group's power, gas and renewable assets, manages the portfolio risks on behalf of ENGIE on all its markets and contributes to the competitiveness of the Group's GBU. In addition, GEMS provides and develops innovative and competitive commercial offerings for more than 190,000 external customers.
- **Nuclear: to ensure the optimum availability of nuclear power plants during their operational phase**, thus contributing to the production of carbon-free electricity. The Group is monitoring the decommissioning of the first reactors shutdown (Doel 3 in 2022, Tihange 2 in 2023) in both technical and organizational terms. Finally, an agreement has been concluded with the Belgian government regarding the extension of the Tihange 3 and Doel 4 nuclear reactors and all obligations related to nuclear waste.

1.2.4 INTERNAL PERFORMANCE

Improving internal performance is a key area of the new strategic road map, in order to support the Group's growth in the long term.

A plan has thus been established for the period 2021-2023, with a savings target of €600 million. Targets have been assigned to the GBU, support functions and regional hubs. This plan is based on various drivers: (i) operational excellence, (ii) the turnaround of loss-making entities and a reduction in overheads. At the end of 2023, the performance plan objective was exceeded, with cumulative savings of around €687 million, due to strong operational performance despite overheads impacted by inflation in 2023.

A continuous improvement leading to an additional net contribution to EBIT annually of around €0.2 billion is provided for under the 2024-2026 plan.

ENGIE's success relies on the women and men who make up the Group and represent its biggest performance driver. The Group must be able to rely at all times on skills tailored to its changing needs. Accordingly, the human resources function plays a major role:

- anticipating and identifying the needs of the GBU and business divisions and the emerging trends; developing and adapting expertise for our new business solutions and challenges;
- strengthening the Group's ability to attract, recruit and retain the talents of today for tomorrow in an increasingly competitive market.

1.3 RESEARCH AND INNOVATION

1.3.1 DESCRIPTION AND ORGANIZATION

Being a major player in the energy transition means understanding and mastering new trends, technologies and business models. Supporting ENGIE's ambition, Research & Innovation (R&I) aims at developing and integrating innovative and differentiating tools and solutions to strengthen the Group's leading position. Thanks to its expertise, ENGIE has the ability to identify, test and roll out the solutions that will contribute to making the energy transition possible. This work carried out in areas in line with the Group's strategy and selected, in close collaboration with the GBU, simultaneously addresses different scales through different means of intervention, combining internal expertise, partnerships and collaborations.

In 2023, the Group relied on the simplified and streamlined R&I organizational structure that was introduced on January 1, 2022, with six complementary activity models grouped under a single management within ENGIE R&I:

- **Research Programs**: oversee research programs with a medium-term outlook;

- **Labs** (CRIGEN and Cylergie (France), Laborelec (Belgium), Lab Singapore (Singapore)): provide the expertise needed to implement research programs and provide support services to GBU;
- **Incubation:** integrates innovation in the Group's strategic activities and incubate new opportunities;
- **ENGIE Ventures**: promotes "outside-in" innovation through minority investments in start-ups;
- **Ecosystems & Expertises**: develops a culture of innovation within the Group, the links with external ecosystems (start-ups) and ensures the development of R&I talents;
- **Steering & Performance**: is responsible for defining and implementing R&I strategy and for steering R&I's financial and operational performance.

At end-2023, ENGIE's R&I teams included more than 650 employees.

The alignment of R&I priorities with the Group's strategic objectives and growth targets is ensured by specific governance, based on ongoing dialog between R&I and the GBU. R&I priorities for 2023 mainly focused on renewable energy systems (solar power, onshore and offshore wind), green gases production and use (hydrogen, biomethane) or the development of decentralized energy networks (district heating & cooling, decentralized solar power and mobility).

1.3.2 RESEARCH ACTIVITIES

Research activities are grouped within the Labs and managed by the "Research Programs" entity.

Research teams work in CRIGEN, Cylergie, Laborelec and Lab Singapore's Labs on all aspects of detecting, testing and developing new technologies, thus supporting the performance and differentiation of the Group's various businessed. Research centers and teams can also provide the necessary expertise and technical support for key operations in business entities and innovation projects (for instance, EU Innovation Fund and Green Deal projects and major tenders). They provide a medium- and long-term technological vision to guide the decisions the Group makes.

In 2023, Group technological Research and Development expenditure amounted to €142 million.

	2023	2022	2021
R&D expenditure	142	135	138

ENGIE R&I also carries out collaborative work with external, industrial and academic partners, on a portfolio of around 100 collaborative projects. This exchange of expertise allows ENGIE to bring new technologies and customer offers to maturity, as well as to explore and elaborate more long-term subjects. Among these partnerships, ENGIE R&I collaborates in particular with the National Renewable Energy Laboratory (United States), the French Alternative Energies and Atomic Energy Commission (France) and EnergyVille (Belgium).

ENGIE R&I takes part in European research projects, as well as in projects co-funded by French and Belgian public bodies. For example, ENGIE partners more than 60 research projects in the European Commission's HORIZON program. The Group is a member of several academic chairs co-funded by the French National Research Agency (ANR), of the Energy and Prosperity chair with the Institut Louis Bachelier, the École Polytechnique, the ENSAE and the Institut Polytechnique de Paris' Energy4Climate (E4C) Interdisciplinary Center. ENGIE has also entered a partnership with the Singapore Institute of Technology (SIT).

Since 2009, ENGIE is supported by a scientific committee which brings together 10 world-renowned scientists covering the major disciplines relating to the Group's activities.

Finally, R&I is also responsible for innovation activities.

In particular, since its creation in 2014, ENGIE Ventures has invested more than €200 million in over 50 start-ups. In 2023, investments in nine innovative start-ups (including three new) focused on the Group's priority growth sectors such as biomethane, hydrogen and e-fuels, as well as software for the streamlining of renewable energy production based on artificial intelligence. ENGIE Ventures also reinvested in a replicable green steel production project based on green hydrogen. More than 200 new relevant start-ups were identified in 2023.

The main objective of these investments is to identify emerging technologies and business models in ENGIE's businesses, and to provide priority access to these innovations through strategic partnerships, in search of a balanced return on investment. ENGIE Ventures' direct investment portfolio currently includes 25 active start-ups, which are listed on www.engieventures.com.

Beyond these activities, R&I develops the culture of innovation and R&I talents in the Group. As such, R&I leads a community of Group innovators and promotes the emergence of internal innovation. In 2023, 1,600 employees presented innovations to boost the value creation of the GBU, the transversal performance and also on subjects such as health & safety, diversity and digital technology. Also in 2023, a plan for attracting and developing R&I talents was rolled out.

1.4 FINANCIAL PERFORMANCE

1.4.1 2023 HIGHLIGHTS

The highlights of 2023 are described in Section 6.1.1.1 ENGIE 2023 results.

1.4.2 FINANCIAL OBJECTIVES FOR 2024-2026

When presenting its 2023 annual results ENGIE updated its financial objectives for 2024-2026 (see Section 6.1).

ENGIE continues actively to roll out its Strategic Plan aimed at achieving carbon Net Zero by 2045.

Despite decrease in market prices in the last quarters and given the now embedded growth of GEMS contribution to our activities, ENGIE upgrades net recurring income Group share guidance for 2024 to a range of €4.2 to 4.8 billion compared to the previous range of €3.8 to 4.4 billion. EBIT excluding Nuclear is expected within an indicative range of €7.5 to 8.5 billion (compared to €7.2 to 8.2 billion previously announced).

2026: a pivotal year for ENGIE

By 2026, the Group anticipates growth in Renewables fueled by investments, in Energy Solutions driven by additional capacity and improved margins as well as a higher contribution from Networks and GEMS with a normalized yearly EBIT upgraded from €1.0 billion to €1.5 billion, which allows to offset the impact of the decrease in commodity prices and spreads in Europe, occurred in the second half of last year, on activities exposed to market prices. Batteries activities are also expected to make an increasing contribution to the Group's results from 2024 onwards. Furthermore, as anticipated, ENGIE expects a decrease in Nuclear results following the shutdown of several power plants in Belgium by 2025 and the LTO of Doel 4 and Tihange 3 reactors.

Price assumptions for the 2024-2026 guidance are based on forward prices in Europe as of 29 December 2023.

Therefore, ENGIE outlook for 2024–2026 is:

In billions of euros	2024 results	2025 results	2026 results
EBIT excluding Nuclear (new)	**7.5 - 8.5**	**7.9 - 8.9**	**8.2 - 9.2**
EBIT excluding Nuclear (previous)	*7.2 - 8.2*	*7.5 - 8.5*	*n/a*
NRIgs guidance (new)	**4.2 - 4.8**	**3.9 - 4.5**	**3.7 - 4.3**
NRIgs guidance (previous)	*3.8 - 4.4*	*4.1 - 4.7*	*n/a*

ENGIE is committed to a strong investment grade credit rating and continues to target a ratio below or equal to 4.0x economic net debt to EBITDA over the long-term.

ENGIE confirms its €22-25 billion growth Capex target over 2023 to 2025 and expects to invest a similar yearly amount on average in 2026. Capital allocation is based on strict discipline respecting financial and ESG criteria.

ENGIE continues its efforts towards efficiency by significantly controlling its general and administrative expenses, improving the efficiency of support functions, and restructuring underperforming activities. The Group aims for a positive impact of these measures on EBIT amounting to circa €200 million p.a. over the period 2024-26.

After successfully completing its previous disposal plan with €11 billion over the period 2021-22, the Group significantly reduced the amount of disposals in 2023 (€0.3 billion). ENGIE expects a limited portfolio turnover until 2026, with disposals estimated at less than €1 billion per year in average.

Main drivers for 2024-2026 EBIT evolution by activity:

<table>
<tr><th>2021</th><th>2023</th><th>Activity</th><th>Expectations for main EBIT evolution drivers</th><th>vs. 2021 (1)</th><th>vs. 2023 (1)</th><th>2026</th></tr>
<tr><td rowspan="6">EBIT excluding Nuclear
€5,2 billion</td><td rowspan="6">EBIT excluding Nuclear
€9,5 billion</td><td>Renewables</td><td>Investments contribution, lower prices</td><td>++</td><td>+</td><td rowspan="6">EBIT excluding Nuclear indication
€8.2 billion to €9.2 billion</td></tr>
<tr><td>Networks</td><td>Regulated tariffs reflecting inflation, cost and revenue clawback from previous period in France, new investments</td><td>++</td><td>++</td></tr>
<tr><td>Energy Solutions</td><td>Investments contribution, continued improvement of performance, negative one-offs in 2023</td><td>=+</td><td>+</td></tr>
<tr><td>FlexGen</td><td>Prices & volatility normalization, lower thermal volumes partially offset by acceleration in batteries</td><td>=-</td><td>-</td></tr>
<tr><td>Retail</td><td>Portfolio management and optimization, high comparison basis in 2023</td><td>=+</td><td>=-</td></tr>
<tr><td>GEMS</td><td>Normalization of prices and volatility</td><td>++</td><td>- - - -</td></tr>
<tr><td></td><td></td><td>Nuclear</td><td>Plant shutdowns and LTO impact from 2026</td><td>-</td><td>-</td><td></td></tr>
</table>

(1) *Convention: each "+" sign amounts to c. +€500 m, each "-" sign amounts to c. -€500 m, "=+" sign amounts to a variation between 0 and +€250 million, "=-" sign amounts to a variation between -€250 million to €0.*

1.4.3 2023 KEY FINANCIAL FIGURES

In millions of euros	2023	2022	2021	2020 restated [(1)]	2020	2019
1. Revenues	**82,565**	**93,865**	**57,866**	**44,306**	**55,751**	**60,058**
of which generated outside France	45,889	59,617	33,525	25,640	33,311	35,635
2. Income						
EBITDA	15,017	13,713	10,563	8,908	9,276	10,366
• EBIT	10,084	9,045	6,145	4,493	4,578	5,726[(2)]
• Net income / (loss) Group share	2,208	216	3,661	(1,536)	(1,536)	984
• Net recurring income / (loss) Group share	5,366	5,510	3,158	1,703	1,703	2,683
• Net recurring income / (loss) relating to continued operations	5,366	5,223	2,927	1,726	1,703	2,683
3. Cash flow						
Cash flow from operating activities	13,117	8,586	7,312	7,589	7,589	8,178
of which cash generated from operations before net financial income / (loss) and income tax	14,407	12,415	9,806	8,506	8,788	9,863
Cash flow from investment	(11,818)	(4,290)	(11,042)	(4,046)	(4,046)	(7,193)
Cash flow from (used in) financing activities	(218)	(2,979)	4,848	(561)	(562)	212
4. Balance sheet						
Shareholders' equity	**30,057**	**34,253**	**36,994**	**28,945**	**28,945**	**33,087**
Total equity	35,724	39,285	41,980	33,856	33,856	38,037
Net debt	29,493	24,054	25,350	22,458	22,458	25,919
Net debt excl. internal debt E&P / EBITDA	1.96	1.75	2.40	2.42	2.42	2.50
Total assets	194,640	235,490	225,333	153,182	153,182	159,793
5. Per-share data *(in euros)*						
• Average outstanding shares [(3)]	2,421,449,644	2,419,985,959	2,419,429,772	2,416,072,154	2,416,820,377	2,412,518,837
• Number of shares at period-end	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011
• Earnings / (loss) per share [(3)]	0.88	0.06	1.46	(0.71)	(0.71)	0.34
• Net recurring income / (loss) Group share, per share [(3)]	2.18	2.24	1.26	0.63	0.63	1.04
• Dividend paid [(4)]	1.43	1.40	0.85	0.53	0.53	0
6. Total average workforce	**98,791**	**98,020**	**174,027**	**175,873**	**175,873**	**262,139**
• Fully consolidated entities	96,816	96,116	171,754	173,398	173,398	170,475
• Proportionately consolidated entities	469	479	717	748	748	756
• Entities consolidated using the equity method	1,506	1,424	1,556	1,727	1,727	90,908

(1) *Comparative data at December 31, 2020, were restated due to the classification of EQUANS assets held for sale as "Discontinued operations," in accordance with IFRS 5 (see Note 2 of Section 6.2.2 "Notes to the consolidated financial statements" of the 2021 Universal Registration Document).*

(2) *Figure restated in 2019: 5,819.*

(3) *Earnings per share calculated on the basis of the average number of shares outstanding, net of treasury shares (see Note 12 Section 6.2.2 "Notes to the consolidated financial statements").*

(4) *2023: proposed to the OGM.*

1.5 CSR PERFORMANCE

The Group's Corporate Social Responsibility performance (CSR) is an essential part of its overall performance. It is based on CSR commitments and a CSR policy at the Group level (see Section 1.5.1), as well as sectoral policies, action plans with dated and quantified CSR targets (see Section 1.5.2). It is externally assessed, requested or not by the leading CSR rating agencies (see Section 1.5.3).

The Group's Non-Financial Statement (NFS) details the governance of the CSR policy, its results, material challenges and the main CSR risks relating to the Group's activities (see Chapter 3).

In 2022, the Group voted on a "Say on Climate" resolution during its Shareholders' Meeting on April 21 on its climate strategy for carbon neutrality by 2045 (resolution 96.7% approved). In 2023, the Group committed to putting its climate strategy to the vote of the shareholders with each major change and at the very least every three years (see Jean-Pierre Clamadieu's response to certain shareholders dated March 22, 2023: www.engie.com/en/general-meeting-april-2023). In addition, the Group also committed to presenting the progress of its climate strategy annually at its Shareholders' Meeting as part of a dedicated agenda item. Finally, the Group calculated its activities' eligibility and alignment rates under the European taxonomy for the third year. The results are shown in Section 3.1.5.

1.5.1 CSR POLICY

CSR drives the Group's purpose, which is to accelerate the transition to a carbon-neutral economy, reconciling economic performance and a positive impact on people and the planet. This purpose, included in the bylaws by the Shareholders' Meeting in May 2020, guides the development of the business strategy through:

- the development of sustainable business, which involves identifying environmental and societal issues and transforming them into opportunities for the Group's businesses;
- the management of the CSR risks and impacts of its projects and activities and its value chain, i.e. relating to the environment, social acceptability, health & safety, human resources, ethics, and governance.

ENGIE published its first CSR policy in 2014 (updated in 2023: www.engie.com/en/group/social-responsibility/csr-goals), and in 2016 had set six CSR targets for 2020. The work carried out since then has made it possible to define a new set of CSR targets for 2030, including 18 overseen at the level of the Ethics, Environment and Sustainable Development Committee (EESDC). In addition to these are 13 targets overseen by the Executive Committee which supplement these commitments.

These commitments reflect the determination of the Group's as regards the energy transition and demonstrate both its compliance with the various legal and regulatory requirements in the different areas of CSR, and also its determination to make a positive contribution, anticipate and manage the possible impact of its activities on its scope of influence as best as possible. Another aim of the CSR commitments and policies is to create value for all stakeholders.

All these objectives align perfectly with the 18 Sustainable Development Goals for 2030 established by the United Nations. These CSR 2030 objectives also reflect the acceleration of the Group's strategy approved in July 2020. They also mirror the Group's materiality matrix, which was updated in December 2020 following a consultation process with stakeholders and management (see Section 3.3).

Climate change constitutes today a major environmental challenge for our societies. To take on this challenge, the Group has committed to:

- a Greenhouse Gas (GHG) reduction plan;
- a climate vigilance plan;
- a natural resources consumption reduction program, and finally;
- a business model adaptation program to make it resilient to climate change while complying with the requirements of a fair transition.

In order to model the European energy system and its changes, ENGIE has developed a carbon price projection model. This data is integrated into the Group scenarios for future European energy to define energy price projections which are then used in the Group's decision-making processes (new investments, budget, etc.). This system is complementary to that of the carbon budgets allocated to the entities in order to meet the Group's 2030 target in terms of GHG emissions.

The Group also takes nine CSR criteria into account for its major investment projects, assessed using risk analyses. These criteria mainly relate to: ethics, GHG emissions, social impact, human resources, environmental management of ecosystems, cooperation with stakeholders, sustainable procurement, and the health & safety of people.

Lastly, an increasingly sizeable part of the Group's investments is successfully funded through green bonds, demonstrating the market's recognition of their durability (see Section 5.3).

1.5.2 ACHIEVEMENT OF CSR TARGETS BY 2030

The Group has set itself ambitious targets to be achieved by 2030, in order to meet its CSR commitments by this deadline: 18 objectives overseen at EESDC level and 13 objectives overseen by the Executive Committee.

All the results of these targets are presented below and are presented excluding EQUANS (entity disposed of on October 4, 2022, see Section 1.1.2).

Based on the Group's purpose, all these targets are part of a continuous improvement approach, taken in response to growing expectations of the Group's various stakeholders interested in CSR risk management and the alignment of its performance with national or international sustainable development goals.

PLANET	Indicators	2030 targets	2023 Results	2022 results	2021 results
Targets overseen by the governance bodies (EESDC)					
CO_2 Energy generation	GHG emissions (Scopes 1 and 3) for energy generation (in Mt CO_2eq.)	43	52	60	65
CO_2 Energy production and consumption	Carbon intensity for direct energy production (Scope 1) and energy consumption (Scope 2) in g CO_2 eq. per kWh	110 (<149: SBTi (1) well-below 2°C threshold)	135	156	181
CO_2 Energy sales	GHG emissions relating to the use of sold products (in Mt CO_2 eq.) (Scope 3)	52	53	61	66
	Carbon intensity of energy sales produced (Scopes 1 and 3) and purchased (Scope 3) in g CO_2 eq. per kWh	152 (Target for SBTi (1) well-below 2°C)	225	221	252
CO_2 Other	Other GHG emissions, including Scope 3 of purchases, fixed assets and the upstream fuel and electricity purchase chain (scopes 3.1, 3.2, 3.3) in Mt CO_2 eq.	85 (Target for SBTi (1) well-below 2°C)	82	90	101
Renewables	% of renewable energy in the electricity production capacity mix	58%	41%	38%	34%
Decarbonization of our customers	Customer GHG emissions avoided by ENGIE offers and products (in Mt CO_2 eq.) (excluding Scope 1, Scope 2, Scope 3)	45	25	28	27
Decarbonization of our suppliers	% of top 250 preferred suppliers (excluding energy) certified by or aligned with the SBT initiative (1)	100%	24%	23%	20%
Biodiversity	Rate of industrial sites with natural management of green spaces in the use of chemical phytosanitary products	100%	58%	34%	28%
Water	Fresh water consumption per energy produced (m^3 / MWh)	0.1	0.275	0.301	0.342
Other operational objectives of the Group overseen by the Executive Committee					
Renewable capacities	Renewable electricity production capacity (@100% and excluding pumped storage) in GW (2)	80	42	38	34
CO_2 Energy generation	Carbon intensity of energy production (Scopes 1 and 3) in g CO_2 eq. per kWh	158	203	216	240
Decarbonization of our working practices	GHG emissions relating to working practices in Mt CO_2 eq.	0 (after offsetting up to 0.2 Mt CO_2 eq.)	0.3	0.3	0.3
Environment	Rate of activities with an environmental plan established in consultation with stakeholders	100%	66%	53%	37%
Pollution	NO_x emissions reduction rate vs 2017	-75%	-71%	-63%	-46%
	SO_x emissions reduction rate vs 2017	-98%	-98%	-95%	-34%
	Total particle emissions reduction rate vs 2017	-60%	-61%	-54%	-21%
	Non-hazardous waste disposal reduction rate vs. 2017	-80%	-73%	-47%	+4%
	Hazardous waste disposal reduction rate vs. 2017	-95%	-93%	-94%	-91%
Methane emissions	Direct methane emissions into gas networks in Mt CO_2 eq.	-30% vs 2017 or 1.45 Mt CO_2 eq.	1.45	1.26	1.62
Storage of electricity	Electric battery capacities (GW)	10	1.26	0.05	-

(1) SBT (Science Based Targets): an international initiative to scientifically validate companies' GHG reduction programs in line with Paris Agreement commitments (see Section 3.1.4).

(2) Including decentralized electricity capacities.

Three-year average of direct emissions (Scope 1) at the end of 2023: 30 Mt CO_2 eq. and three-year average of renewable energy capacity @100% at the end of 2023: 38 GW

GHG emissions from energy generation in 2023 (52 Mt CO_2 eq.) were significantly down on 2022 (60 Mt CO2 eq.). They break down into 22 Mt for emissions from controlled assets (scope 1) and 30 Mt for emissions from assets consolidated by the equity method (scope 3). The full effect of the withdrawal from the Jorge Lacerda coal business in Brazil was taken into account in 2022 and 2023 saw the closure of the Pampa Sul coal business also in Brazil.

GHG emissions associated with the use of sold products (scope 3) stood at 53 Mt CO_2 eq., down compared with 2022 (61 Mt CO2 eq.) as a result of a decrease in gas sales due to a warmer climate effect in 2023 than in 2022.

The Group's renewable capacity share was 41%, an improvement on 2022 (38%) as a result of the strategy to develop renewable capacity which was up +4 GW in 2023. This increase was in line with the Group's public commitments in terms of new renewables capacity.

The CO_2 emissions avoided for customers thanks to the Group's offers and services in 2023 (25 Mt CO_2 eq. avoided) decreased compared with 2022 (28 Mt CO_2 eq.). This decrease is related to the updating of emission factors for renewable technologies. The calculation methodology was revised in 2023 to follow the recommendations of the WBCSD (World Business Council for Sustainable Development) and will be implemented in 2024.

The decarbonization level of the top 250 preferred suppliers reached 24% in 2023, up on 2022. This improvement was due to action plans put in place across these preferred suppliers to encourage them to commit to SBT alignment or certification. The Group also continued to support all preferred suppliers in their journey to decarbonization, not just the top 250 preferred suppliers.

PEOPLE	Indicators	2030 targets	2023 Results	2022 results	2021 results
Targets overseen by the governance bodies (EESDC)					
Health & safety	Lost time work-related injury frequency rate [(1)] for employees and subcontractors working on sites with controlled access. This indicator will be extended from 2024 to all people working for the Group, with a higher goal for the 2030 target which will decrease from 2.3 to 1.8.	1.8	1.8	2.0	2.5
	Fatality rate [(1)]	0 each year	0.019	0.014	0.045
Gender diversity	% of women in Group management	[40-60%]	31.2%	29.9%	28.9%
W / M equity	Gender pay gap	< 2%	1.92%	1.73%	-
Apprenticeships	Proportion of apprentices in the workforce on permanent and fixed-term contracts in France excluding regulated entities GRDF and GRTgaz [(2)]	>10%	8.5%	8.5%	7.2%
Training	Rate of staff trained each year	100%	86%	84%	82%
Responsible procurement	Responsible procurement ratio (excluding energy purchases): CSR assessment and inclusive procurement	100	54	38	40
Fraud prevention and corruption	Rate of training of employees most exposed to corruption risk	>95%	68%	55%	49%
Other operational objectives of the Group overseen by the Executive Committee					
Stakeholder dialog	Rate of activities with a societal plan for consultation with stakeholders	100%	49%	46%	36%
Access to energy	Number of beneficiaries with access to sustainable energy	30 M	12 M	9.5 M	7 M

(1) Calculated per million hours worked.

(2) Scope revised for the periods 2021, 2022 and 2023, to cover only France entities excluding regulated entities GRDF and GRTgaz.

The total lost-time work-related injury frequency rate (including employees and subcontractors working on sites with controlled access) reached 1.8, representing an improvement compared with 2022 (2.0). This indicator will be extended from 2024 to all people working for the Group, with a higher goal for the 2030 target, revised to 1.8.

The proportion of women in management is 31.2%, up compared with 2022 (29.9%). This improvement is the result of the continued effects of the fifty-fifty program, dedicated to the Group's cultural transformation in terms of welcoming and retaining female talent, thereby accelerating and supporting the promotion of gender equality.

As a reminder, the gender equity indicator, previously referred to as the EgaPro index, was replaced in 2022 by the gender pay gap indicator which measures the pay gap between men and women. The objective for 2030 was set at a maximum difference of 2% at the Group level. This indicator is a continuation of the EgaPro index and reflects a more ambitious target by switching to a more understandable international indicator. The result in 2023 was 1.92%, up compared to 2022 (1.73%).

Most of the Group's social indicators (see Section 3.4), environmental indicators (see Section 3.5), and societal indicators (see Section 3.6) are audited by an independent third party (see Section 3.11).

1.5.3 CSR RATINGS

ENGIE's CSR performance was again recognized in 2023 by the S&P Global rating agency with a score of 81/100, unchanged from 2022. The Group confirmed its inclusion in the World Dow Jones Sustainability Index (DJSI).

The Group received a score of 70/100 in 2023 from the Moody's ESG rating agency, stable compared to 2022. With this score, the Group is included in the four indices: Euronext Vigeo World 120, Europe 120, Euro 120 and France 20, in addition to being listed in the CAC 40 ESG index.

In 2023, the Sustainalytics rating agency assessed the Group's CSR risk as medium, as in 2022, with a rating of 29.6 (slight deterioration compared with 29.2 in 2022).

The MSCI rating agency confirmed the Group's AA rating in 2023 with a score of 6.9/10, referencing it in its MSCI EMU ESG et Europe ESG indices.

The ISS-ESG rating agency assigned ENGIE a B- Prime Status rating in 2023.

The ECOVADIS rating agency assessed the Group in 2023 with a score of 78/100, up by one point.

Finally, as it does every year, ENGIE also answers the CDP (ex-Carbon Disclosure Project) questionnaires. In terms of the fight against climate change, the Group was rated B (versus A- in 2022) following its answers to the CDP Climate questionnaire. In terms of the protection of water resources, the Group was rated A- (versus B in 2022) following its answers to the CDP Water questionnaire. Finally, the Group was rated C (versus B in 2022), focusing its efforts on sustainable management of wood resources, following its answers to the CDP Forest questionnaire.

The Group maintains high scores in CSR performance, placing it well above the average of the reference sectors of the various agencies.

Regarding more specific ratings, ENGIE has once again been listed in the Bloomberg Gender Equity Index, as it was last year.

Moreover, the Group had its carbon neutrality trajectory up to 2045 assessed by Moody's, which published its assessment on February 21st 2024: NZA-2 on a scale of five levels ranging from NZ-1 to NZ-5, with an ambition aligned with a +1.5°C trajectory and a 'solid' level on the implementation of objectives. A summary of the assessment is available below with the full report directly accessible on the Moody's website (www.moodys.com/research/doc--PBC_1388307).

1.6 DESCRIPTION OF THE GROUP'S ACTIVITIES

In the context of its new organization, implemented on July 1, 2021, ENGIE is made up of four Global Business Units (GBU) associated with the Group's four main business lines (renewables, networks, energy solutions, FlexGen & retail production & energy supply) and two operating entities (Nuclear and Global Energy Management & Sales (GEMS)).

1.6.1 GBU RENEWABLES

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues *(in millions of euros)*	5,512	6,216	-11.3%
EBIT *(in millions of euros)*	2,005	1,627	+23.2%
Installed capacity *(GW at 100%)*	41.4	37.9	+9.2%

1.6.1.1 Missions, organization and strategy

Missions

The role of GBU Renewables is to develop, build, finance, operate and maintain renewable electricity production assets in line with ENGIE's purpose to act to accelerate the transition to a carbon-neutral economy. To do so, the GBU focuses its industrial, financial and energy management expertise on five main technologies:

- hydropower;
- solar power;
- onshore wind;
- offshore wind; and
- battery storage collocated with a renewable asset.

Organization

GBU Renewables is organized around:

- four operating regions:
  - Europe,
  - North America,
  - South America,
  - AMEA (Asia, Middle East and Africa),
- three operational support departments:
  - Business Development,
  - Operational performance,
  - Engineering and projects,
- supported by three support functions:
  - Legal and ethical,
  - Finance and strategy,
  - Human Resources, communication and CSR.

ENGIE's offshore wind activities are exclusively managed by Ocean Winds, a joint venture with EDP Renovàveis.

Strategy

The GBU continues to roll out an industrial growth strategy based on the following pillars:

- being a leader in renewable energy, reaching 50 GW of installed capacity in 2025 and 80 GW in 2030. An additional 38 GW must be installed over the 2024-2030 period to achieve this latter objective. To this end, the majority of the future investments will be focused on the five historical priority markets of the GBU, namely the United States, France, Brazil, Chile and offshore wind, with a growing ambition in the AMEA region, particularly in India;

- focusing the Group's development on a (develop-to-own) model that keeps the assets on the balance sheet in mature geographic areas where ENGIE is the operator and manages the development risk;
- strengthening competitiveness by improving operational excellence, in particular through the rollout of a global industrial platform to share expertise and achieve scale effects in engineering, procurement, operation and maintenance (O&M);
- setting the Group apart by rolling out an integrated industrial model, benefiting from expertise throughout the value chain: project origination and development, engineering, financing, purchase of key equipment, construction project management, market access routes, market risk management, asset management and operations and maintenance.

1.6.1.2 Risks specific to renewable energy

The global political environment is generally very favorable to the development of renewable energy sources because of its awareness of the urgent need to reduce CO_2 emissions in order to combat climate change. In a post-Covid world that is also struggling with the shockwaves of the conflict between Russia and Ukraine, renewable energy capacity targets have been revised upward and new policies have been introduced or are being prepared to support these new objectives.

However, there are difficulties in achieving these them, including:

- attracting and retaining talent in a market where competition is very strong;
- obtaining authorizations and access to the network in a timely manner;
- investing heavily in electricity transmission networks to absorb the growth of renewable facilities;
- managing project costs in light of rising inflation, interest rates, equipment supply chain disruptions and technical and financial difficulties affecting some western suppliers. These disruptions have arisen as a result of the global pandemic, the conflict between Russia and Ukraine and the relocation of manufacturing facilities to the United States, India and Europe, in a context of pressure to meet the scale of global demand.

To mitigate these risks, the Group relies on its global reach and local presence. ENGIE's global presence enables it to respond to the challenges of equipment procurement by improving supplier access and synergies at a global level. GBU Renewables has a global industrial platform that supports projects in all countries where it operates, covering development, construction and operations, in support of local teams with a thorough knowledge of the local business environment.

Finally, market price volatility can create challenges, even though absolute price levels continue to support renewables projects and ENGIE can rely on GEMS to manage the market risks.

1.6.1.3 Activities in Europe

1.6.1.3.1 France

In France, ENGIE remains the number one generator of onshore wind and large-scale solar power, and also holds the number two position in the field of hydroelectric generation. The GBU aims to strengthen its position in onshore wind and significantly accelerate growth in photovoltaic power. It mainly positions itself on public tenders and contributes to the emergence of corporate tenders (corporate PPA). The GBU is currently developing the largest solar power energy and battery storage project in continental Europe (700 MW Horizeo project) to stimulate this growth market.

In 2023, ENGIE commissioned almost 0.3 GW of new solar and onshore wind capacity in France.

The scope of activities in France comprises three subsidiaries owned by ENGIE, either solely or in partnership:

- ENGIE Green (100% owned by ENGIE), the French wind and solar leader based in Montpellier with around 540 employees, which operates 4 GW installed capacity (2.5 GW onshore wind, 1.5 GW solar power and 3 MW batteries);
- SHEM (Société Hydro-Électrique du Midi, 100% owned by ENGIE), based close to Toulouse: high-head hydroelectric generation (0.8 GW installed) in the South-West of France;
- CNR (Compagnie Nationale du Rhone, of which ENGIE is the principal shareholder with a 49.97% stake), based in Lyon, with 3.1 GW hydroelectricity installed capacity along the Rhone river and its subsidiary CN'Air with 0.9 GW onshore wind and solar installed at the end of 2023.

Regulatory changes

The law on the acceleration of renewable energy production adopted in March 2023 aims to facilitate the installation of new and renewable energy sources to make up for time lost in this field. The implementing texts, particularly the main ones (development of agrivoltaism, imperative reasons of major public interest, value sharing), have been the subject of numerous discussions and are expected to be published in 2024. The results of the consultation had not been made public at the time of this publication. The French climate energy strategy (SFEC) was submitted for consultation at the end of 2023, and a law on energy production is expected to be reviewed in 2024. The challenge is to validate the 2035 objectives in terms of solar, onshore and offshore wind and hydroelectric capacity. This law could include a provision allowing the government to change the legal framework for hydroelectric concessions.

1.6.1.3.2 Rest of Europe

In addition to its leadership position in France, the Group continues to accelerate its business in the rest of Europe by developing a strong portfolio of projects, with different maturities and in targeted geographic areas.

In Europe (excluding France) at end-2023, the Group operates 1.9 GW of hydropower (mainly in Iberia), 3.6 GW of onshore wind power (mainly in Spain, Portugal and Belgium) and 0.4 GW of solar power (mainly in Spain and Italy) and 0.05 GW of battery storage, associated with renewable assets. In 2023, ENGIE added almost 0.5 GW of renewable capacities in Europe (excluding France and Ocean Winds), mainly in Germany, Italy, Poland and Spain.

In the field of hydroelectric generation, ENGIE, in partnership with Crédit Agricole Assurances and Mirova, has a strong position in **Portugal** with a 1.7 GW hydroelectric portfolio in the north-east of the country. The Group is also present in **Spain** with a portfolio of small hydropower plants (totaling 0.06 GW) and **Germany** where it operates the Pfreimd hydropower plant (0.1 GW).

The Group operates 3.6 GW of onshore wind assets at the end of 2023, mainly in **Spain** (1.4 GW), **Belgium** (0.6 GW, number one position), **Portugal** (0.5 GW, via TrustWind, a 50-50 joint venture with Marubeni), **Italy** (0.4 GW), **Germany** (0.2 GW), **Poland** (0.2 GW) and **Romania** (0.1 GW). Pursuing its geographical refocusing strategy, ENGIE withdrew from Norway by selling its shares in a 208 MW wind farm in 2023.

The Group also has 0.4 GW of solar power assets, mainly in **Spain** (0.2 GW), **Italy (0.1 GW), Poland (0.1 GW), the Netherlands (0.04 GW), Romania and the United Kingdom**.

1.6.1.3.3 Offshore wind activities through Ocean Winds (OW)

Ocean Winds (OW) is a 50-50 joint venture, owned and created in 2019 by EDP Renovàveis and ENGIE, combining the existing and developing offshore wind project portfolios of both companies (fixed and floating), mainly in Europe, the United States and selected geographies in Asia. At the end of 2023, the joint venture operates an installed capacity of 1.5 GW (1 GW in the United Kingdom, 0.5 GW in Belgium and 0.03 GW in Portugal). In 2023, construction began on three offshore wind projects, including 1 GW in France and 0.9 GW in the United Kingdom.

1.6.1.4 Activities in North America

North America is a priority market for ENGIE's growth in renewable energy, with a large proportion of assets contracted to C&I (Commercial and Industrial) customers through Corporate PPA agreements. In 2023, the Group signed 1 GW of Corporate PPA in the United States.

At the end of 2023, ENGIE's operational asset portfolio consisted of 3.9 GW of onshore wind (3.2 GW in the United States and 0.7 GW in Canada), 2 GW of solar in the United States and 0.5 GW of battery storage in the United States. The vast majority of this operational portfolio is located in five markets: ERCOT (Electric Reliability Council of Texas), SPP (Southwest Power Pool), PJM (Pennsylvania, New Jersey, Maryland) and MISO (Midcontinent Independent System Operator) in the United States and in Ontario (Canada). In 2023, ENGIE commissioned almost 2 GW (0.4 GW of onshore wind, 1.1 GW of solar and 0.5 GW of batteries associated with renewable assets).

Regulatory changes

The Inflation Reduction Act (IRA), adopted in the United States in August 2022, is expected to generate an estimated investment of US$370 billion (around €350 billion) in renewable energy over the 2023-2033 period. The IRA includes federal tax credits to encourage investment in renewable energy technologies and to combat climate change through carbon storage, the production of renewable fuels and the installation of renewable energy equipment production resources. The package of measures includes more than US$60 billion (around €57 billion) to support the "generation of clean energy along the US coastline." These measures should double the pace of renewable energy development, while stimulating the relocation of renewable energy supply chains, in particular manufacturing.

1.6.1.5 Activities in South America

Two out of ENGIE's five key markets are located in South America (Brazil and Chile), where the Group has strong positions with 12.1 GW of hydropower (mainly in Brazil), 2.4 GW of onshore wind, 1.4 GW of solar power and 0.1 GW of battery storage.

In 2023, 0.7 GW of new renewable installed capacity was commissioned in South America, mainly in Brazil. In 2023, the Group signed an agreement for the acquisition of 0.5 GW of operational solar assets in Brazil.

In **Brazil**, ENGIE operates 11.8 GW of hydropower, 1.7 GW of onshore wind and 0.3 GW of solar power.

ENGIE Brasil Participações Ltda (EBP, 100% ENGIE subsidiary), holds 68.71% of the share capital of ENGIE Brasil Energia (EBE), which is responsible for the centralized electricity production and transportation business. EBP has a 40% interest in Energia Sustentavel do Brasil Participações S.A. which owns the Jirau hydroelectric power plant (3.8 GW).

In **Chile**, through its 60%-owned subsidiary ENGIE Energia Chile (EECL), ENGIE has 0.9 GW of renewable capacity, including 0.4 GW of solar power and 0.3 GW of onshore wind power, 0.05 GW of hydropower, supplemented by the commissioning in 2023 of 0.1 GW of battery storage associated with an existing solar park.

In **Mexico**, the Group operates 0.9 GW (0.7 GW from solar power, 0.2 GW from onshore wind and 0.03 GW from battery storage).

In **Peru**, ENGIE, through ENGIE Energia Peru (61.77%-owned by ENGIE), operates 0.3 GW of hydropower capacity, 0.04 GW of solar capacity and the Punta Lomitas onshore wind farm (0.3 GW) commissioned in 2023. This wind farm is the largest in the country and takes over the Power Purchase Agreement from the Ilo21 coal-fired power plant that will cease to operate (Section 1.6.4.2.2 "Americas").

1.6.1.6 Activities in Asia, Middle East and Africa

ENGIE operates 2.6 GW of capacity in the region, including 1.4 GW from solar power and 1.2 GW from onshore wind power, including 0.3 GW from the full acquisition in 2023 of BTE Renewables in South Africa.

The acquisition of BTE Renewables, the leading developer, owner and operator of renewable assets in Africa, strengthens ENGIE's position in **South Africa**, which stands at 0.7 GW of installed capacity (0.3 GW onshore wind and 0.4 GW solar power). It paves the way for accelerated development as this acquisition is accompanied by a 3 GW portfolio of advanced development projects.

In **India**, ENGIE holds a portfolio of around 1.1 GW in renewable energy, including 0.8 GW solar and 0.3 GW onshore wind. In 2023, the Group obtained 0.3 GW in new solar projects through a call for tenders organized by the State of Rajasthan.

ENGIE also operates assets in **Morocco** (0.3 GW onshore wind), **Egypt** (0.3 GW onshore wind), where the Group is also building a 500 MW wind project, in **Australia** (0.2 GW onshore wind) and **Malaysia** (0.1 GW solar).

The region continues to implement the Group's geographical refocusing strategy, having completed the withdrawal from Mongolia (55 MW onshore wind power) in 2023.

1.6.2 GBU NETWORKS

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change (reported basis)
Revenues *(in millions of euros)*	6,873	6,961	-1.3%
EBIT *(in millions of euros)*	2,265	2,371	-4.5%
Length of gas distribution networks *(in km)*	258,512	255,394	+1.2%
Length of gas transmission networks *(in km)*	39,629	39,504	+0.3%
Length of electricity transmission networks *(in km)*	5,720	4,882	+17.2%

1.6.2.1 Missions, organization and strategy

GBU Networks is responsible, in particular, via independent subsidiaries, for developing, operating and maintaining gas (distribution and transmission networks, storage and LNG terminals) and electricity networks, as well as the production of biomethane, in France and abroad. ENGIE is the leading gas networks operator in Europe. These networks and their decarbonization are a key challenge of the energy transition. Natural gas, in the form of biomethane or synthetic methane and then hydrogen in the longer term, is a key vector in enabling the transition by replacing coal, which is much more polluting, and by ensuring the flexibility and overall security of integrated energy systems. The electricity networks, meanwhile, are inextricably linked to the development of renewable energy, which has to be connected and distributed, and new uses such as electric mobility.

The strategy implemented can be summed up in five points:

- carrying out the necessary actions and projects to ensure the security of the gas supply in Europe;
- maximizing the value of networks;
- shifting the portfolio, traditionally built around gas networks in France, toward international activities and electricity;
- promoting biomethane, and more generally low-carbon gas, production in France and in a certain number of target countries abroad;
- converting assets to hydrogen.

Besides this strategic road map, GBU Networks is also tasked with:

- managing and optimizing the necessary expertise;
- ensuring the operational performance and digitization of assets and processes;
- reducing or offsetting CO_2 and methane emissions;
- overseeing personal health & safety.

Market and competitive environment

An independent national regulator is establishing a network remuneration system with formulas whose parameters are reviewed every four or five years on average. There is very little, or even no, competition between the various players due to the nature of transmission and distribution assets, and the regulated nature of their markets. In Europe, which is ENGIE's main market, the main network grid managers are EDF, National Grid, Enel and E.ON with exposure mostly to electricity networks.

The business model is almost entirely regulated but uncertainty remains as to the model that will be used to develop hydrogen networks.

The biomethane market remains local and fragmented with a large number of players (local developers, companies specialized in biomethane production, oil and gas companies, utilities). Leaders have emerged among these and have built their development on local markets, such as *Archaea Energy* in the United States, *Malucelli* in Brazil and *SGN* in the United Kingdom. Acquisition operations are under way, allowing international players in the oil and gas industry and utilities to build up a portfolio of European as well as global assets and projects.

1.6.2.2 Activities in France

1.6.2.2.1 GRDF

In France, GRDF, an independent subsidiary of ENGIE, develops, operates and maintains distribution networks (201,000 km of networks) and delivers gas for consumers. GRDF is tasked with giving all gas suppliers and biomethane producers equal access to its network. Its business plan, which has been completed, targeted the installation of 12 TWh of biomethane by the end of 2023, double the current multi-year energy schedule. This ambitious goal has been achieved. Its new business plan will be announced in 2024.

The distribution activity has specific features related to its classification as a local utility. Each municipality where gas supply is available grants a concession to an authorized distributor to operate the gas distribution utility in its territory. Concessions are entered into or renewed based on a standard agreement established jointly by the French national federation of concession-granting and state-controlled municipalities (Fédération Nationale des Collectivités Concédantes et Régies or FNCCR), the Urban Landowners' Association (Association Foncière Urbaine or AFU) and GRDF. The concession-granting bodies then carry out controls to ensure the proper execution of the obligations arising from these concession agreements. In 2022, a new standard concession agreement was adopted by the FNCCR (the French national federation of concession-granting and state-controlled municipalities), France Urbaine (the French association for metropolises, urban communities and large cities) and GRDF. This agreement embodies several major changes: in addition to challenges relating to the network's security and modernization, it focuses on an improved response to territorial challenges to support the local energy transition; clear management and control of investment decisions (investment blueprints / multi-annual investment programs); the implementation of service quality indicators, with penalties for GRDF in the event of failure to meet commitments. At end-2023, more than one hundred new agreements have been signed with large cities, metropolises and energy syndicates based on this new standard. These long-term agreements – up to 30 years – demonstrate the value recognized by the authorities of the gas network in the energy transition over the long term.

Distribution structures belong to the municipalities even when they are built and financed by GRDF. GRDF, the concession operator has exclusive use of these structures. The Energy Code recognizes the entitlement of the historical concession operators, i.e., GRDF and 22 local distribution companies (ELD), to exclusive service areas. As holders of a "distribution monopoly" they are the sole operators with which the conceding municipalities may renew the concession. The grounds for terminating a concession contract early are strictly controlled (listed exhaustively) as is the date the concession can be terminated (it cannot be in the first half of the contracted term). Termination also requires two years' notice and the concession-granting authority must pay compensation to the concession operator for early termination.

Apart from the exclusive service areas of GRDF and the local distribution companies, all municipalities not supplied with gas may entrust their public gas distribution to the authorized operator of their choice, following competitive bidding.

Regulatory changes

Apart from this specific case of public service delegations recently awarded after a competitive bidding process, GRDF's activity is remunerated by a tariff set by the CRE. The current tariff, "ATRD6," has applied since July 1, 2020 for a period of four years across GRDF's exclusive service area. The tariff, which comes into force in July 2024 for a period of four years, known as "ATRD7," on GRDF's exclusive service area, covers the greening and safety of the gas network as well as the major projects that GRDF will take on during the period such as the gas changeover project (conversion from B gas to H gas in northern France). The project to transition from gas with low calorific power ("B" gas), mainly originating in the Netherlands, to gas with high calorific power, which is more widespread in France, successfully continued in 2023.

In addition to the major dynamic of including biomethane in the networks, GRDF also rolled out its R&D program to prepare for the inclusion in the network of new renewable gases (blended hydrogen, methanation or dedicated networks; pyro-gasification; hydrothermal gasification).

The CRE changed the compensation rate of the regulated asset base of GRDF to 4.10% (real before tax) for 2020-2023. Once a year, the CRE decides on any necessary tariff changes to fit the current context. After a slight decrease of -0.8% on July 1, 2022, the tariff increased by +4.3% on July 1, 2023.

For the new four-year period starting on 1 July 2024, the compensation rate for assets integrated into the Regulated Asset Base (RAB) before 2024 will be 4% real before tax. In addition, new assets (added to the RAB after that date) will be compensated by a nominal rate of 5.3% before tax.

1.6.2.2.2 GRTgaz

GRTgaz is an independent ENGIE subsidiary owned by ENGIE, SIG and SIG's employees, which have respective stakes in its capital of 60.8%, 38.6% and 0.6%.

Activities

GRTgaz operates over most of France, developing, operating and maintaining a gas transmission network consisting of more than 32,000 km of buried pipeline and 26 compression stations. This network transmits gas between suppliers, biomethane producers and consumers (distributors or industrial companies directly connected to the transmission network). GRTgaz operates its network in a secure and optimized way and provides transmission services to network users; it has a public service mandate to guarantee the continuous supply of gas to consumers, and facilitates better integration of the European gas markets.

GRTgaz, with its subsidiaries Elengy, which operates LNG terminals in France, and GRTgaz Deutschland, which operates the MEGAL transmission network in Germany, plays a key role on the European gas networks stage.

Regulatory changes

GRTgaz activity in France is highly supervised: first of all, France's Energy Code stipulates that the construction and operation of natural gas transmission pipelines are subject to a specific and non-transferable authorization issued by the competent administrative body. Moreover, the business of GRTgaz is conducted within a general framework designed to guarantee the independence of the grid manager in terms of the production and supply of natural gas. This framework was officially recognized by the certification issued by the CRE in its resolution dated January 26, 2012, which was renewed on July 6, 2017. Finally, the retail business of GRTgaz is conducted within a regulated framework which guarantees a relative stability for the company's revenue, which is mainly generated through the sale of annual and multi-annual transmission capacity at a tariff set by the CRE to cover its expenses and ensure a fixed return on investment. Thus, by resolution of January 20, 2020, the CRE defined the methodology and set the tariffs for the use of transmission networks in France known as "ATRT7," applicable for 2020-2023. In this context and applying the methodology and inflation assumptions used, the gas transmission tariff applicable at April 1, 2023 (ATRT7) was +2.08% on the main network and +2.02% on the regional network (CRE resolution of January 31, 2023) compared with the tariff applied since April 1, 2022. This resolution does not alter that of April 1, 2020, which set the compensation rate of the regulated asset base of GRTgaz at 4.25% – real before tax – for 2020-2023.

A new tariff will apply from April 1, 2024, for a period of four years (ATRT8).

The compensation rate for assets integrated into the regulated asset base (RAB) before 12/31/2023 will be 4.1% real before tax. In addition, new assets (integrated into the RAB after that date) will be compensated by a nominal rate of 5.4% before tax, over 30 years instead of 50 years.

Projects launched or completed during 2023

GRTgaz, a player in the energy transition, invests in innovative solutions that favor the development, injection into the networks and use of renewable, low-carbon gas (biomethane and hydrogen), and thus contributes to the achievement of carbon neutrality.

GRTgaz is contributing to the growth of hydrogen as an energy carrier by developing hydrogen transmission network projects within the fastest growing hydrogen production and consumption basins: Dunkirk (Dhune project), Saarland (MosaHyc project), Alsace (RHyn project), Marseille (HYnframed project), etc. GRTgaz is also part of the H2med project that will connect the Iberian Peninsula with Germany, primarily through the Barcelona–Marseille offshore pipeline project and the Hy-FEN project between Marseille and Germany.

GRTgaz is involved in the emergence of carbon capture, use and storage for the pipeline logistics part. GRTgaz is involved in four CO_2 transmission projects in France in Dunkirk (onshore and offshore pipeline), Saint-Nazaire and its hinterland and Fos-sur-Mer.

In 2023, the gas transmission activity remained marked by the almost total suspension of Russian gas imports into Europe by pipeline in 2022, which has since led to a major increase in LNG imports to compensate. Flows which previously came from countries to the east of France decreased markedly, or even reversed, with France at times becoming a gas exporter to the east, notably to Germany.

This change was made possible by the network of GRTgaz, which has been significantly enhanced over the past 10 years, and by the rationalization of its use, which authorized an increase in the injection of gas from LNG terminals into the network, and outbound exports to Germany, through the Obergailbach interface point. GRTgaz has also launched the Ecogaz system, to encourage customers who can, to reduce their gas consumption during peak periods. All of these elements ensured the security of gas supply in France during winter 2022-2023.

In addition, GRTgaz carried out in one year the work required to connect an FSRU (floating LNG terminal) to Le Havre, which came into service in the fall of 2023. In addition, the production of biomethane has continued to increase, reaching an injection capacity of 11.1 TWh / year at the start of October 2023. These developments have improved the security of the energy supply and boosted European gas solidarity.

Gas consumption

The consumption observed during the first quarters of 2023 is in line with that observed in 2022. The year 2022 was marked by a fall in gas consumption in France, notably in the industrial sector (due to high gas prices) and the residential sector (due to temperatures that were higher than reference temperatures, which limited heating needs). As the revenue of GRTgaz mainly consists of transmission capacity sales, the impact of short-term changes in volumes actually consumed in France is minimal.

In April 2023, the CRE published a report on the future of gas networks in the long term, which shows that in all scenarios of changes in gas demand studied, the transmission network remains largely necessary in the long term, to address geographical and temporal imbalances between production and consumption, manage the need for intra-day flexibility and ensure potential flows with neighboring countries.

1.6.2.2.3 Elengy

LNG terminals are port facilities that allow liquefied natural gas (LNG) to be received and regasified. Elengy has developed additional services since 2012, such as the reloading of LNG tankers, transshipment between vessels, and LNG tank truck loading.

Elengy is one of the largest European LNG terminal operators, with three LNG terminals in France. The facilities operated by Elengy had a total regasification capacity of 21.5 billion m^3 (Gm^3) of gas per annum as of December 31, 2023.

The year 2023 saw the continuation of a high level of business with 17 billion m^3 actually unloaded at the Elengy terminals.

Since the beginning of the crisis in Ukraine, French LNG terminals have been operating at maximum capacity and the maximum capacity of the Fos Cavaou terminal has been increased to 117 TWh thanks to the technical and regulatory debottlenecking of the terminal. Investments could enable a further increase of the regasification capacities of its terminals.

Elengy owns 100% of its three terminals and has been a subsidiary of GRTgaz, an independent subsidiary of ENGIE, since 2017.

Elengy is fully in line with the decarbonization trajectory, in particular by coordinating the GO-CO_2 project aimed at developing, for the benefit of industrial customers in the vicinity of Nantes-Saint-Nazaire, a set of networks for the capture, transmission, liquefaction and loading of CO_2 for a geological storage site.

Facilities

Commissioned in 1972, the Fos Tonkin terminal is located on the Mediterranean coast and receives LNG primarily from Algeria. Its dock can accommodate vessels carrying up to 75,000 m^3 of LNG while its tank has a total capacity of 80,000 m^3. Its commercial capacity has been reduced to 1.5 Gm^3 per year since January 1, 2021. The first micro-tanker loading operation was carried out in October 2023.

The Montoir-de-Bretagne terminal, commissioned in 1980, is located on the Atlantic coast and receives LNG from various sources. It has a regasification capacity of 10 Gm^3 of gas per annum and three tanks with a total capacity of 360,000 m^3 of LNG. It also has additional capacity of two docks that can accommodate tankers transporting up to 260,000 m^3 of LNG (Qmax) and enables significant transshipment activity.

The Fos Cavaou terminal, which was commissioned in 2010, now has a regasification capacity of 10 Gm^3 of gas per annum. It has one dock that can accommodate Qmax-size tankers and three tanks with a total capacity of 330,000 m^3 of LNG. Following that, a further 31 micro-tanker loading operations were carried out in 2023.

Work to double the number of tank loading bays at the Montoir and Fos Cavaou terminals was completed in 2023.

Regulatory changes

The LNG terminals are accessible to all LNG suppliers. Access to regasification is regulated. The current tariff, referred to as "ATTM6" was set by a CRE resolution of January 6, 2021. A mid-term review was set by the resolution of January 31, 2023, and has been in place since April 1, 2023.

The micro-LNG and LNG tanker transshipment and loading services are not regulated.

A new prefectural order dated March 2022 authorizes the optimization of water samples from the Fos Cavaou terminal and now allows it to operate with an increased commercial capacity of 10 Gm^3/year.

1.6.2.2.4 Storengy

With Storengy, the Group is the leader in natural gas underground storage in Europe, with net storage capacity of 12.2 billion m^3.

Gas storage and conversion to renewable gas

In **France,** Storengy S.A. operates 14 underground storage facilities: nine of these are in aquifers (total useful storage volume of 9 billion m^3), four are in salt caverns (1 billion m^3) and one is in a depleted field (80 million m^3). Three of these sites are in reduced operation according to precise regulatory procedures (880 million m^3).

Following a reduced start up in 2012, Storengy restarted the Trois-Fontaines-l'Abbaye site in January 2023. Restarting existing facilities will allow some of the gas still in the storage site's reservoir to be withdrawn. Revenue from the sale of this gas will contribute to the decommissioning or reconversion of the site at the end of its operating period, in around 10 years' time. This restart is part of the overall project to fully rehabilitate the site in consultation with local partners (administration, public bodies, communities, associations, residents). The first stage, beginning in 2023 for a period of around 10 years, will allow some of the natural gas still present in the sub-soil to be withdrawn, i.e. around 8 TWh, or the equivalent of 20 years of consumption for the urban community of Saint-Dizier, Der & Blaise (France).

In **Germany,** Storengy Deutschland GmbH owns and operates six storage facilities (1.7 billion m^3; three salt sites and three depleted sites) and operates a seventh storage facility for a third party.

In the **United Kingdom,** Storengy UK Ltd operates the storage site in saline caverns in Stublach (400 million m^3). With 20 caverns, this storage facility is the largest in operation in the UK (the Rough storage facility, the largest gas storage facility in the United Kingdom, is still awaiting re-opening in response to supply security issues relating to the Russian-Ukrainian crisis).

In Europe, Storengy is also preparing to convert storage assets to renewable gas (biomethane, synthetic methane, hydrogen) in order to add value to gas storage in a decarbonized market. To this end, Storengy is developing the HyPSTER project (1 MW of electrolysis and 3 tons of H2 storage, gradually increasing with a potential 44 tons by 2026) at its Etrez site and the GeoH2 project (a potential 2,000 tons of H2 storage by 2027) at its Manosque site. Other projects are being studied at Storengy's sites in the UK and Germany, two markets with major goals for the development of hydrogen and related networks.

Renewable gas production, led until mid-2023 by Storengy, has become increasingly important in the Group's strategy. To best position this activity and dedicate resources for the rollout of a strong European ambition, the Group has set up a new entity, Renewable Gases Europe (RGE). Since July 2023, this entity has taken over renewable gas production activities in France (see below).

Heating, cooling and power generation from geothermal energy

In Germany, Storengy is the sole shareholder of the engineering firm geoEnergieKonzept, which specializes in shallow geothermal energy. The company works as a service provider for Group entities in Germany as well as for external customers.

Regulatory changes

At the European level, in terms of storage, events during 2022 (conflict between Russia and Ukraine) have shifted attention from affordability to the safety and availability of natural gas.

Following these events, in March 2022 the European Commission published the Communication "REPowerEU: Joint European Action for more affordable, secure and sustainable energy," stating that the European Union (EU) must accelerate the process of gradual independence from Russian gas. The Commission has also recognized, through this proposal, that high levels of storage are essential to protect EU security and would allow the EU gas system to absorb potential shocks to the gas market.

Following these comments, the Commission submitted a new proposal to amend Regulation 2017/1938 of October 25, 2017, regarding measures to guarantee the security of natural gas supply.

In this regard, Regulation 2022/1032 of June 27, 2022, provides that Member States must ensure that storage networks located in their territory are filled to 90% of their capacity by November 1 each year.

At the national level, the law of August 16, 2022, establishing the emergency measures for the protection of purchasing power, entrusts storage operators with the mission of building so-called security stocks to meet the minimum fill target before the beginning of winter, as set by the Minister of Energy.

These rules are having a positive impact on the security of natural gas supply by establishing new measures to prevent and / or mitigate the effects of supply disruptions at European level.

France had already put in place a suitable regulatory framework for these supply security issues. Implementation at European level is also a positive signal in this direction.

Following the CRE resolution of 01/31/2024 on the ATS3 period, the compensation rate for assets integrated into the regulated asset base (RAB) before 12/31/2023 will be 4.6% real before tax. In addition, new assets (integrated into the RAB after that date) will be compensated by a nominal rate of 5.9% before tax, over a period of 30 years rather than 50 years.

1.6.2.2.5 Renewable Gases Europe

In 2023, the Renewable Gases Europe entity was created, dedicated to the development of renewable gas and its derivatives, in particular synthetic methane. This new entity, composed of some 200 people, brings together ENGIE Bioz teams that already operate in France through around 30 operating sites (for close to 0.7 TWh in production). It also includes an engineering subsidiary mainly active in the Netherlands, and business development teams from different European countries.

Biomethane demand is set to grow significantly in a very favorable environment, as the European Commission decided last year to double its biomethane production target to 35 billion cubic meters by 2030, which is equivalent to around 380 TWh. According to the scenario recently published by ENGIE on decarbonization trajectories in Europe, in order to meet the European "Fit for 55" targets, 450 TWh of decarbonized gas must be mobilized by 2030 from among all technological procedures (methanization, pyrogasification, renewable hydrogen and all its derivatives and natural gas associated with the capture and storage of CO_2).

The Group aims for 10 TWh in production per year in Europe with the plan to target seven production countries outside France: Germany, Belgium, Spain, Italy, the Netherlands, Poland and the United Kingdom. In the latter country, ENGIE announced in 2023 the acquisition of Ixora Energy, which brings to the Group three units with a capacity of 160 GWh / year and consolidates its portfolio of projects in this key market.

1.6.2.3 Activities in America

ENGIE has become one of the biggest power network players in South America.

In **Chile**, ENGIE owns a 59.99% stake in ENGIE Energia Chile (EECL). This company operates 2,409 km of electricity transmission lines and 25 substations, with an additional 11 km of transmission lines and 10 substations under construction. EECL also owns 50% of Transmisora Electrica del Norte (TEN). This company operates 1,204 km of transmission lines and four substations, that interconnect Chile's North and Central electricity grids. In the gas business, ENGIE holds a 63% stake in GNL Mejillones, an LNG regasification terminal with a 5.5 Mm^3/day capacity, located in Northern Chile, and 100% in ENGIE Gas Chile and ENGIE Stream Solutions Chile, companies dedicated to the commercialization of natural gas through distribution pipelines and LNG by trucks. Additionally, its subsidiary EECL holds 100% of Gasoducto NorAndino, an approximately 1,000 km gas pipeline between Argentina and Chile.

In **Mexico**, ENGIE operates eight local distribution companies providing natural gas to nearly 664,200 customers through a 13,964 km network located in the country's major industrial centers: Bajío, México state, Jalisco, Puebla-Tlaxcala, Querétaro, Reynosa-Matamoros, Tampico and Merida. ENGIE also operates three transmission networks with a total length of 1,306 km supplying natural gas to areas undergoing significant economic development in Bajío (Bajío gas pipelines), central Mexico (Los Ramones II Sur gas pipelines) and the Yucatan Peninsula (Energía Mayakan). The Bajío gas pipeline, at 204 km in length, supplies one of Mexico's most dynamic regions. In 2016, ENGIE strengthened its presence in this region with the Los Ramones II gas pipeline which forms part of the Los Ramones gas system, considered one of the largest gas networks to be built in Mexico in recent years. ENGIE developed Los Ramones II Sur in partnership with Brookfield and the public company Pemex, which own 45% and 5% of the network respectively. In the Yucatan Peninsula, ENGIE operates the Mayakan gas pipeline developed in partnership with the EXI investment fund, which holds 16%. In December 2021, the transmission agreement with the gas pipeline's main customer, which accounted for 96% of the capacity contracted until 2025, was extended until 2050 for the same capacity. In November 2022, ENGIE and CFE signed a collaboration agreement for an extension of the pipeline. This extension will supply two new power plants (Mérida IV and Valladolid IV) and meet the region's growing demand for natural gas. With this agreement, ENGIE will be able to expand its gas network operations and contribute to the security of supply of the region.

In **Peru,** ENGIE owns a 62% stake in ENGIE Energia Peru, via which it operates more than 900 km of power transmission lines.

In **Brazil**, in December 2017, ENGIE entered the power transmission business. ENGIE Brazil Energia (EBE) won an auction for the Gralha Azul project, 1,000 km transmission lines and five substations in the southern state of Paraná. In January 2020, ENGIE purchased the Novo Estado projects from Sterlite, the holder of a concession for the construction, operation and maintenance of 1,800 km of transmission lines in the states of Pará and Tocantins, also including the construction of a new substation and upgrades to three existing substations in the two states. The Gralha Azul project has been fully operational since July 2022, as has the Novo Estado project since February 2023. In 2022, EBE was awarded the Gavião Real project, in the state of Para, for the construction of a new 230/138 kV substation and a transmission line of 1.5 km for a total investment of €18 million. Commissioning is scheduled for March 2024. In June 2023, ENGIE won at auction the Asa Branca project to build a 500 kV power line of 1,000 km in length and to reinforce five substations, to connect renewable electricity production from the north-eastern state of Bahia to the state of Esperito Santo in the south-east. The investment is estimated at €520 million with commissioning expected in 2025.

In the area of gas networks, ENGIE concluded the acquisition of TAG's transport assets in 2020 through a consortium comprising ENGIE, holding 65%, and the Caisse de Dépôt et Placement du Québec (CDPQ), that holds the remaining 35%. In January 2024, the Group completed the sale of a 15% stake in TAG to CDPQ (current partner). TAG is one of the biggest natural gas transmission companies on the regulated market in Brazil, with a network of pipelines of approximately 4,500 km in operation and 100 km under construction, representing around 45% of the country's total gas networks. TAG has 11 gas compression facilities, 14 gas reception points (including two LNG terminals in operation and a third under construction) and 90 gas delivery points in operation and two under construction. TAG transports natural gas to 10 gas distributors (LDCs), refineries, fertilizer plants and electric power plants. TAG inaugurated its supervision and control center in Rio de Janeiro in March 2022. In 2023, TAG launched a new short-term capacity reservation product. New contracts, representing 20% of TAG's revenues in 2023, were also signed with 20 customers, including Shell, Equinor, Galp, four natural gas distribution companies and one industrial company (Unigel). In addition, several projects are under construction, including:

- GASFOR II, a gas pipeline of 84 km (loop within the existing network), COD (Commercial Operation Date) scheduled for August 2024;
- a connection to the Sergipe LNG terminal with a gas pipeline of 25 km, COD in July 2024;

Lastly, ESOM, the company incorporated by ENGIE to provide maintenance for TAG's 4,500 km of network, through 16 operating sites, has been fully operational since July 2022.

In **Canada**, moreover, ENGIE holds a 40% stake in Intragaz, a company owning and operating two natural gas underground storage sites in depleted reservoirs in the Quebec region, with a 157 million m3 total capacity. Expansion is under way to increase the withdrawal rate by 25%. The Intragaz tariff, which expired at the end of 2023, was renewed with no meaningful impact on the rate of return.

Regulatory changes

In **Chile**, in February 2023, the Ministry of Energy published in the Official Journal the tariff decree on the transmission of electricity for the period 2020-2023, without further comment from the Controller General of the Republic (GCR). In June, the Independent Network Operator (ISO) made tariff adjustments over this period. Adjusted revenues are in line with ENGIE's expectations and its subsidiary TEN, with a positive net impact.

In **Mexico**, regulation of the natural gas sector continues to evolve with new environmental standards for the reduction of methane emissions, industrial safety and environmental protection. The Energy Regulatory Commission is conducting a process of consultation with gas sector players with a view to changing the current regulations.

In **Brazil:**

- in April 2021, a gas law was introduced, but there has been no regulation from the National Regulatory Agency (ANP) since that date;
- in order to ensure that the Brazilian gas market is opened up successfully, federal legislation must be harmonized with that of the states as the ANP regulates activities upstream and midstream, whereas each state regulates downstream activities (27 natural gas distribution companies).
- the main risk for gas transmission activities is the bypassing of networks, with projects directly linking gas supply sources to the point of consumption (mainly thermal power plants, which represent around 40% of the country's total demand). The legal framework of the new law requires improvement. To do so, TAG and the Group are part of the public debate with various stakeholders and closely follow regulatory changes and the implementation of the legal framework for the new law at both the federal and local level;
- In 2022, the government launched the "Gas to employ" program to promote the use of natural gas as a substitute for more polluting fuels. TAG is actively involved in this program.

1.6.2.4 Activities in Europe and the rest of the world

ENGIE operates in the area of gas networks in **Romania** via Distrigaz Sud Retele, a subsidiary 99.99% owned by ENGIE Romania, itself 50.99% owned by the ENGIE group. Distrigaz Sud Retele is the country's main natural gas distributor. It covered the southern half of Romania and operated a distribution network of 23,189km at the end of 2023, serving more than two million delivery points.

The Group is also active in natural gas storage in Romania through its subsidiary, Depomures, which is 59% owned. It operates a storage facility of 3 TWh, i.e. 10% of the country's natural gas storage capacity.

In **Germany**, ENGIE has a 31.575% stake in GASAG, the Berlin-based gas distribution company. It also covers the Brandenburg region through its subsidiaries. GASAG markets and sells energy and energy services.

ENGIE is also participating alongside TES in the construction of an FSRU terminal in the port of Wilhelmshaven on behalf of DET (Deutsche Energy Terminal GmbH). This terminal is expected to be operational in 2024, thus contributing to the country's energy security.

1.6.3 GBU ENERGY SOLUTIONS

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues *(in millions of euros)*	11,033	11,441	-3.6%
EBIT *(in millions of euros)*	386	523	-26.2%
Decentralized energy production capacity (GW@100%)	25.3	24.9	+1.5%

1.6.3.1 Missions, organization and strategy

Missions

Energy Solutions is one of the global leaders [(1)] in decentralized energy networks and associated services. It aims to support town-cities, local authorities, industrial and service sector customers in their decarbonization trajectory. To do so, the GBU provides a wide range of solutions to drive action on three levels: making the energy mix greener, energy efficiency and energy savings.

These solutions are divided into three categories: local energy networks, on-site energy production, and energy management and performance services.

Local energy networks designed on a neighborhood, town or metropolitan scale, allow for the production and delivery of final energy (heating, steam, cooling, electricity) to a large number of users by optimizing the use of green energies available in the area (biomass, geothermal, thermal solar, etc.), while developing highly energy-efficient technologies.

The GBU provides public authorities with the creation, development, modernization and operation of these networks, mostly via asset-based business models with investment, in the following main areas:

- heating and cooling networks;
- island-based energy networks;
- sustainable mobility: electric charging networks, biogas stations, production and distribution of renewable hydrogen (see Section 1.6.4.5 "Hydrogen activities").

The combination of these solutions makes it possible to propose global offers to decarbonize towns and cities, campuses and other territorial units.

On-site energy production depends on networks that allow for the site-wide production (industrial or service sites) of the final energy required for its operation (heating, cooling, electricity, steam, compressed air, etc.).

The GBU provides industrial and services customers with the creation, development, modernization and operation of these networks. mostly via asset-based business models, notably allowing:

- final energy production through on-site low-carbon utilities (biomass, thermal solar energy, geothermal energy, fatal heat recovery) and systems to optimize efficiency;
- decentralized solar power.

Finally, **energy performance contracts** combine the production of final energy with the use of renewable and recovery sources (solar power, biomethane, etc.) and the use of this energy in an efficient and less wasteful way.

The GBU thus offers its local authority, industrial, service sector and community housing customers contracts involving commitments to reduce the energy consumption of their buildings and the associated CO_2 emissions.

The GBU also provides:

- a decarbonization advice service, to establish "zero-carbon" road maps (ENGIE Impact);
- engineering services (Tractebel);
- a range of operational services with the operation and maintenance of installations producing and distributing heat and cold in buildings, energy management, etc.

Organization

The GBU is organized around four operating regions: France, Europe, Asia & the Middle East, the Americas, plus two entities specialized in consulting (ENGIE Impact) and engineering (Tractebel).

The central teams provide:

- the implementation of guidelines, tools and methods to industrialize the GBU's activities and improve both the commercial and operational performance of entities within the scope, in particular through business platforms dedicated to the main solutions;
- management of the global scope via five functional departments: Finance, Human Resources, Strategy – Development (including Marketing and Communication), Legal – Ethics and CSR – Operations (including HSE, projects, Performance, Digital and Purchasing);
- the strengthening of synergies between the various entities.

Market and competitive environment

There are mainly two types of actors present in one or other of Energy Solutions' business lines:

- Utilities with energy networks and / or services, and with which there is a trend of expanding their geographical footprint and improving their positioning in terms of activities, thus bringing them more in line with that of Energy Solutions (Energy Solutions nonetheless remains the only entity to centralize all its activities under a single management mechanism);
- network funds, which are more focused on network activities, with assets notably in cooling and heating networks and sustainable mobility.

(1) *Competitive positions established on the basis of specialist work within the Group, carried out using available information published by stakeholders or entities providing external analysis. They are established within the scope of the Group as at 12/31/2023.*

1.6.3.2 Activities in France

In France, business is conducted under the ENGIE Solutions brand and is dedicated to the BtoB services. It serves all segments: cities and local authorities, the industrial and services sectors.

ENGIE Solutions is the leader in France, Monaco and the Overseas Territories in low-carbon decentralized energy networks and associated energy services, with more than 300 centers and subsidiaries.

The 16,000 employees are spread out across the whole of France, both in the mainland and the Overseas Territories. The development of urban heating networks continued in 2023 as part of the decarbonization approach:

- greening and extension of the Amiens heating network by 2025 with the creation of a second biomass boiler (14 MW) and 25 new kilometers of virtuous networks. The rate of renewable energy and recovery will increase from 60% to 72%. The creation of the first cooling network in Hauts-de-France has also been carried out.
- implementation and commissioning of the new Cannes ocean thermal heating and cooling network, supplied by sea water and recovering wastewater. This project is part of the Croisette beautification program, in line with the territory's decarbonization targets and the Territorial Climate-Air-Energy Plan in particular.
- the company SOVEN is the first biomass buyer and producer to obtain SBP*-RED II certification guaranteeing the sustainability of the biomass used in its heating plants;
- development and greening around smaller heating networks, for example the project to set up biomass boilers on the Bernay heating network that will allow customers to be supplied with 85% renewable heat, in addition to the connection of 750 additional equivalent housing units, to provide a total of nearly 8 GWh.

The year 2023 marks an important turning point for sustainable mobility with the creation of ENGIE Vianeo, a new electric mobility brand:

- B&B HOTELS has chosen the ENGIE Vianeo brand to roll out 4,200 electric charging points in more than 340 hotels throughout France by 2024. The facilities are often located in the immediate vicinity of major roads, and the terminals will be accessible not only to the establishments' customers but also to all users of electric vehicles passing through;
- on motorways, the network of superchargers is densifying and diversifying. ENGIE Vianeo and APRR are rolling out five very-high-power charging stations dedicated to electric heavy goods vehicles and long distance coaches. This initiative is a first in France.

ENGIE Solutions continues to support its customers in their energy transition and decarbonization efforts, notably in the industrial sector:

- the installation of a 3.5 MW steam biomass boiler at the Saint-Père-en-Retz (44) dairy, for the supply of decarbonized steam for use in their process, derived from forest platelets. This contract for the design, construction, operation, maintenance and major repairs and renovation is the first to be concluded with the Agromousquetaires group, which has 58 other industrial sites;
- the commissioning of a 17 MW biomass boiler for the Prospérité Fermière INGREDIA dairy in Saint-Pol-sur-Ternoise. This new facility will provide the site with sustainable and more economically stable heat, while promoting the dynamism of the local wood sector.

In terms of energy management and performance services, development continued with the signing of Energy Performance Agreements, notably with:

- the Energy Performance Contract with the city of Vitré for 60 communal buildings and three aquatic centers for five years and nine months, with a commitment to reduce gas consumption by more than 1,000 MWh in total, energy-based and comfort-based consumption commitments for each site and the implementation of numerous energy performance actions (replacement with more efficient boilers, insulation, remote management setup, user awareness);
- the Global Energy Performance Contract with the Departmental Council of Yvelines for 24 middle schools in the department, a partnership led by ENGIE. This 12-year contract will reduce greenhouse gas emissions by 39% and reduce energy consumption by 31%, mainly thanks to the rollout of the Vertuoz Control solution, which allows for optimized control of each room according to its usage rate.

1.6.3.3 ENGIE Impact

ENGIE Impact partners with companies to accelerate decarbonization efforts around the world. ENGIE Impact's engagement model goes beyond strategy to include data excellence, digital tools, and project delivery expertise. As a long-term partner, ENGIE Impact establishes credible pathways to achieve ambitious carbon emission reduction targets, while sharing commitments and responsibility across portfolios. ENGIE Impact now has a portfolio of more than 1,500 customers, including 25% Fortune 500 companies.

1.6.3.4 Tractebel

Tractebel is known as an engineering and consulting company of prime standing which offers integrated solutions in the areas of energy, nuclear, water and networks. It supports its customers, both public and private, in their transition to carbon neutrality.

Tractebel, with 5,500 employees, operates mainly in around 30 countries.

Energy

In the energy sector, Tractebel provides its expertise and know-how to customers within and outside the ENGIE Group covering the design, planning, development and supervision of the construction of projects. For ENGIE, Tractebel is mainly involved in projects for new power plants such as the Flémalle combined-cycle gas plant in Belgium and the Serra do Assuruá (Brazil) and Gulf of Suez (Egypt) wind farm projects.

Tractebel continues to provide its expertise and know-how in the area of nuclear power to major operators. Tractebel also provides its services to players such as EDF in France, ESKOM in South Africa, as well as ENGIE in Belgium. Tractebel is also involved in the development of the ANGRA 3 construction project in Brazil, as well as new reactors at the Hinkley Point and Sizewell sites in the UK. It also takes part in major projects in the areas of research reactors (such as PALLAS, the Netherlands), experimental reactors (such as ITER, France), defense and nuclear waste management networks and small modular reactors (SMRs).

Water

In the water sector, Tractebel is engaged in dams and hydropower projects of all sizes, water irrigation, supply, purification and distribution, as well as maritime or river networks and coastal protection in connection with climate change. Tractebel is carrying out studies for the Pumping Energy Transfer Station (PETS) of Snowy 2.0 (Australia) and to increase the capacity of Coo (Belgium). Tractebel is also involved in purification projects such as Uharakhand (India) and desalination projects such as Dakhla (Morocco) for ENGIE.

Networks

In the urban networks sector, Tractebel helps to engineer buildings, land transportation networks and cities, with the aim of accelerating the development of integrated offerings and decarbonizing districts and regions. Using Building Information Modeling (BIM) and modeling and simulation tools, Tractebel is taking part in various public transport and mobility infrastructure projects in Belgium, Germany, India and Chile and in the Grand Paris Express (France) and Belgrade metro (Serbia) projects. The teams are the leading designers of low-energy buildings in Belgium and won an award at the MIPIM (Marché International des Professionnels de l'Immobilier), the international real estate event, for the design of Liège Hospital (Belgium). Lastly, the teams are involved as experts in the development of the low-carbon strategy of Springfield City Group and Monash University (Australia).

1.6.3.5 International activities

1.6.3.5.1 Europe (excl. France)

Italy

The GBU has leading positions in heating networks in the north of Italy and is one of the biggest players in public lighting, with more than 600,000 lighting points under management. The GBU also provides, with its market leader positioning, energy efficiency and on-site utilities solutions to businesses and public customers.

In 2023, the GBU won several energy performance contracts in the cities of Florence, Naples and Venice.

Germany

The GBU is a major player in on-site utilities through long-term contracts with industrial or services customers. It actively participates in the installation, operation and maintenance of energy efficiency solutions and has specific expertise, particularly in refrigeration. Lastly, for several decades, the GBU has held stakes in a number of *Stadtwerke* – local energy production and distribution companies – making ENGIE a player with strong regional roots in Germany.

In 2023, the GBU signed a 20-year asset-based contract for the greening and extension of the heating network in the city of Tettnang, which is 96% decarbonized with biomass.

Spain

The GBU is active in installation and maintenance services, the provision of energy efficiency solutions and on-site utilities. It is a player in cities via several district heating networks, particularly in Barcelona.

In 2023, it signed the project to build a new 28 MW cooling plant for the Barcelona network and various projects to decarbonize the industry, particularly in the chemical sector.

Portugal

The GBU distributes heating and cooling to the city of Lisbon through its Climaespaço subsidiary and provides O&M services and energy efficiency solutions. In 2023 it developed a portfolio of solar projects as well as an onsite utilities project for an industrial player.

Slovakia and Poland

The GBU is a major player in district heating networks. It also provides installation, operation and maintenance services. The GBU actively develops onsite utilities and decentralized solar activities in both of these countries.

In 2023, the GBU was awarded several contracts to develop and implement solar power projects with Slovakian industrial and service sector customers.

Belgium

The GBU is a large player in decentralized solar via the Sun4Business joint venture with the Orka group.

In 2023, it also initiated the rollout of 5,600 electric charging points as part of the concession won in Flanders.

Romania

The GBU is developing its decentralized solar activities and in 2023 commissioned a contract for 8.6 MW with Saint-Gobain.

1.6.3.5.2 The Americas

United States

The GBU is involved in energy efficiency solutions, particularly for the public sector – local governments, schools and hospitals – and has been developing major partnerships for several years, particularly for universities. The GBU continues to develop its decentralized solar solutions with 380 MW installed in 2023.

Brazil

The GBU is also active in the development and implementation of integrated solutions focused on reducing costs and improving networks for businesses and cities. Its activities mainly include energy efficiency, energy management and public lighting.

1.6.3.5.3 Asia, Middle East and Africa

Persian Gulf countries

ENGIE holds a 40% stake in Tabreed (National Central Cooling Company PJSC), the leader in urban cooling networks in Gulf Cooperation Council (GCC) countries. The company distributes the equivalent of a million tons of cold energy. Tabreed has had several commercial successes since 2020 with the acquisition of the cooling networks of Downtown Dubai and the cooling plants of Masdar (United Arab Emirates).

The GBU also provides onsite energy solutions (solar and other utilities) to industrial customers in the region. It also works with cities and won the Abu Dhabi public lighting energy renovation concession in 2023.

South East Asia

The GBU has strong capacity in technical maintenance, energy efficiency and district cooling systems, to provide turnkey low-carbon offerings. The GBU continues the construction of major projects developed in recent years, notably an integrated district cooling network with Jurong Town Corporation (JTC) for the digital quarter of Punggol in Singapore, as well as onsite solar and utility projects for several industrial players.

In 2023, the GBU won a new call for tender for the supply of cooling for the fifty-seventh largest shopping mall in the Philippines, Festival Mall, as well as an 11 MW onsite solar project for a subsidiary of Cemex.

1.6.4 GBU FLEXGEN & RETAIL

1.6.4.1 Missions, organization and strategy

The GBU FlexGen & Retail includes the following activities:

- thermal production (electricity production from gas, diesel, coal and biomass, energy pumped storage and battery storage);
- seawater desalination;
- BtoC energy supply (sales of electricity and gas, energy services, energy access);
- large-scale production of low-carbon hydrogen and coordination of all hydrogen activities within the Group;
- battery storage and coordination of all battery activities within the Group.

These activities share the same challenge – but also the same opportunity – related to the reduction of CO_2 emissions.

The GBU contributes to the Group's development and preparation for the future. It brings industrial expertise and digital know-how. Besides balancing the Group's financial exposure via Retail activities, the activities of GBU FlexGen & Retail compensate for the intermittent nature of renewable energy by contributing upstream flexibility (flexible thermal production and electricity storage) and downstream flexibility (load shedding or shifting of consumption of BtoC customers). They also provide solutions for decarbonizing industry with low-carbon hydrogen. The GBU therefore plays a key role in the energy transition.

Market and competitive environment

In thermal electricity production, the top 10 (excluding China) is mainly composed of European (ENGIE, Enel, RWE, EPH, Uniper, etc.) and Asian players (KEPCO, Marubeni, Mitsui). These top 10 companies represent a total thermal capacity of 286 GW (around 19% ENGIE). At end-2022, these players had 26 GW of secured projects for new production plants across the globe, of which 95% in gas, driven mainly by Asian players.

In battery storage, around 11 GW of capacity was either installed or in the advanced development stage at the end of 2022 for the main European players, mainly for utilities (ENEL, ENGIE, RWE and EDF), followed by renewable energy developers (NEOEN, Zénobé, etc.) and investment funds (Capital Dynamics, Gresham House).

In low-carbon hydrogen production, outside China, there is a high concentration of projects in Europe and Australia (90% of the total projects announced) with the creation of consortia aimed at reducing production costs. By 2030, Air Liquide, Orsted, EDF and Iberdrola each aim to achieve at least 3 GW in installed electrolysis capacity.

1.6.4.2 Flexible production activities (FlexGen)

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues *(in millions of euros)*	5,264	7,126	-26.1%
EBIT *(in millions of euros)*	1,513	1,768	-14.4%
Centralized gas-powered electricity production capacity *(GW@100%)*	49.2	49.9	-1.4%
Centralized coal-powered electricity production capacity *(GW@100%)*	2.1	2.2	-4.5%
Electricity storage capacity by pumped storage *(GW@100%)*	3.3	3.3	+0.0%

1.6.4.2.1 Europe

The market in Europe is accelerating its transition to less carbon-intensive energy generation. The European energy market, guided by European and national regulatory changes, is experiencing a major short- and medium-term program of shutting down coal-fired production sources, coupled with the phasing out of nuclear power in Germany. In this context, natural gas power plants now have a key role to play by offering the necessary flexibility in the energy markets, alongside emerging solutions such as batteries. Governments (Belgium, Italy, France and UK) are introducing various compensation mechanisms for power generators (remuneration capacity mechanisms, strategic reserves, etc.). These mechanisms allow existing capacity to remain operational.

In **Europe**, ENGIE manages a portfolio of thermal generation assets with installed capacity of 19.5 GW in seven European countries (France, Belgium, the Netherlands, Italy, the UK, Portugal and Spain), including its own power plants and decentralized customers' assets. Installed capacity broken down by technology is as follows: gas (14.6 GW), hydro pumped storage (3.3 GW), biomass & other (1.3 GW).

ENGIE is also building a new CCGT power plant in Flémalle, Belgium, with a view to its commissioning in 2025. This power plant, with a capacity of 875 MW, benefits from the capacity compensation mechanism introduced in Belgium to ensure security of supply following the decrease in the country's nuclear capacity. In the Netherlands, the Maxima CCGT power plant recently received an upgrade allowing 50% hydrogen co-combustion, thus initiating the implementation of flexible carbon-free thermal capacity.

In addition, in Europe, ENGIE offers energy supply, operation and / or maintenance solutions to large industrial sites. It relies on proximity to its customers and its strong references to help them face the challenges of the energy transition.

Regulatory changes

Following the promulgation of the European Green Deal, the European Commission proposed the accelerated reduction of CO2 emissions between now and 2030. Various European countries have started to phase out electricity production from coal. These marked trends have resulted in an acceleration of the study of solutions for decarbonizing their assets, while mechanisms for the compensation of electricity capacity are also emerging to ensure security of supply.

1.6.4.2.2 The Americas

In **North America**, ENGIE owns and operates the West Windsor 126 MW combined cycle natural gas power plant in Ontario, Canada. In addition, ENGIE holds a 35% stake in EcoElectrica, a 534 MW natural gas combined cycle power plant in Puerto Rico.

In **Peru**, ENGIE operates 2,081 MW in power plants, with natural gas-fired combined cycle power plants in Chilca, as well as open cycle power plants in Ilo.

In **Chile**, ENGIE has a large thermal network in northern Chile for a total of 1,563 MW. The Group operates a diversified portfolio of combined cycle or open cycle natural gas power plants, coal units that can be converted to natural gas or biomass from 2025, and gas turbines and diesel engines. In addition to these generation assets, a 1,081 km gas pipeline is operated to supply gas to the power plants and to import Argentine gas when this is available.

In **Mexico**, ENGIE Mexico operates gas-fired cogeneration plants with a combined capacity of nearly 301 MW.

1.6.4.2.3 Africa, Middle East and Asia

In **Singapore**, ENGIE holds a 30% stake in Senoko Energy, operating a portfolio of power generation assets with a combined capacity of 2,565 MW. Senoko is present in the BtoB electricity retail market and is also the BtoC retail market which has been fully open since May 1, 2019.

In the **Gulf Cooperation Council (GCC)** countries, ENGIE acts as an asset developer, owner and operator. ENGIE sells the electricity and water it produces under long-term public power and water contracts. ENGIE is one of the leading private power and water developers and operators in the region. The total power generation capacity of 28 GW serves more than 40 million people (in Saudi Arabia, the United Arab Emirates, Oman, Bahrain, Qatar and Kuwait). Desalination facilities in operation or under construction produce nearly 5.6 million m^3 of water / day, with additional developments in progress for 1 million m^3 of water / day.

In **Pakistan**, ENGIE owns 100% of two combined cycle gas turbine (CCGT) plants with total capacity of 931 MW. The electricity produced is sold under long-term PPAs to the distribution companies.

In **Africa**, ENGIE holds a minority stake in South Africa in two open cycle "peak" diesel plants with total capacity of 1,003 MW and a minority stake in Morocco in the coal-fired power plant of Safi with total production capacity of 1,250 MW. A desalination unit is also under construction in Morocco, with an expected capacity of 100,000 m3 of water / day.

In **Australia**, ENGIE has several majority interests in gas power plants with a total capacity of 857 MW.

1.6.4.3 Battery storage activities

The GBU FlexGen & Retail is developing its activities around battery storage operations. These batteries are intended to contribute to the balancing of the electricity networks to which they are connected by offering their availability on the ancillary markets. They may also take advantage of scope for arbitrage in wholesale electricity markets, particularly on the day-ahead or intraday markets.

To date, the GBU has developed a capacity of 192.5 MW in Europe (Belgium, Italy), South America (Chile and Peru) and Australia. The year 2023 saw the commissioning of batteries in Hazelwood (Australia – 150 MW) and Chilca (Peru – 26.5 MW), as well as a major acquisition – that of the American developer Broad Reach Power in August 2023. This player has 350 MW of operating capacity in the ERCOT market in Texas and a portfolio of 880 MW under construction in Texas and California. This acquisition provides an acceleration platform for the Group's energy storage ambitions.

1.6.4.4 Retail activities

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues *(in millions of euros)*	16,443	16,810	-2.2%
EBIT *(in millions of euros)*	569	-6	-
Number of BtoC gas energy and services contracts *(in millions)*	10,574	10,866	-2.7%
Number of BtoC electricity energy and services contracts *(in millions)*	9,257	9,108	+1.6%

The energy supply business is concentrated in France, Belgium, Italy, Romania, the Netherlands and Australia. ENGIE targets both individual customers and small business customers. The business is based on the supply of energy contracts (gas and electricity) and the sale of decarbonization services.

In all the markets where ENGIE operates, the aim is to become a leading provider of energy and energy transition solutions. To achieve this, the priorities are to market:

- **green energy contracts** with digital solutions for budget-based or comfort-based consumption management;
- **green comfort services**: installation, maintenance and surveillance of high-performance thermal equipment (heat pumps, very high performance boilers, hot water tanks, wood-fired boilers);
- **clean mobility services**: installation of charging points, charging solutions, electric vehicles leasing, etc.;
- **energy decentralization services**: solar roof equipment, management of fixed or on-board batteries and load-matching of the electrical power demanded;
- **balancing and capacity services to electricity system players** through virtual plants that aggregate the flexibilities of residential customers.

ENGIE holds a portfolio of almost 20 million energy and service contracts (2.8 million contracts). In France, ENGIE is still the leader in gas sales and the main challenger in electricity sales. In Belgium, the Group is the leader in both gas and electricity and, in Romania, is the leading gas supplier. In the area of decarbonization services, for retail and small corporate customers, the Group implements numerous solutions that have made it a reference player and contribute to its growth.

Sales of green electricity contracts continued to increase to reach 71% (6.5 million at the end of 2023) of electricity contracts marketed by ENGIE.

Against this backdrop of energy price variability and inflation, in order to support its customers in controlling their energy consumption and reducing their bills, ENGIE is rolling out several strong initiatives across all countries, including:

- energy saving information and awareness-raising campaigns;
- continued progress in decarbonization services (installation of solar panels, electric charging stations, etc.) and offerings that allow customers to better understand and act on their consumption. In this regard, digital tools (apps) allow for monitoring of energy consumption in real time: "Mon pilotage gaz" ("My Gas Management") (France), which enables consumption to be managed according to budget instructions, "Mon pilotage élec" ("My Electricity Management") (France) which enables consumption to be managed based on temperature instructions, "EcoDéfis" ("EcoChallenges") (France) which allow customers to meet challenges to reduce consumption individually or collectively, or a management offering to optimize own consumption of solar power (Belgium), etc;
- showcasing a range of offers which favor controlled consumption and a balanced energy system. In France, for example, customers can benefit from remote control services that allow them not only to consume better and less, but also to relieve networks at times of high stress: in France, "Mon pilotage élec" or the behavior-centered load shedding programs "EcoDéfi+" and "Reduce & Reward" in Australia which make it possible to reduce and shift consumption at critical times for the network.

Regulatory changes

In France, the Regulated Gas Tariff ended on June 30, 2023 – customers still on a regulated tariff on that date (1.9 million) were switched to the "Gaz Passerelle" contract. Despite the lull in energy prices in 2023, price caps and cushions were extended for both gas and electricity (extended price cap for gas until June 30, 2023, and electricity until the end of 2023 with a gradual withdrawal in 2024).

In other countries, while most of the emergency measures taken in 2022 to mitigate price increases for customers have been gradually abandoned (for example: withdrawal of temporary entitlement to the social tariff from July 1, 2023 in Belgium), some government measures have however been extended (capping of gas and electricity prices until the end of 2023 in the Netherlands or until March 2025 in Romania, lower VAT on gas and electricity in Belgium).

ENGIE Energy Access

ENGIE Energy Access develops innovative off-grid solar solutions for homes, public services and businesses, providing customers with access to clean, affordable energy. Solar home systems and mini-grids promote economic development, enabling productive use of electricity and creating business opportunities for entrepreneurs in rural communities.

ENGIE Energy Access is Africa's leading off-grid company with a presence in nine countries (Benin, Ivory Coast, Kenya, Mozambique, Nigeria, Uganda, Rwanda, Tanzania and Zambia), over 1.3 million customers and over 6.5 million people.

1.6.4.5 Hydrogen activities

1.6.4.5.1 Missions & Strategy

Hydrogen is a key transition energy vector, in which ENGIE aims to develop strong positions throughout the entire value chain of hydrogen production, networks, mobility and trading.

In **Europe**, the Group benefits from its portfolio of industrial and local authority customers (GBU Energy Solutions) as well as significant renewable energy production capacity and the commercial know-how of Global Energy Management & Sales (GEMS).

In **France, Germany** and the **United Kingdom**, the Group is expanding around the existing transmission networks (GRTgaz) and storage networks (Storengy) that are a central part of the future European hydrogen backbone.

Internationally, the Group is prioritizing renewable projects in low-cost countries where it is strongly positioned, in particular those with public policies in support of the development of hydrogen, with a view to support the energy transition of its customers and develop large-scale green fuel projects.

1.6.4.5.2 Description of activities

GBU FlexGen & Retail coordinates all of the Group's hydrogen activities, which are developed in the various GBU according to their relevant expertise.

Large-scale production of decarbonized hydrogen: ENGIE has a comprehensive and phased approach, developing large-scale projects with its industrial customers in the most favorable geographic areas. The Group designs models for replicable offers for targeted segments. A number of large-scale projects are under development (at different levels of maturity) with key players. Most of these projects may, in the longer term, lead to the implementation of large-scale projects (GW scale).

In Europe, ENGIE targets industries that are otherwise hard to decarbonize. Electrification is not possible or financially viable in certain sectors, for which the hydrogen vector is a solution, in particular the steel industry, refining (conventional or bio), and the production of e-molecules (ammonia, methanol, synthetic kerosene, etc.).

Excluding Europe, ENGIE focuses on areas with low-cost renewables, such as the United States, Australia, Chile, Brazil and the Arabian peninsula.

ENGIE signed a Memorandum of Understanding with Equinor in 2023 to strengthen collaboration on decarbonizing electricity production in Belgium, France and the Netherlands. This agreement allows ENGIE to cooperate and possibly co-invest in decarbonized electricity production projects, either through the use of low-carbon hydrogen or through carbon capture and storage solutions.

Two Memoranda of Understanding were also signed in May 2023 to explore hydrogen collaboration opportunities. The first, between ENGIE and the Saudi sovereign investment fund, the Public Investment Fund, concerns the production of decarbonized hydrogen in Saudi Arabia. The second, between Storengy and ADNOC, targets the storage of hydrogen in salt caverns in the United Arab Emirates.

Finally, in Le Havre, the France KerEAUzen and Salamandre projects (whose respective aims are the production of e-kerosene from decarbonized hydrogen and biogenic CO_2, and the pyro-gasification of waste (second-generation biomethane)) won the call for projects in June, launched by HAROPA to allocate land on the Port du Havre site to an innovative project engaged in the decarbonization of the Le Havre industrial basin.

ENGIE aims to reach 4 GW of electrolysis capacity by 2035.

Mobility: ENGIE, through GBU Energy Solutions, is one of the leading players in France in the development of regional hydrogen ecosystems for mobility and industrial uses. It finances, designs and operates decentralized systems for the production of hydrogen by electrolysis and charging points for public and private transport operators.

With this in mind, ENGIE Solutions signed two partnership agreements in 2023: in February with Stellantis for a combined offer of vehicles and hydrogen charging stations, and in June with Airbus, the Occitanie Region and Terega Solutions for hydrogen solutions at Toulouse Blagnac Airport (fuel, industrial gas, airport mobility, stationary uses).

ENGIE currently operates around 20 hydrogen stations in France, and six stations are currently under construction.

Networks: The adaptation and conversion of networks for development of hydrogen is a priority for the Group. GRTgaz is heavily involved in the development of a European hydrogen backbone with the first concrete projects, such as the MosaHYc project and the RHYn project launched in 2022. In the longer term, GRTgaz is associated with the H2med project, the hydrogen pipeline connecting Portugal and Spain to France and Germany (Section 1.6.2.2.2.). Storengy is developing an underground hydrogen storage service to enable reliable and flexible hydrogen supply (HyPSTER or HyGreen projects in France, Salthy in Germany). These hydrogen network projects, involving both transport and storage, received a very favorable response during Calls for Expression of Interest launched between 2022 and 2023 (MosaHYc, RHYn, Hygreen, Hynframed, etc.). The Group aims to have 700 km of hydrogen transport network by 2030, as well as 1 TWh of storage in 2030 (Section 1.6.2.2.2 "GRTgaz" and Section 1.6.2.2.4 "Storengy").

Hydrogen trading: GEMS aims to grow within the wholesale low-carbon hydrogen and derivative molecules (methane, ammonia, etc.) market, developing a portfolio of diversified supply, sale with services adapted to the requirements of each customer, and electricity and gas supply to hydrogen production sites.

Innovation: In terms of innovation, ENGIE supports investment in the development of hydrogen technologies. In 2022, ENGIE inaugurated its H2 Lab, a research and innovation center dedicated to low-carbon hydrogen, equipped with testing facilities for the entire H2 value chain, from production through to use. Natural hydrogen could be a new competitive, low-carbon hydrogen resource to help decarbonize regions.

Regulatory changes

As part of its carbon-neutral trajectory, the European Union (EU) intends to develop the production of renewable and low-carbon hydrogen on a huge scale with an ambitious target of 40 GW of electrolysis capacity in Europe by 2030. This target was increased with the RePowerEU plan, following the conflict between Ukraine and Russia and the EU's decision to minimize dependency on Russian natural gas, which aims to produce 10 Mt H2 per year on European soil and to import an additional 10 Mt H2. Binding targets for the consumption and limitation of greenhouse gas emissions have been set in the industry, and recently in transport as part of the European Fit for 55 package. These are positive changes that demonstrate a strengthened political will but have yet to be implemented in practice, particularly through a simplified and accelerated process of making funds available. ENGIE is working to reduce the existing obstacles to project development and to improve the regulatory framework.

1.6.5 NUCLEAR

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues [(1)] *(in millions of euros)*	118	35	-
EBIT *(in millions of euros)*	605	1,026	-41%
Nuclear-powered electricity production capacity *(GW@100%)*	4	5.3	-18.2%

(1) *Contributing revenues after the elimination of intra-group transactions of €2,325 million on December 31, 2023 (€2,653 million at December 31, 2022).*

1.6.5.1 Missions & Strategy

The Nuclear operating entity is dedicated to the operational management of the seven nuclear reactors in Belgium and the rights held by EDF's two power plants in France.

The operating entity is structured around the following priorities:

- to ensure the optimum availability of nuclear power plants during their operational phase, thus contributing to the production of carbon-free electricity; and
- to monitor the decommissioning of the first reactors (Doel 3 in 2022, Tihange 2 in 2023) in both technical and organizational terms.

Nuclear safety is a key part of these priorities. The current nuclear safety system is being continuously strengthened, in close collaboration with the nuclear safety authorities.

1.6.5.2 Description of activities

The entity has sites in Doel, Tihange and Brussels in Belgium. Electrabel operates, in compliance with the strictest nuclear safety standards, the Doel and the Tihange nuclear power plants. At the end of 2023, these plants represented a total installed capacity of 3,928 MWe (including 792 MWe in partnership with the EDF Group). Doel 3 (1,006 MW) and Tihange 2 (1008 MW) power plants have been permanently shut down, respectively on September 23, 2022 and January 31, 2023. The Group also has 1,218 MWe of drawing rights in the Tricastin and Chooz B power plants in France.

The initial legal framework provided for the gradual withdrawal from the operation of nuclear power plants in Belgium between 2022 and 2025. Following a decision dated March 18, 2022, the Belgian government decided to take the necessary measures to extend the operating life of Doel 4 and Tihange 3 by 10 years.

On December 13, 2023, ENGIE and the Belgian government signed the final agreement on the extension of the Tihange 3 and Doel 4 nuclear reactors and all obligations related to nuclear waste.

This document confirms and endorses the key principles of the framework agreement signed on July 21, 2023, namely:

- the commitment of the two parties to carry out a Flexible Long-term Operation ("LTO"), for an estimated investment amount of between €1.6 billion and €2 billion, and to make their best efforts to restart the Doel 4 and Tihange 3 nuclear units from November 2025;
- the establishment, subject to the required authorizations, of a legal structure dedicated to the two extended nuclear units, equally owned by the Belgian State and ENGIE;
- the business model for the extension with a balanced distribution of risks, in particular through a Contract for Difference mechanism for compensation of electricity production. The strike price will be based on the actual cost of extending the nuclear units. This cost is not yet known but will be estimated based on nuclear safety requirements established by the Federal Agency for Nuclear Control (AFCN). Thus, an initial price will be fixed in 2025 and will be updated in 2028 based on the known amount of the final cost of the extension, to cover the period up to 2035;
- the setting of a flat-rate amount for future costs related to the treatment of nuclear waste, for all ENGIE nuclear facilities in Belgium, for a total amount of €15 billion in 2022 payable in two installments according to the waste categories;
- the lifting of restrictions on Electrabel's non-European assets.

This agreement remains subject to approval by the European Commission – with which consultation is under way – and to an effective vote on legislative changes.

The Group assumes obligations resulting from the April 11, 2003 Belgian Law, as amended by the Law dated July 12, 2022, relating to the provisions made for the decommissioning of nuclear power plants and for the management of spent nuclear fuel. The Law of July 12, 2022 provides in particular for the full financing of nuclear provisions by 2030 and a strengthening of the control of the Commission for Nuclear Provisions on certain decisions relating to the capital of Electrabel and to Synatom.

In the framework of the above-mentioned final agreement, the law of July 12, 2022, will be amended to take into account the establishment of a lump sum payment for future costs related to the treatment of nuclear waste (€15 billion in 2022), with Electrabel remaining exclusively responsible only for decommissioning obligations (and still subject to nuclear provisions).

Nuclear provisions stand at €23 billion. Under the above final agreement, €15 billion in 2022 will be transferred to the Belgian State and €8 billion, dedicated to decommissioning costs, will remain with Synatom. The next review exercise is planned for 2025 (see Note 17 Section 6.2.2 "Notes to the consolidated financial statements").

1.6.6 OTHER – INCLUDING GLOBAL ENERGY MANAGEMENT & SALES (GEMS)

Key figures

	At Dec. 31, 2023	At Dec. 31, 2022	% change *(reported basis)*
Revenues *(in millions of euros)*	37,322	45,277	-17.6%
o/w GEMS	*37,221*	*45,137*	*-17.5%*
EBIT *(in millions of euros)*	2,741	1,736	+57.9%
o/w GEMS	*3,551*	*2,618*	*+35.6%*
Energy volumes sold to BtoB customers *(TWh)*	310	341	-9.2%

The "Other" reportable segment covers the BtoB energy and supply management and optimization (Global Energy Management & Sales (GEMS)), as well as Corporates and holdings. The major share of results for the "Other" segment is attributable to GEMS.

1.6.6.1 Missions and Strategy of GEMS

Active in 17 countries, the Global Energy Management & Sales (GEMS) entity operates around the world. It provides energy management solutions and services to support ENGIE and its customers in their transition toward a carbon neutral economy. GEMS's mission is twofold:

- optimize the value of the Group's power, gas and renewable assets, manage the portfolio risks on behalf of ENGIE on all its markets and contribute to the competitiveness of the Group's GBU;
- ensure a secure and sustainable energy future for more than 190,000 external customers by developing innovative and competitive commercial offers.

In addition to its leading position in the European wholesale natural gas and electricity markets, GEMS aims at developing the same leadership position in renewable and low-carbon gases (biomethane, hydrogen). More broadly, the entity pursues its plan to expand its green energy management portfolio, which includes renewable energy, low-carbon energy and green gases, sustainable biomass, guarantees of origin and green certificates. In this respect, GEMS is a world leader in long-term renewable power purchase agreements, "Green PPAs," and concluded agreements for 21 TWh in 2023. GEMS is also developing innovative offerings for optimizing battery electricity storage and managing customer demand.

GEMS's strategy to develop its green energy portfolio is supported by cultural change initiatives and specific training programs, as well as the inclusion of social, environmental and carbon emissions criteria in the decision-making process.

By proactively working with others to reduce the carbon intensity of the natural gas portfolio, GEMS contributes to the Group's compliance with its commitments to SBTi (Science Based Targets initiative) certification.

1.6.6.2 Activities of GEMS

GEMS activities are divided into two main areas of expertise.

Asset Optimization:

- regarding the management of electricity assets, GEMS provides marketing and dispatching activities for ENGIE's production assets as well as for third-party assets;
- concerning gas asset management, GEMS manages the gas upstream supply, transmission and storage capacities, including valorization and optimization of asset flexibility through the markets;
- GEMS optimizes a portfolio of LNG and biomass assets.

Risk management and supply of energy to customers (Customers Risk Management & Sales):

GEMS ensures security of supply for the Group's customers.

- GEMS supplies natural, green and low-carbon gas (biomethane, hydrogen), and electricity to companies and large industrial customers, as well as to other ENGIE business entities;
- GEMS develops renewable electricity supply activities (green Power Purchase Agreements), and offers customized solutions to help customers achieve their environmental, social and governance (ESG) objectives (guarantees of origin, energy traceability, carbon offsets, energy efficiency);
- GEMS manages the risks of the physical & financial energy portfolio with bespoke hedging strategies, competitive market access & high-quality market expertise.

In 2023 ENGIE secured contracts and launched partnerships including:

- Signature of an innovative agreement to provide renewable energy to cover the consumption of certain Microsoft data centers in Texas. This agreement will allow Microsoft to match the demand of its data centers 24/7, with clean energy from ENGIE's portfolio of wind, solar and battery projects in Texas;
- Agreement with Arkema for the supply of 300 GWh / year of renewable biomethane in France for a period of 10 years. This is one of the largest private biomethane contracts in Europe to date;
- in the UK, a solar PPA with Arla, the country's largest dairy cooperative. The 15-year contract will provide approximately 20% of the energy needed to power all of Arla's UK operations from new solar parks created at sites previously used as landfills;
- A 20-year PPA with the French leader in mass retailing Les Mousquetaires. In total 340 GWh will be sold over a period of 20 years, representing the entire production of the ENGIE Ygos 2 solar power plant, with an installed capacity of 13 MWp.

1.6.7 GROUP BUSINESS MODEL

The Group's business model is presented in Section 3.2.

1.7 REAL ESTATE, PLANT AND EQUIPMENT

The Group owns or leases a significant amount of industrial real estate around the world. Many Group activities involve operating very large plants that the Group only partially owns.

As of December 31, 2023, the Group operated electricity power plants, natural gas terminals and storage facilities in over 22 countries.

The tables below show the main facilities currently in operation, either wholly or partially owned by the Group. Leased properties are covered in Notes 13 and 14 to Section 6.2.2 "Notes to the consolidated financial statements."

Power plants (capacity > 400 MW excluding units under construction)

Country	Site / plant	Total capacity [(1)] *(MW)*	Type of plant
South Africa	Avon	669	Fuel-oil fired
Saudi Arabia	Fadhili	1,498	Natural gas
	Marafiq	2,744	Natural gas
	Ju'aymah	467	Natural gas
	Shedgum	467	Natural gas
	Uthmaniyah	467	Natural gas
	Riyadh PP11	1,729	Natural gas
Australia	Pelican Point	489	Natural gas
Bahrain	Al Dur	1,224	Natural gas
	Al Ezzel	940	Natural gas
	Al Hidd	929	Natural gas
Belgium	Amercœur	446	Natural gas
	Coo	1,113	Hydraulic pumping
	Doel	1,916	Nuclear
	Drogenbos	466	Natural gas and batteries
	Herdersbrug	480	Natural gas
	Tihange	1,992	Nuclear
Brazil	Cana Brava	439	Hydroelectric
	Estreito	1,068	Hydroelectric
	Jaguara	413	Hydroelectric
	Jirau	3,750	Hydroelectric
	Miranda	404	Hydroelectric
	Ita	1,442	Hydroelectric
	Campo Largo	688	Wind
	Machadinho	1,135	Hydroelectric
	Salto Osòrio	1,072	Hydroelectric
	Salto Santiago	1,415	Hydroelectric
Chile	Mejillones	1,121	Coal-fired and natural gas
	Tocopilla	428	Natural gas, coal- and fuel oil-fired
United Arab Emirates	Fujairah F2	2,000	Natural gas
	Mirfa	1,600	Natural gas
	Shuweihat 1	1,500	Natural gas
	Shuweihat 2	1,496	Natural gas
	Taweelah	1,590	Natural gas
	Umm Al Nar	1,532	Natural gas
Spain	Cartagena	1,199	Natural gas
	Castelnou	791	Natural gas

Country	Site / plant	Total capacity (1) *(MW)*	Type of plant
France	CombiGolfe	435	Natural gas
	CyCoFos	428	Natural gas and steelworks gas fired plant
	DK6 (Dunkirk)	788	Natural gas and steelworks gas fired plant
	Génissiat	423	Hydroelectric
	Montoir-de-Bretagne	478	Natural gas
Italy	Roselectra	406	Natural gas
	Torre Valdaliga	1,134	Natural gas
	Vado Ligure	782	Natural gas
	Voghera	404	Natural gas
Kuwait	AzZour North	1,519	Natural gas
Morocco	Safi	1,250	Coal
Oman	Barka 2	674	Natural gas
	Barka 3	737	Natural gas
	Sohar 2	737	Natural gas
Pakistan	Uch 1	551	Natural gas
Netherlands	Eems	1,925	Natural gas
	Flevo	888	Natural gas
Peru	Chilca	943	Natural gas and batteries
	ILO Nodo	600	Fuel-oil fired
	ILO 31	564	Fuel-oil fired
Puerto Rico	Ecoelectrica	534	Natural gas
Portugal	Bemposta I&II	438	Hydroelectric
	Elecgas	839	Natural gas
	Picote I&II	433	Hydroelectric
	Turbogas	990	Natural gas
Qatar	Ras Laffan B	1,025	Natural gas
	Ras Laffan C	2,730	Natural gas
United Kingdom	First Hydro Dinorwig-Ffestiniog	2,088	Hydraulic pumping
	Moray East	950	Wind
Singapore	Senoko	2,564	Natural gas and fuel oil-fired

(1) Capacity of assets held by ENGIE, all of which are taken into account irrespective of the real ownership percentage.

Natural gas underground storage (> 550 Mm^3 of total useful storage volume (1))

Country	Location	Total useful storage *(Mm^3)* (1)
France	Gournay-sur-Aronde (Oise)	1,310
France	Germigny-sous-Coulombs (Seine-et-Marne)	820
France	Saint-Illiers-la-Ville (Yvelines)	690
France	Chémery (Loir-et-Cher)	3,690
France	Céré-la-Ronde (Indre-et-Loire)	570
France	Étrez (Ain)	690
France	Cerville (Meurthe-et-Moselle)	590
Germany	Uelsen	860

(1) Useful storage volume held by ENGIE, all of which is taken into account irrespective of the real ownership percentage.

LNG Terminals

Country	Location	Total regasification capacity *(Gm^3(n)/per annum)* (1)
France	Montoir-de-Bretagne	10
France	Tonkin (Fos-sur-Mer)	1.5
France	Cavaou (Fos-sur-Mer)	10
Chile	Mejillones	2.0

(1) Capacity of assets held by ENGIE, all of which are taken into account irrespective of the real ownership percentage.

2

RISK FACTORS AND INTERNAL CONTROL

The material, specific risks to which the Group is exposed, based on its own assessment, are described below. They are divided into seven categories of risks:

- political and regulatory risks;
- risks deriving from climate and environmental issues;
- economic and competitive risks;
- financial risks;
- operational risks;
- social and societal risks;
- risks relating to nuclear activities.

The risks presented have been assessed and prioritized on the basis of "net risk," in other words the quantification of risk after taking into account the means of management established.

The summary table below covers the most significant risks in each category, classified in decreasing order of criticality (probabilized impact).

Risks	Criticality	Change (versus 2022)	URD sections and references
Political and regulatory risks			
Risk of State intervention in wake of the marked increase in energy prices		decrease	2.2.1.1 and Notes 7.1 and 8.4 of Section 6.2.2 "Notes to the consolidated financial statements"
Risk of changes in regulations in Brazil in various business sectors (electricity production and sales, transportation of gas), including changes in taxes		stable	2.2.1.2
Risk on the security of gas supply in Europe for winter 2024 / 2025		decrease	2.2.1.3
Risk of a downward trend in the return on gas distribution, transmission, storage and regasification assets in France		decrease	2.2.1.4
Risks deriving from climate and environmental issues			
Risk of climate change affecting energy demand and generation		stable	2.2.2.1 and NFS 3.3.1 risk F
Risk of adaptation of industrial assets		stable	2.2.2.2 and NFS 3.1.5
Economic and competitive risks			
Risk of adaption or development of business models due to the energy transition in a context of heightened competition on some of the Group's activities		stable	2.2.3.1 and NFS 3.1.5 and Note 13.4 of Section 6.2.2 "Notes to the consolidated financial statements"
Financial risks			
Commodities market risk		stable	2.2.4.1 and Note 15.1.1 of Section 6.2.2 "Notes to the consolidated financial statements"
Counterparty risk		stable	2.2.4.2 and Note 15.2 of Section 6.2.2 "Notes to the consolidated financial statements"
Pension funding risk		stable	2.2.4.3 and Note 18 of Section 6.2.2 "Notes to the consolidated financial statements"
Operational risks			
Supply risk for the construction of renewable energy plants		stable	2.2.5.1
Cybersecurity		slight increase	2.2.5.2 and NFS 3.3.1 risks C and D
Risk of industrial accident		stable	2.2.5.3 and NFS 3.3.1 risk A
Social and societal risks			
Risks related to human resources		stable	2.2.6.1 and NFS 3.3.3
Risks associated with health & safety at work		stable	2.2.6.2 and NFS 3.3.3 risk S
Risks relating to nuclear activities		**decrease**	**2.2.7.2 and Note 17.2 of Section 6.2.2 "Notes to the consolidated financial statements"**

Level of criticality legend: Low / Medium / High

Other, less significant risks or risks unknown to date could also affect the Group. If these risks were to materialize, they could have a material negative impact on the Group's business, financial position and earnings, image and outlook, and / or on the

ENGIE share price. Certain risks that are critical for the Group are listed in the following sections but are not expanded on as they are either already covered in detail in the NFS (see Chapter 3 "Non-financial statement and CSR information") or are not specific to ENGIE.

2.1 RISK MANAGEMENT PROCESS

2.1.1 ENTERPRISE RISK MANAGEMENT POLICY

The Group has adopted an Enterprise Risk Management (ERM) policy, the principles of which are consistent with professional standards (including ISO 31000 and the Federation of European Risk Management Associations). The policy sets out ENGIE's ambition to "manage its risks in order to ensure its performance."

The Group's Enterprise Risk Management Policy applies to the Group's businesses and controlled entities, while observing the rules of governance that apply to each entity.

This policy promotes risk-taking at a reasonable level from a legal perspective, acceptable to generally held opinion and economically viable. It stipulates that all managers are Risk Managers. Generally, the Management Committees of the Group's entities are the main bodies that determine the actions to be taken to manage risks, except when a specific risk committee is created, such as for market risk.

The Head of Risk Management and Insurance is responsible for ensuring the effectiveness of the risk management system. He coordinates the designated Chief Risk Officers of each of the operating entities and Corporate Functions. These Chief Risk Officers assess the entity or Function's overall risk exposure and ensure that risk mitigation plans are implemented.

Risk analysis and coordination of action plans are performed in collaboration with all the Group's divisions and cross-reviewed with the Group's four Global Business Units (GBU).

Each year, the Group's ERM process begins with a risk review by the Executive Committee. An ERM campaign is then launched across the Group, setting out guidelines for risk management throughout the year. It highlights priority risks, each of which is coordinated by an Executive Committee member and will be monitored specifically by one of the Board's standing committees (see Section 4.1.2.4 "Committees"). It results in a new Group risk review that is presented to the Executive Committee, then to the Audit Committee. After examining the review, the Audit Committee gives its opinion on the effectiveness of the risk management system to the Board of Directors.

Knowledge of risks resulting from the reporting of operating entities and functional departments is supplemented by interviews with directors, an analysis of publications by external analysts and a review of major events.

2.1.2 CRISIS MANAGEMENT

To prepare for the occurrence of all types of crises and minimize their impacts, ENGIE has established a global crisis management system. The Group is thus equipped with a major incidents warning and reporting system. Crisis analysis is carried out by a duty officer at the local level who may, when necessary, activate a locally run crisis unit and inform the duty officer at a senior level. Decision-making to manage a crisis is made at the relevant organizational level, according to the principle of subsidiarity.

Business continuity plans were prepared and updated for the priority crisis scenarios identified by the Group and its entities.

To test the robustness of the organization and to ensure continuous improvement, the entities carry out a minimum of one crisis drill per year across a functional and geographic scope that meets regulatory requirements. Additional training sessions are also delivered for internal stakeholders. An internal control framework allows the main entities to carry out an annual assessment of their maturity. Lastly, an annual report is prepared so that lessons can be learned and initiate the identified improvement actions in association and shared with all entities.

However, the existence of this system does not eliminate the risk that the Group's activities and operations might be disrupted in crisis situations. Moreover, this system cannot guarantee the absence of the risk of impacts on third parties or on the environment.

2.1.3 RISK AND INSURANCE COVER

ENGIE's Risk Management and Insurance Department is responsible for preparing, establishing and managing insurance programs in the areas of Group asset protection (against property damage and loss of earnings), personal protection, third-party claims (civil liability) and automobile insurance, and for prevention.

For each of these areas:

- the amounts insured depend on the financial risks resulting from potential claim scenarios and coverage conditions offered by the market (available capacities and tariff conditions);
- financing is optimized: low or moderate hazard risks are covered by self-insurance plans, through deductibles and retentions or through the use of the Group's reinsurance company whose commitments on a cumulative basis represent a maximum estimated loss of approximately 0.22% of the Group's 2023 revenues.

However, the Group could, in certain cases, be required to pay out sizable compensation not covered by the current insurance program or could incur very high costs that its insurance policies do not reimburse or reimburse inadequately. Although the Group has excellent insurance coverage, specifically with regard to civil liability and environmental risks, it could be liable beyond the maximum insured amount or for events not covered (primarily due to the common insurance exclusions).

2.1.3.1 Civil liability

A civil liability program for corporate officers and managers covers the representatives of ENGIE, its subsidiaries and Group representatives within its equity holdings.

A general civil liability program (including for environmental damage) has been taken out for all the subsidiaries for a total amount of €645 million. This program predominantly provides first-euro coverage or coverage for amounts in excess of the underlying coverage taken out by some entities (usually up to US$50 million).

2.1.3.2 Nuclear civil liability

As an operator of nuclear units in Doel and Tihange, Electrabel's civil liability is governed by the Paris and Brussels Conventions (the 2004 protocols of amendment to said conventions came into force on January 1, 2022), which aim to ensure that victims receive compensation and to encourage solidarity among signatory countries, and by the Belgian Law of July 22, 1985, (amended by the Laws of June 29, 2014, and December 7, 2016).

This liability falls exclusively on the operator of the facility where the nuclear accident occurs. In return for this strictly objective liability, the amount of the compensation is capped per accident at €1.2 billion. Beyond this limit, the signatory countries to the conventions have created a mechanism that provides additional compensation.

The nuclear civil liability insurance program taken out by Electrabel on January 1, 2024, on the insurance market, complies with the revised Paris and Brussels Conventions and with Belgian national law requiring the operator to provide financial guarantees or to take out civil liability insurance up to €1.2 billion.

2.1.3.3 Property damage

The Group's entities have property insurance covering the facilities that they own, lease or manage on behalf of third parties, with the exception of gas transmission and distribution network pipelines and heat networks in France. The main programs provide cover based either on replacement value or on contractual limits per loss event. In the latter case, the limits are set on the basis of major scenarios estimated in accordance with insurance market rules and available offers (cost and capacity).

Insurance covering business interruption and additional operating costs is taken out based on each risk analysis and in consideration of existing assistance plans.

Construction projects are covered by "Erection All Risks" programs taken out by the owner or operator, project manager or prime contractor.

2.1.3.4 Employee protection programs

The operating entities develop programs covering employees against the risk of accidents and for medical expenses, in accordance with legislation in effect and pursuant to company agreements.

2.2 RISK FACTORS

2.2.1 POLITICAL AND REGULATORY RISKS

The Group is sensitive to the structural and economic risk factors that affect the energy sector. These risks are all analyzed and assessed as part of strategic planning processes that allow the Group to anticipate certain changes in the external environment and prepare for them. The Group's research and innovation road map and organization also help to deal with strategic developments (see Section 1.3 "Research and innovation").

2.2.1.1 Risk of state intervention in wake of the marked increase in energy prices

DESCRIPTION

Criticality:

The sharp rise in wholesale energy prices started at the end of 2021 / beginning of 2022 and was exacerbated by the conflict between Ukraine and Russia. This led European States, including France, Italy and, to a lesser extent, Romania and Portugal, to adopt price stabilization mechanisms to protect end-consumers.

In particular, in France, following the 2022 provisions, the Finance law for 2023 extended this price cap once again, until June 30, 2023, for gas, and until January 31, 2024, for electricity. The 2023 price cap consisted of limiting increases in Regulated Gas Tariffs (TRVs) to 15%, including tax, as of January 1, 2023, for gas and as of February 1, 2023, for electricity. The price cap for gas retail customers stopped on June 30, 2023. For electricity, it continued with a further increase limited to +10% including tax on August 1, 2023. For alternative suppliers, the differences between the Regulated Gas Tariff (TRV) calculated according to the CRE formula and the frozen TRV are offset by the State. A "tariff cushion" was also introduced for 2023 and 2024 for electricity sector customers who are not eligible for TRVs (companies and local authorities). This cushion will take the form of flat-rate aid on 50% of these customers' consumption.

Following the publication of the offsets payment schedule for 2023 set out on the basis of the amounts declared by ENGIE, this risk is now secured. However, there are residual risk factors, related mainly to the 2023 cap offsetting arrangements and to the lack of activation of an electricity cap for individual customers in 2024.

In addition to this are the potential impacts of the first European Commission guidelines on the electricity market and the end to the ARENH mechanism in 2026.

In Belgium, the mechanisms for capping revenues from electricity production using "inframarginal" technologies set up between August 1, 2022, and June 30, 2023, and for broadening the base of beneficiaries of the social tariff have not been extended by the authorities beyond June 30, 2023.

The June 2024 Belgian federal legislative elections could lead to a change of majority and the introduction of new consumer protection measures in the government agreement.

RISK MANAGEMENT MEASURES

Risk trend: DECREASE

The Group continues to work with the various national regulators and with the European authorities (Commission), where the measures stem from EU texts, to ensure better consistency between regulatory proposals and their objectives and with the aim of alerting them to specific implementation issues.

In France, in particular, ENGIE continued its discussions with the CRE and the Cabinet of the Ministry of Energy Transition (MTE) on the price cap. It also engaged in discussions with the relevant ministries and parliamentarians regarding the mechanism for capturing inframarginal rent introduced in the Finance Bill for 2024.

With regard to the post-ARENH market framework, the Group has publicly expressed its position in response to the government consultation (MTE-DGEC, Bercy-APE, DGE joint consultation of November 21, 2023, on the Draft protection system for electricity consumers from January 1, 2026) and is discussing these matters with the CRE and the ministries.

The Group also closely monitors:

- the emergency measures that have been developed at European level and which will be applied in the different geographic areas where the Group is active;
- the application of the Electricity market reform regulation in the law of the Member States;
- the mechanism proposed in November 2023 to succeed ARENH in France, which was the subject of a consultation, that is included in the draft law on energy sovereignty, which is expected to be presented before Parliament in 2024.

2.2.1.2 Risk of changes in regulations in Brazil in various business sectors (electricity production and sales, transportation of gas), including changes in taxes

DESCRIPTION

Criticality:

The Group is exposed to changes in the regulation of Brazil's electricity markets, such as the reduction of subsidies or the introduction of new taxes for producers. Brazilian authorities may announce new initiatives in line with a modernization of the electricity market design. This would allow for opening of the market to competition, improving its functioning and ensuring the necessary investments in the country's networks.

Brazil represents 3% of Group revenues. ENGIE invests in the transportation of gas, through its subsidiary TAG, and electricity (construction of the Asa Branca and Gavião Real transmission lines and the new renewable energy generation plants Santo Agostinho, Assuruá and Assú Sol). Gas transport and electricity transmission and generation activities for the captive market are regulated.

In 2021, the Brazilian government approved a law aimed at creating the conditions to open up the gas market, after years of monopoly by the state-owned oil giant, Petrobras. Harmonization and enforcement of legislation between the federal states and the Brazilian federal government remain the key next stages. In the gas chain, the production and the transmission activities are regulated by a federal agency (ANP), while downstream activities are a State monopoly, regulated by local agencies. Currently, the main risk is related to the transmission system "bypass" project (direct connection of energy sources to local energy distributors or to end-consumers). This may reduce the capacity of gas transported, leading to an increase in tariffs and the risk of a multiplication in bypass demands.

The Brazilian tax system is complex and could potentially evolve. Several disputes are underway relating to the application of tax, and settling these disputes could take several years (see Note 23.4.2 of Section 6.2.2 "Notes to the consolidated financial statements"). Moreover, the tax reform law was approved on December 20, 2023, by the various local bodies. The stated objective of this reform is tax simplification, transparency, job creation and economic stimulation. The text mainly concerns indirect taxes (ICMS, PIS COFINS, local taxes) with a long implementation period (the first measures will be applied gradually from 2024 to 2033). The first estimates of the impacts on the Group's activities, which are not significant at this stage, will be the subject of final reassessment once the implementing legislation has been finalized.

Modifications to taxation may be adopted in the years ahead, in particular relating to dividends, interest on equity (not taxed to date), and corporation tax. The effects are not yet known and may offset each other out.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

Thanks to its presence in France and internationally, the Group has extensive experience in market design. This experience is made available to the Brazilian institutions, including through the Group's participation in the formal process of revising the market design in Brazil. Changes in the design of the electricity and gas markets will affect all companies active in these sectors. Other companies present in electricity production or gas transmission in Brazil share the Group's opinion and have taken action to ensure the neutrality, and even positivity, of developments in market design. Politically speaking, Brazil's need to continue to attract foreign investment limits the risks.

The Group closely monitors any regulatory and legislative reforms in Brazil to anticipate any changes in these fields as best as possible and set up measures to limit any negative impact on the profitability of its businesses.

The current objective for the gas transmission activity is to avoid the various "bypass" projects and to obtain the clear definition of the legal rules for the new law.

To do so, TAG and the Group are part of the public debate with various stakeholders and closely follow regulatory changes and the implementation of the legal framework for the new law at both the federal and local level.

2.2.1.3 Risk on the security of gas supply in Europe for winter 2024 / 2025

DESCRIPTION	RISK MANAGEMENT MEASURES
Criticality:	**Risk trend:** DECREASE
Against the geopolitical context of 2022 generated by the conflict between Russia and Ukraine, the risk of malicious acts affecting the Group's tangible assets is higher whether through acts of sabotage to the networks or attacks using malware. European sanctions against Russia may escalate as far as an embargo on Russian gas exports to Europe. In accordance with the law of August 16, 2022, establishing the emergency measures for the protection of purchasing power, each year the Minister of Energy may require storage network operators by decree to build security stocks. This obligation would ensure a storage fill rate beyond the current regulatory threshold of 85% on November 1, incumbent on suppliers. On november 1, 2023, the European Union set a fill rate of 90%. The security of the gas supply in Europe may be impacted by these risks and, more specifically, expose the Group to difficulties to reach required stock levels or an overload of its regasification or storage facilities.	The Group has implemented a tangible asset protection policy: sensitive sites are subject to protective measures tailored to the local situation and revised according to the threat status. The Group has introduced a system to catalog incidents and gather feedback to improve risk assessment and prevention in order to limit the impact of any malicious acts. Their analysis is included in a quarterly report and makes it possible to implement the necessary, strategic and operational prevention and mitigation measures. To meet winter 2024 / 2025 supply commitments, the Group has contracted additional volumes, diversified its supply source notably through an increase in Liquefied Natural Gas (LNG) volumes, and continues to restructure its portfolio. Moreover, the Group's LNG terminals have operated at record levels since the beginning of 2023 and are marketing additional unloading capacity in response to the situation. In addition, conditions for marketing storage capacity have been relaxed by the regulators to facilitate filling and the Group is stepping up its growth in green gases, in particular biomethane. All of these measures, which have generated an increase in activity, are being implemented in accordance with each site's industrial safety standards and guidelines.

2

2.2.1.4 Risk of a downward trend in the return on gas distribution, transmission, storage and regasification assets in France

DESCRIPTION	RISK MANAGEMENT MEASURE
Criticality:	**Risk trend:** DECREASE
Tariffs for access to gas networks (distribution, transmission, storage, regasification terminals) in France are regulated. The tariffs are fixed by the French Energy Regulation Commission (CRE), which may change their level and structure if it deems this justified, particularly in view of financial market trends and foreseeable changes in operating and investment costs. These tariffs also include performance incentives. In most cases, they are reviewed every four years, following a public consultation process and public hearings. On December 14, 2023, and January 25 and 30, 2024, the CRE published the deliberations on the draft decisions for gas network tariffs (transmission, storage and distribution) for a period of four years (ATRT8, ATS3 and ATRD7), from April 2024 for transmission and storage and from July 2024 for distribution. The asset compensation rate is very close to previous tariffs (-15 basis points for transmission and storage, -10 basis points for distribution). Tariffs also incorporate significant price adjustments and the rebalancing of charges related to accumulated inflation from previous years. Regarding regasification tariffs (ATTM 6), in force since April 1, 2021, a review should be launched in 2024 in view of implementation in 2025.	The Group is in discussions with the CRE in the context of the tariff review system, which enables great emphasis to be placed on dialog with all stakeholders. In addition to introducing measures to develop the production of green gas and ensuring it is competitive in the long term, the Group continues to defend: • positions that aim to ensure the security of the country's supply (see also Section 2.2.1.3 "Risk on the security of gas supply in Europe for winter 2024 / 2025") • a fair return on assets that is adapted to the new short and long-term economic environment; • the adequate coverage of its costs in order to maintain a high standard of service and to enable the necessary investments for the energy transition; • the recognition of the flexibility provided by the gas system to the energy system and its valuation. It also strives to enhance its performance in order to establish a competitive tariff trajectory.

2.2.2 RISKS DERIVING FROM CLIMATE AND ENVIRONMENTAL ISSUES

The Group's businesses are exposed to numerous rules and regulations relating to respecting and protecting the environment and persons or to the energy transition. The risk of adaption of business models due to the energy transition in a context of heightened competition on some of the Group's activities is presented in Section 2.2.3.1.

Issues associated with soil pollution are specifically being monitored (see Section 3.5.4.11). Provisions are made for these issues in the financial statements when sites are decommissioned and rehabilitated (see Note 17.3 of Section 6.2.2 "Notes to the consolidated financial statements").

Risks relating to climate and environmental issues are discussed in greater detail in Chapter 3 "Non-financial statement and CSR information" in Sections 3.1.3 Climate trajectory (related to the recommendations of the TCFD – Task Force on Climate-related Financial Disclosures and Main Environmental Risks) and 3.3.1 Main environmental risks.

2.2.2.1 Risk of climate change affecting energy demand and generation

DESCRIPTION

Criticality:

Information presented here and in Section 3.3.1 "Transition relating to climate change – Risk F" reflects the financial risks associated with the effects of climate change and the measures taken by the company to mitigate them by implementing a low carbon strategy in all the components of its activity.

In the short term, weather phenomena (e.g. temperature variation, flooding, wind, drought, heat waves) affect energy generation (in the case of lack of water in dams in particular) and energy demand (e.g. gas supply during a warm winter). They have a direct effect on the Group's results.

In the longer term, climate change could have a greater impact on the Group's activities, for example through changes in regional or seasonal energy demand, changes to the network's production, the obligation to reduce CO_2 equivalent emissions and heightened regulations, conflicts over water use, increases in sea and river levels and temperatures, the preservation of natural carbon sinks and conflicts over biomass use, etc.

Hydropower production is the most exposed technology. Significant fluctuations in production are expected by 2050 in certain regions (between -18% and +10%, under the median scenario retained). A marked increase in infra-annual fluctuations in production is also expected.

By 2050, the impact of chronic risks is however limited on solar and wind production.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

(see also Section 3.5.4 "Group actions")

To adapt its offering to fluctuations in annual demand, ENGIE optimizes its portfolio of assets, its gas resources (by load-matching its supplies and managing its underground storage), and its power generation fleet.

To manage this risk in the longer term, ENGIE acts on different levels:

- the Group has completed a strategic review of the impact of climate change in the countries in which it operates. In order to better understand climate change and its impact on ENGIE, a partnership was forged with the Pierre Simon Laplace Institute to model future changes in energy production as accurately as possible and the impact of extreme events on all of the Group's technologies in various regions of the world. These analyses are being integrated into the Group's investment projects to assess the impact of climate change as early as possible and to favor the most suitable technologies and geographic areas to drive the Group's growth;
- the Group is gradually developing adaptation plans to prepare for an increase in extreme weather events;
- a Steering Committee bringing together the GBUs and the Corporate Departments concerned was created in 2022 to monitor progress and validate the actions to be taken.

2.2.2.2 Risk of adaptation of industrial assets

DESCRIPTION	RISK MANAGEMENT MEASURES
Criticality:	**Risk trend:** STABLE
In addition to fluctuations in energy generation, climate change has a direct impact on all facilities. The increase in the number of extreme events may have an impact on the Group's business: damage to facilities, supply disruption, impact on employee's health, or a reduction in insurance coverage. Brazil, particularly affected by wind storms and cyclones, and Australia appear to be the countries most exposed to acute risks, it being noted that, for Brazil, due to the size of the country, risks materialize in different ways depending on the region. Conversely, countries in Northern Europe (Belgium, the Netherlands, Germany) appear the least exposed to chronic and acute risks. Exposure is measured by combining climatic risks with the relative capacity of each country to deal with them.	Operational risk management consists of implementing adaptation plans for each of the Group's sites and new projects that are exposed to climate change. To do so, the first driver is to integrate the physical risk of climate change into the Group's risk monitoring process (Enterprise Risk Management). Following the development of a site prioritization methodology in 2020 and the definition of a list of priority sites (which is updated annually) since 2021, the Group launched a pilot scheme in 2022 at 28 priority sites as well as GRTgaz and GRDF sites, to draw up adaptation plans. In 2023, work focused on ensuring that the methodology is in line with European taxonomy requirements (see Section 3.1.5) and the widespread roll-out of these adaptation plans. In 2024, priority will be given to the maturity of the quantification of climate change risks.

2.2.3 ECONOMIC AND COMPETITIVE RISKS

2.2.3.1 Risk of adaption or development of business models due to the energy transition in a context of heightened competition on some of the Group's activities

DESCRIPTION

Criticality:

The energy transition, exacerbated by the international geopolitical context, brings about several changes in the business lines in which the Group operates: the decentralization of energy generation and sales, the emergence of digital technologies and smart energy which has an impact on the electricity and gas value chain, changes in trading activities with new products and markets to support customer decarbonization, French regulations in support of decarbonization through greater electrification. Competition is intensifying on these various energy markets, with key players (oil companies, etc.) becoming increasingly active throughout the entire value chain.

France's energy policy is based on the national regulations (SNBC (Stratégie Nationale Bas-Carbone – National Low-Carbon Strategy), PPE (Programmation Pluriannuelle de l'Énergie – Multi-Year Energy Schedule), LEC (Loi Énergie-Climat – Climate and Energy Law) and the "RE2020" (Réglementation Environnementale 2020 – the 2020 environmental regulation)) that target decarbonization by strengthening and accelerating electricity usage. More recently, the French Ministry of Energy Transition has taken a stand against gas boilers, which may have a major influence on the natural gas market. This vision entails a number of risks for the energy system, in particular the increase in peak electricity needs and the additional cost necessary to meet them, as well as the recurrent challenge of balancing the electricity grid. Natural gas distribution activities will see a decrease in the number of customers using natural gas.

In other geographic areas (notably in the United States), increased competition in renewable energy, facilitated by the Inflation Reduction Act (IRA), passed in August 2022 and which offers ambitious support for the development of these activities, make development goals more difficult to achieve. Similarly, adverse developments in this law, given the upcoming US elections, could impact these goals.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

To meet these current and future challenges and adapt its business model, on June 12, 2023 the Group presented an energy transition scenario for Europe (15 countries) by 2050.

This scenario is based on five major beliefs, including:

- the alliance between the electron and the molecule as the key to success in the transition;
- the massive development of electric renewable energy;
- the anticipation of flexibility needs upstream.

In the meantime, the Group regularly develops new offers to meet changing customer demand: digitization, green offers, and development of "carbon-neutral" solutions.

In addition, the Group has strengthened, with French public bodies (particularly in the framework of the guidelines of future energy regulations) and the European authorities, its actions to promote gas as indispensable to the acceleration and achievement of a resilient and affordable energy transition in various areas. These actions include the defense of heating use via the development of hybrid heat pumps, the competitiveness of green gases, the market design of biomethane and the energy complementarity.

With regard to the development of biomethane, in addition to the shift to an industrial scale of this sector in France and the strengthening of its expansion in Europe (recent acquisition of production plants in the United Kingdom), the Group is also developing second-generation biomethane production lines, using biomass pyrogazeification. It is thus leading the way in projects related to green hydrogen which has been identified as a key component of the future French energy mix. These projects range from green hydrogen production through water electrolysis, to storage with saline cavities conversion projects, to the transport of this molecule.

Downstream, the Group's transmission and distribution networks adapt their infrastructure to allow the delivery of biomethane to customers at the lowest cost in parallel with existing infrastructure conversion projects for the transmission of pure hydrogen and the improvement of injection conditions in the networks.

Moreover, the Group intends to rebalance its portfolio of networks in terms of technologies; electricity (via the construction and ongoing operation of high-voltage lines) and geographic areas (development outside the European Union to growth countries).

In terms of the development of renewable energy, and in particular in the United States, a geographic area of growth for the Group, ENGIE is developing battery storage and continues to step up its investment strategy, notably via external growth (recent acquisitions) and the securing of its solar panel supply chain.

2.2.4 FINANCIAL RISKS

The structure of financial risks is broken down according to the same format as in the Universal Registration Document 2022.

It should be noted that liquidity risk, which reflects the Group's exposure to the risk of lack of liquidity enabling it to meet its contractual commitments, is not detailed in this chapter; as it is generic for the activity of a Group that is present in different countries. Nevertheless, the actions put in place to manage and monitor this risk are presented in Note 15.3 of Section 6.2.2 "Notes to the Consolidated financial statements."

2.2.4.1 Commodities market risk

DESCRIPTION	RISK MANAGEMENT MEASURES
Criticality:	**Risk trend:** STABLE

DESCRIPTION

Criticality:

The Group is chiefly exposed to two kinds of energy commodity market risk: price risk directly related to fluctuating market prices or spreads between market prices (for example: basis risk in nodal markets, due to congestion risk such as in the United States) and volume risk (weather risk and / or risk depending on economic activity) mainly in Europe (Belgium, France, Spain, Italy, the Netherlands, the United Kingdom, etc.), the United States, Australia and South America (Brazil, Chile, etc.). The Group is exposed to these risks, particularly with regard to gas, electricity including capacity certificates (CRM – Capacity Remuneration Mechanism), CO_2 and other green or white products related to the energy transition (Guarantees of Origin, green certificates, energy savings certificates) (see Note 15.1.1 of Section 6.2.2 "Notes to the consolidated financial statements").

Exposure to price risk is focused on nuclear power, hydropower and thermal gas assets. Wind and solar power assets, a large share of which are under contract until 2030, generate very little exposure to price risk but are exposed to risks relating to their intermittent nature. Electricity and gas sales activities are hedged as close to sales as possible to limit pricing and volume risks.

With the exception of trading activities, market risks are assessed by means of their impact on EBIT. Accordingly, the main risk indicators for managing the energy portfolios include sensitivity to unit price changes, EBIT at Risk, portfolio hedging ratios and stress tests based on predefined unfavorable scenarios. For trading activities, and in accordance with market standards, risk indicators include sensitivities, Value at Risk (VaR), drawdowns and stress tests (see Note 15.1.1 of Section 6.2.2 "Notes to the consolidated financial statements").

RISK MANAGEMENT MEASURES

Risk trend: STABLE

Through a Group policy updated in 2023, the Group has implemented a specific governance process to manage energy market and counterparty market risks based on:

- the general principle of separation of risk management and risk control;
- a Group-level Energy Market Risks Committee that is responsible for validating the risk mandates of each of the operating entities and monitoring consolidated exposure;
- the monitoring of market and counterparty risk mandates at different levels within the Group, and a whistleblowing process;
- centralization of liquidity risk management associated with margin calls and wholesale market interventions within the GEMS entity (see Section 1.6.6);
- an incentive for operating entities to reduce the risk within the Group; and
- a specific Control Division coordinated by the Finance Department.

Part of its electricity production activity, particularly outside Europe, is covered by long-term Power Purchase Agreements (PPA) and complemented by corporate PPAs in renewable electricity production activities reducing exposure to market prices over the term of these contracts.

The Group also uses hedging products to provide its customers with hedging instruments and to hedge its own positions.

With regard to the liquidity impacts of the risk, in a context of major volatility of margin calls (the market mechanism implemented to manage counterparty risk), the Group has an oversight system for these margin calls at the GEMS level in particular, and uses instruments aimed at reducing the volatility induced.

2.2.4.2 Counterparty risk

DESCRIPTION

Criticality:

Due to its financial and operational activities, the Group is exposed to the risk of default by its counterparties (customers, suppliers, partners, intermediaries, and banks) – see Note 15.2 of Section 6.2.2 “Notes to the consolidated financial statements.”

The impact of this may be felt in terms of payment (non-payment for services or deliveries made), delivery (non-delivery of supplies or services that have been paid for), assets (loss of financial investments), or loss of earnings in the event of customer bankruptcy or additional costs in the event of supplier default. The current decline in the global economic environment, the rise in interest rates, the historic surge in energy prices and the conflict between Russia and Ukraine have increased this risk.

The development of green offers through Corporate PPAs over longer periods than traditional sales led the Group to tighten its requirements for the rating of these counterparties and the guarantees requested in order to limit the increase in these counterparty risks.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

The financial soundness of customers is assessed before contracts are signed, using the same methods and tools across the entire Group.

These risks are managed via contracts and framework agreements that use standard mechanisms such as third-party guarantees, netting agreements and margin calls, or dedicated hedging instruments. The operational activities may also involve prepayments or suitable recovery procedures, especially for retail customers.

Finally, the increase in the risk of default by our counterparties observed in recent years, reduced by the implementation of price caps in several countries, has led the Group to monitor its arrears and to take into account, when assessing its expected credit losses, forward-looking information which best reflects the situation in a certain number of economic sectors considered as the most sensitive to the economic crisis (resurgence of inflation and higher interest rates).

2.2.4.3 Pension funding risk

DESCRIPTION

Criticality: 

A significant portion of the Group pensions commitments and the assets associated with these plans are concentrated in France and in Belgium. Other defined-benefit pension plans are mainly located in Europe and Brazil.

Where possible, the Group favors defined-contribution plans over defined-benefit plans. The effect of the closure of the electricity and gas industries sector (EGI) special pension plan to new entrants as of September 1, 2023, will only be seen in the long term. This is due to the large number of employees and retirees still under the EGI pension plan.

Note 18 of Section 6.2.2 “Notes to the Consolidated financial statements” details the items measured and recognized.

The calculation of commitments is estimated via actuarial methods using methodologies, assumptions and models to assess liabilities or determine asset allocations and associated risks that could have a significant impact on hedging levels and financing requirements.

In addition to pension liabilities, there are other significant commitments related to post-employment benefits and long-term employee benefits. For example, the energy-related benefit provided to EGI staff during retirement could see its value increase in a context of high energy prices.

Hedging levels and financing requirements for the Group’s pension plans vary according to the performance of financial markets and asset allocations, as well as interest and inflation rates and changes in the applicable legal and regulatory framework.

For some plans outside the scope of the EGI, ENGIE may be required to fully or partly finance any difference between the market value of these assets and the hedging levels projected for these plans, or any insufficiency in the return on the assets in respect of the guaranteed minimum average rates.

Overall for 2023, the funds posted a positive performance due to anticipations of a rate drop in 2024 favoring the markets and the rise in European and global equities despite a context of inflation and geopolitical tensions.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

The Group has implemented a policy to cover pension commitments specific to each of the countries and legislation concerned.

Within the scope of the special EGI regime in France, the scheme is financed through the outsourcing of assets within the framework of life insurance contracts.

For the majority of international schemes, liabilities are covered through the funding of pension funds in which the Group strives to be present in governance, as far as legislation allows.

The energy benefit in kind granted to the personnel within the scope of the EGI during the retirement period is not covered.

2.2.5 OPERATIONAL RISKS

2.2.5.1 Supply risk for the construction of renewable energy plants

DESCRIPTION

Criticality:

Against a global backdrop of energy transition, combined with international geopolitical tensions, the low-carbon technology suppliers continue to be in high demand by all energy players. These suppliers are still also impacted by the geographical predominance of manufacturing certain raw materials in regions where there are allegations of forced labor that have recently resulted in national and international reactions and, in particular, economic sanctions.

As an example, in the United States, the Group is developing solar farms and imports the majority of its solar panels for these farms from Chinese provinces. Since June 2021, due to allegations of forced labor in these provinces, the US authorities have banned, under the Withhold Release Order, certain Chinese producers of raw materials and have introduced import restrictions for other suppliers who may use these products from the regions implicated. In addition, the price of these raw materials as well as the cost of international shipping has risen considerably.

These different factors may lead to delays and budget overspends exceeding the project contingencies and result in customer complaints.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

The Group continues to develop different strategies to limit its dependence on key suppliers and supply chain risks:

- by diversifying its sources of supply: the Group is working on building partnerships not only with its usual compliant suppliers, but with producers from outside high-risk countries that are located as close as possible to end-users;
- in the United States, the Group has charged a specialist control body to conduct audits on the traceability protocols of solar panel suppliers and their capacity to comply with US import regulations;
- through collaboration with suppliers to strengthen circularity and sustainability very upstream of the value chain;
- the Group's key suppliers are monitored by the partner EcoVadis. The regular assessment of ethics, environment, sustainable procurement, work and human rights elements helps ensure the monitoring of suppliers. This assessment is taken into account during the selection of new suppliers;
- site audits contain ethical questionnaires that also deal with human rights;
- in the longer term, the Group is working on improving the technologies used and on recycling materials from its old farms via its research centers;
- finally, ENGIE is part of several sector initiatives in solar and wind to share and help improve its risk management practices. At WindEurope, ENGIE is a member of the sectoral initiative managed by EcoVadis to improve the transparency of its supply chain.
- In addition, ENGIE continues its enhanced vigilance actions with regard to this high-risk supply chain in the United States (allegations of forced labor).

These measures are also covered by the Group's vigilance plan which is presented in Section 3.9 "Vigilance plan."

2.2.5.2 Cybersecurity

DESCRIPTION

Criticality:

The use of modern technologies (connected objects, mobility, cloud, collection and analysis of data on digital platforms, digital tools, etc.) exposes the Group to threats of cyber attacks. The digitalization of administrative processes such as the management of energy production, the supervision of energy services or gas infrastructures could lead, in the event of a cyber attack, to risks of service interruption or loss of productivity, as well as a potential reputational impact and fines or contractual penalties.

The risk of cybersecurity can be of different nature: a series of feared events such as ransomware attacks (extortion), cyber sabotage of industrial control systems, theft of personal data (from customers for instance) or sensitive information.

While ENGIE has indeed experienced, like any other company and community, an increase in attempted cyber-attacks since the start of the Covid-19 crisis, the Group was well prepared for teleworking through its "cloud first" approach and has not particularly suffered from this increase thanks to a good level of cybersecurity built into its IT infrastructures.

In 2022 in a context of conflict between Russia and Ukraine and the energy crisis, the risk of a cyber attack against the energy sector has increased according to the French National Information Systems Security Agency (ANSSI). At ENGIE the number of cyber-attack attempts, including against industrial assets, has remained relatively stable. However, an increase in phishing attempts was noted and continued in 2023.

The continued digitalization of the Group's activities, the integration of new entities or the creation of Joint Ventures, the use of subcontractors, as well as the limitation of available cyber insurance coverage, could also contribute to the increase in exposure to this risk, despite the constant progress made by ENGIE in terms of cybersecurity.

RISK MANAGEMENT MEASURES

Risk trend: SLIGHT INCREASE

The Group constantly adapts its prevention, detection and protection measures for its information systems and critical data. Thus, it has:

- a Security Operations Center (SOC) in charge of monitoring its critical infrastructures and applications (management and industrial) and detecting incidents. SOC acts on a global level and is operated jointly with Thalès; its coverage follows in particular the Group's regulatory developments and constraints;
- a cyber incident response team (CERT) guaranteeing the proper response to cyber attacks within the Group and interaction with partner or government organizations such as the French National Information Systems Security Agency;
- reinforced controls for access to its internal and cloud platforms. The use of secure collaborative tools in the cloud, with two-factor authentication, has helped avoid the increasing exposure to cyber risk with the development of teleworking.
- intrusion prevention devices on its networks and systems, including in the cloud, as well as encryption of its sensitive data;
- a cyber risk awareness program including mandatory training in good cybersecurity practices for all employees;
- cyber insurance.

To comply with regulations (examples: European Regulation No. 2016/679 on the protection of personal data, European Directive No. 2016/1148 on the security of networks and information systems), evaluations are organized on site or for relevant applications and some Group entities have initiated procedures to certify under ISO 27001 the security level of their information systems. ENGIE also works with a cyber rating agency in order to have independent control of its cybersecurity level.

Major attacks are managed by specific cyber incident response and cyber crisis management systems, supplementing the Group's crisis management system. Exercises to restart sensitive systems are carried out, particularly addressing "ransomware" type scenarios.

Organizational, functional, technical and legal cybersecurity measures are subject to permanent controls which include test campaigns (intrusion, social engineering and phishing).

2.2.5.3 Risk of industrial accident

DESCRIPTION	RISK MANAGEMENT MEASURES

DESCRIPTION

Criticality:

The areas of activity in which the Group operates carry industrial risks capable of causing harm to individuals, property or the environment, in line with its profile as an energy company. These risks could expose the Group to claims for civil, criminal and / or environmental liability, with a strong potential impact on its reputation. These may relate to facilities that belong to the Group or are managed by it on behalf of customers, or facilities where employees work. The process safety of the facilities that the Group operates is one of its major concerns. The handling of these risks is subject to in-depth monitoring and specific targeted investments, and audits of the facilities in question are performed regularly.

Industrial facilities and Seveso sites

The Group operates and builds systems for gas transmission, distribution and storage, regasification, gas liquefaction and bio-methanization. It also operates and builds gas-fired electricity production plants, hydro facilities, wind farms and photovoltaic facilities and provides services in an industrial environment. Some of these facilities are classified as “upper tier” Seveso sites.

Risks of industrial accident can stem, for example, from operating incidents, design or construction flaws, or from external events (including third-party actions and natural disasters). These accidents could cause injuries, loss of life, property or environmental damage, activity interruptions and operating losses.

Although the unscheduled unavailability of ENGIE’s industrial sites remains stable from the perspective of the overall portfolio, during 2023 several climate events significantly impacted individual sites, in addition to technical problems on specific wind turbine models.

The main risks that have arisen have been wind storms and cyclones, mainly affecting the South America and Africa scopes.

The operation of all industrial assets was maintained by controlling the related risks and reinforcing surveillance in terms of cyber-attack risks to the industrial control systems or related to the risk of potential malicious acts against the Group’s facilities.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

The Group carries out its industrial activities in compliance with a framework of safety regulations, including the “Seveso III [(1)]” European Directive. These industrial risks are controlled by implementing safety management systems based on the principle of continuous improvement. These systems aim to reduce the level of residual risk by responding to the highest risks as a priority. Moreover, process safety is specifically incorporated (standards and frameworks) into the Group’s audit and internal control programs. In addition, ENGIE hires external experts to audit its industrial assets. Regular audits are carried out by the competent local authorities.

The protection of industrial control systems is included in the Group’s IT system security policy roll out.

For the greatest part, these risks are covered by insurance policies. In the event of a major claim, these policies could prove insufficient (see Section 2.1.3 “Risk and insurance coverage”).

(1) Directive 96/82/EC amended and superseded by Directive 2012/18/EU (Seveso III).

2.2.6 SOCIAL AND SOCIETAL RISKS

The Group is also still exposed to risks for which the direct financial impact is difficult to assess, but that have a non-financial impact that is considered significant. These risks are developed in more detail in Chapter 3 "Non-financial statement and CSR information" and are not covered in detail in this section if they do not present a risk that is specific to ENGIE's business.

2.2.6.1 Risks related to human resources

DESCRIPTION

Criticality:

The risk analysis approach relating to human resources revealed three main risks:

Risk of loss of skills and talents, high turnover

In an economic context marked by successive crises, high inflation and rising energy prices, the difficulties related to the recruitment and retention of the resources needed by the company (particularly in the technical divisions) are on the increase.

The labor market in the energy sector is experiencing intense competition to recruit qualified staff. Global players in the oil and gas sector have increased their attractiveness, resulting in higher competition in terms of the "employer brand."

In certain emerging sectors (such as hydrogen, renewable energy, etc.), this competition is exacerbating, leading to a shortage of experienced labor.

Psychosocial risks

The evolution of jobs and working approaches within the Group have required managers to assume greater responsibility, in particular to support the transformation of the energy sectors.

The *ENGIE&Me* annual engagement survey shows higher levels of stress among managers, mainly related to workload. This is a risk factor likely to favor absenteeism and departures from the Group.

See Section 2.2.6.2 Risks associated with health & safety at work.

Social climate

The risk associated with the social climate mainly concerns two countries within the Group: France and Belgium. Social movements and strikes were again observed in France this year.

They reflect the fact that economic and social issues, including inflation, wage negotiations, purchasing power and pension reform, are at the heart of employees' concerns.

In addition to this is the fear that changes in regulations related to measures for the ecological transition may adversely affect employment.

See Section 2.2.6.2 Risks associated with health & safety at work.

RISK MANAGEMENT MEASURES

Risk trend: STABLE

Risk of loss of skills, talent and increasing turnover

The Group is committed to the following measures:

- rollout of employee retention and development programs, in particular juniors, high-potential talent, critical positions and employees identified in succession plans;
- strengthening internal mobility, at all levels and entities within the Group;
- targeted implementation of strategic job planning, which addresses current critical needs and future skills requirements;
- implementation of the "Onboarding Path" program, the aim of which is the optimal integration of all new employees, at all levels of the Group;
- work aimed at strengthening the employer brand, in particular through a strong communication plan both internally and outside of the Group;
- design of customized training programs to maintain and develop key skills;
- implementation of a Group-wide Diversity, Equity and Inclusion policy, confirming the Group's willingness to invest heavily in its human capital.

Psychosocial risks

Actions implemented under the No Mind at Risk axis of prevention (see Section 3.4.6.4 "Improving well-being at work"):

- awareness-raising and training of managers within the Group in the detection of psychosocial risks;
- establishing mechanisms for listening to and collecting ethical or health & safety alerts, and the introduction of self-assessments of psycho-social risks;
- annual employee engagement survey (ENGIE&me) and interactive management of associated action plans;
- Improvement plan related to Employee Value Proposition.

Social climate

Main actions implemented:

- continued promotion of positive and constructive social dialog with unions, while ensuring effective communication with employees;
- implementation of negotiations by subsidiary, in particular on wage measures in response to the increase in the cost of living.
- global rollout of the ENGIE Care program, a modern and comprehensive social agreement, aiming to ensure social protection for all Group employees.

2.2.6.2 Risks associated with health & safety at work

DESCRIPTION	RISK MANAGEMENT MEASURES
Criticality:	**Risk trend:** STABLE
The Group is committed to eradicating serious and fatal accidents and continuing to reduce occupational accidents among its employees, subcontractors and temporary workers, to improving well-being at work and to preventing psychosocial risks.	With regard to health & safety at work, the Group has defined two axes of prevention: the first No Life at Risk relates to accident prevention, the second No Mind at Risk deals with improving well-being at work and preventing psychosocial risks. The Group's Executive Management decided, following fatal accidents which occurred in 2021, to implement a major transformation plan called ENGIE One Safety focusing on improving the safety culture and managerial leadership and promoting commitment and vigilance among all individuals to protect their lives and those of others. This transformation plan includes the tightening of safety rules defined by the Group. It also includes the definition of a new training and coaching program dedicated to all Group managers. This program is intended to improve the efficiency of managerial safety rituals, such as safety visits, to promote the appropriate safety behavior of employees, temporary workers and subcontractors with regard to risks. This innovative training, tested in 2022, was reviewed in 2023 to best adapt it to the Group's specific features and was rolled out for the first managers. The Group has also implemented several awareness-raising actions to improve health & safety at work: • dissemination of the "Safety Essentials", key behaviors that everyone must adopt; • availability of an e-learning training course on these Essentials; • organization of Safety Stand Down, dedicated opportunities for sharing about serious and fatal accidents involving all individuals working for the Group. Other actions have complemented these initiatives, such as the implementation of a new internal audit process focused on major risks, the integration of proactive indicators in health & safety reporting, that promote prevention actions, the revision of Prevention News, the Group newsletter dedicated to occupational health & safety. The various provisions introduced in 2023 are described in Section 3.4.6 "Health & safety policy."

2.2.7 RISKS RELATING TO NUCLEAR ACTIVITIES

In Belgium, Electrabel, a Group subsidiary, owns and operates seven pressurized water reactors at two nuclear power stations at Doel and Tihange. Two reactors in this fleet, Doel 3 and Tihange 2 were permanently shut down on September 23, 2022, and January 31, 2023, respectively.

Electrabel has established governance principles for the operation, maintenance and decommissioning of nuclear power plants based on its experience as an operator and service provider. It is also active in employee recruitment, training and retention, both for facilities in operation and nuclear services entities, and is involved in developing new services. These activities are subject to several kinds of risks, at the regulatory and political level, in operational terms for both the maintenance and decommissioning of power plants, at the financial level, and also from the point of view of social and societal risks.

DESCRIPTION

Criticality:

Dismantling of facilities

Costs associated with the dismantling of facilities and the management of nuclear waste and spent fuel are included in the costs of nuclear electricity production and are the subject of provisions in this regard. The assumptions and sensitivities regarding the assessment of these amounts are detailed in Note 17.2 of Section 6.2.2 “Notes to the consolidated financial statements.” The risk associated with the assessment of these provisions weighed heavily on the Group. The finalization of an agreement with the Belgian government on December 13, 2023 formalizes and specifies the changes in the residual risk to the operator for the treatment and storage of the various categories of radioactive waste once they have been conditioned in accordance with defined contractual transfer criteria (CTC).

After payment of a lump sum of €15 billion$_{2022}$ including a risk premium, Electrabel will have the right to unconditional removal of the volume of waste from its reference program, including margins for uncertainties, subject to compliance with the CTC and fulfillment of its commitments to extend the life of the Doel 4 and Tihange 3 nuclear reactors. The cost of waste management is therefore definitively established without residual responsibility for the waste transferred, including that related to the adaptation of this waste to the constraints of the final storage sites and the post-treatment of certain forms of problematic waste (for example, gelatinous waste barrels), which is fully transferred to the Belgian government.

Only the risks associated with the cost of decommissioning power plants, with the compliance of the volumetric credit of radioactive waste and with the conditioning of waste in accordance with the CTC remain the responsibility of the operator.

Securing nuclear provisions

Securing nuclear provisions creates financial risks specific to nuclear activity.

Indeed, the Belgian law of July 12, 2022, strengthening the framework regarding the provisions for the decommissioning of nuclear power plants provides that these provisions are made within the nuclear provisioning company Synatom, a subsidiary of Electrabel in which the Belgian State has a golden share. Synatom levies the amount of provisions as assessed under the control of the Commission des Provisions Nucléaires (Belgian Commission for Nuclear Provisions – NPC) to invest them in dedicated financial assets. Long internalized within the Group, €10 billion of these dedicated financial assets are now external to the Group and will be fully externalized by 2031. The volatility of the value of financial assets in consideration of nuclear provisions represents a significant risk for the Group.

RISK MANAGEMENT MEASURES

Risk trend: DECREASE

Dismantling of facilities

With regard to the assessment of the provisions relating to the dismantling of facilities and the management of nuclear waste and spent fuel, the agreement, signed on December 13, 2023, considerably reduces the Group’s risks with the payment of a premium.

For the residual risks that the Group must manage:

- in order to control the cost of decommissioning power plants, a strengthened management control system and quarterly reviews of the program are organized;
- in terms of volumes, efforts to inventory and categorize the waste generated by dismantling continue and should confirm the sufficiency of the volumetric credit obtained in consideration of the lump sum payment;
- for waste packaging, the CTC have been established and working groups with the ONDRAF determine the conditioning arrangements in order to confirm the treatment process and cost.

Securing nuclear provisions

Concerning the financial risk associated with securing nuclear provisions, the agreement considerably restricts this since, following the European Union (EU) validation process and the change in the law for category B and C waste (end of 2024), €15 billion$_{2022}$ of these provisions will be paid in full and final settlement of any account to Belgian State and the public body Hédéra, created for this purpose. The balance for category A waste will be paid when the units are restarted in November 2025.

For the balance of secured nuclear provisions, investment management is entrusted to a team led by a chief investment officer. An investment committee composed of experts, who are all Synatom directors, is responsible for overseeing investment decisions. To this end, the investment policy is based on a controlled risk profile aimed at achieving the Group’s performance objectives and strong diversification of risks, and relies on a rigorous risk control policy.

Appeals against the permits necessary for nuclear operation

Appeals against the laws for the extension of the Doel 1 and Doel 2 nuclear units led to the adoption of an amending law on October 11, 2022, following compliance with the prescribed environmental assessment procedures (see Note 23.5.1 of Section 6.2.2 “Notes to the consolidated financial statements”). As such, the risk associated with the invalidation of the original law for the extension of these units until 2025 is no longer present in the Group’s critical risks.

The nuclear activity’s legal teams closely monitor these disputes and assist the State agencies in their favorable resolution.

DESCRIPTION	RISK MANAGEMENT MEASURES
Appeals against the permits necessary for nuclear operation Electrabel must obtain building permits and authorizations to operate certain nuclear facilities, which are often subject to appeals for annulment without suspensive effect. For example, permits are necessary for the construction of new buildings for temporary storage of spent fuel at the Tihange and Doel power plants. For Tihange, the required operating and planning permits of January 26 and February 21, 2020 have been the subject of ongoing appeals by local citizens. **Risk of unavailability of the nuclear fleet** The risk of one or more nuclear units not being available for technical, security or nuclear safety reasons could have a negative impact on performance objectives. The industrial performance and safety of Electrabel's nuclear facilities have improved over the 2020-2023 period and the key indicators are performing well. The availability of the nuclear generation fleet at the end of December 2023 was 89%, corresponding to a production of 32 TWh. The availability of the nuclear generation fleet was 84% in 2022. Reasons for unavailability may be related to technical issues (e.g. aging or reliability of certain equipment), an insufficient number of qualified operators on site or possible saturation of temporary radioactive waste storage. **Security of facilities and nuclear safety** Since the commissioning of the first reactor in 1974, the Doel and Tihange sites in Belgium have not experienced any major nuclear safety incidents that could have resulted in danger to employees, subcontractors, the general population or the environment. However, they could present civil liability risks for Electrabel, specifically in the event of a nuclear accident or the discharging of large quantities of radioactive material into the environment.	**Risk of unavailability of the nuclear fleet** the management of the aging of the generation fleet is closely monitored. a specific policy to maintain skills is in place. new suppliers of additional equipment are being accredited with the authorities, in particular for the supply of containers allowing the release of temporary storage capacity for spent fuel, with the first containers in the process of being manufactured. **Security of facilities and nuclear safety** Electrabel has implemented an internal and industrial control system in accordance with the extremely high standards of the profession, which operates on several levels: • the Safety Report establishes the control structures for the design, operating procedures and defines dedicated human resources; • safety principles are integrated into the operational management of the power plants; • compliance with the principles is subject to managerial supervision and independent controls by the operational organizations, carried out by the Nuclear Safety Department, which reports directly to the Chief Executive Officer; • it can rely on numerous, documented and quantified control points, as well as audits. All individuals working at nuclear power plants have the appropriate qualifications and are aware of their personal responsibility with regard to nuclear safety. During operations, compliance with safety and security rules and conditions at the facilities are subject to inspection by the Belgian Federal Agency for Nuclear Control (FANC), assisted by Bel-V, its technical support subsidiary. In addition, Electrabel takes into account the feedback and external peer reviews of the World Association of Nuclear Operators (WANO). The terrorist risk is addressed with the competent authorities of the Belgian State. The two nuclear sites have OHSAS 18001, ISO 45001, ISO 14001 and EMAS certification.

2.3 INTERNAL CONTROL PROCEDURES

2.3.1 INTERNAL CONTROL OBJECTIVES

2.3.1.1 Legal framework of application

ENGIE's internal control complies with the Financial Security Act adopted on August 1, 2003; and is based on the COSO II model of the Committee of Sponsoring Organizations of the Treadway Commission and the French Financial Markets Authority (Autorité des Marchés Financiers – AMF) reference framework. It is guided by a Group Policy which sets out, with regard to the applicable regulatory framework, the expectations and objectives of the Internal control function.

2.3.1.2 Internal control objectives

The purpose of ENGIE's internal control is to provide reasonable assurance (as described by the COSO) of the control of activities in terms of the following objectives:

- appropriate implementation and optimization of operations;
- the reliability of financial information; and
- compliance with laws and regulations as well as with instructions and guidelines set by Executive Management.

As such, ENGIE's internal control system is constantly adapted to take into account the challenges facing the Group. These adaptations respond to constant changes in regulations, the transformation of the organization, the development of new business lines and the development of digital technology.

2.3.2 INTERNAL CONTROL ORGANIZATION AND STAKEHOLDERS

2.3.2.1 Organization of internal control

The ENGIE Group has set up an internal control management program called "INCOME" (**IN**ternal **CO**ntrol **M**anagement and **E**fficiency) which is activated according to the risks and managerial challenges of each business line.

Internal control is first and foremost a managerial responsibility that applies at all levels within the Group so that each manager, as the "first line of management," is responsible for the design of an appropriate internal control system and for overseeing its efficiency.

In this respect, the operating entities and countries on the one hand, and the regions and Corporate on the other, have their own internal control teams, first and second level respectively, which are responsible for managing the roll out of the internal control system within their scope; they act at their level in support of management and have a matrix-style connection between the Internal control function (functional) and local management (hierarchical).

Reporting to the Finance Department, the Internal Control Department has global and cross-functional responsibility for the internal control area. Its main duties include:

- keeping the Group Internal Control Policy and the program's "reference framework" up to date;
- directly and indirectly supervising the actions of the Internal Control function within the Group; and
- managing and coordinating the system as a stakeholder of the "second line of management" with the other functions (see Section 2.3.2.3.3). Each is responsible for the suitability and effectiveness of its internal control system in its respective area.

The Internal Control Department is also specifically responsible for the suitability and effectiveness of the internal control system for the financial area.

The internal control function is composed of all of these elements.

2.3.2.2 General compliance framework

2.3.2.2.1 Ethics and compliance

In line with its values and its undertakings, ENGIE aims to act in compliance with the laws and regulations in force in the countries where it operates in all circumstances. To this end, the Group has established an ethics and compliance policy that guides its strategic decisions, management and professional practices. It also has the necessary tools to measure compliance with this undertaking (see Section 3.8 "Ethics and Compliance").

2.3.2.2.2 Information systems

The IT solutions strategy, policies and standards are defined by the Group Digital and Information Technology Department (GDIT). The security of the Information Systems (IS) of the Group's divisions and central functions is the responsibility of the corresponding Corporate Departments, in accordance with the policies and standards. The standardization of these business line applications and the security of the Industrial Control Systems (ICS) are overseen under the responsibility of the Global Business Units (GBU). The regions and entities are responsible for the security and resilience of their IS and ICS under the supervision of the GBU and the GDIT Department. The GDIT Department manages cross-divisional security actions, including awareness-raising actions, as well as the connection of Information Systems and industrial facilities to the Group's cybersecurity supervision platform (Global Security Operations Center).

2.3.2.2.3 Internal policies and standards

The functional departments implement and distribute Group Policies that aim to define, according to the area in question, the main provisions applicable at all levels of the organization, in line with ENGIE's objectives and values.

ENGIE's internal control system systematically refers to these Policies in the establishment of its reference framework, notably with regard to its compliance objective.

Decisions, standards and procedures setting out the Group's methods of operation supplement these Policies.

In this respect, the Finance Department provides the procedures and rules intended to ensure the reliability of the accounting and financial information applicable to the Group's entities.

The Internal Control Department provides all employees with:

- the Group internal control policy as well as a methodological guide to which the entities must refer, to help them define, assess and coordinate an internal control system adapted to the nature of their activities;
- internal control standards drawn up with the functional departments (see Section 2.3.2.3.3 "Second line of management"), which set out the risks relating to activities in the relevant fields and the key controls designed to manage them;
- tools to assess the general control environment and the management of fraud risk, as well as practical guides covering cross-divisional subjects which include the segregation of duties, the management of accreditation and access rights to Information Systems, the protection of tangible and intangible assets, and the role of Directors representing the Group within the entities owned.

All of these Policies, standards and procedures are available on the Group's Intranet site.

2.3.2.3 The system's stakeholders

The stakeholders and their respective roles are presented according to a three-line management model, overseen by ENGIE's governance bodies.

2.3.2.3.1 The Group's governance bodies

The Board of Directors, with the Audit Committee, ensures the correct functioning of the Group's internal control. The Executive Committee defines the organization and responsibilities of managers and ensures compliance with the delegations of authorities. An annual review of internal control is submitted to the Executive Committee and the Audit Committee.

2.3.2.3.2 First line of management

The operational managers, who are responsible for the internal control of their organizations, constitute a key element of the system. Following the reference framework defined by the Group, they ensure that control activities are implemented, analyze the results, correct any deficiencies and endeavor to improve the efficiency of their system.

The Management Committees of the GBU, regional hubs and operating entities are responsible for establishing and overseeing the internal control covering the scope of their activities.

2.3.2.3.3 Second line of management

This line of management is organized into functions, overseen by the Group's functional departments. In addition to the Internal Control Department, whose duties were described in Section 2.3.2.1 above, the following Departments are the main stakeholders of the second line of management:

The Finance Department carries out internal accounting and financial control (see Section 2.3.3 below). Within this department, the Risks Management & Insurance Department is involved in risk identification, loss prevention, and the definition and implementation of hedging strategies.

The Societal Responsibility Department monitors ENGIE's CSR compliance, particularly with regard to environmental and social matters. It proposes Group policies in this area, assesses the RSE maturity of the Group's various businesses, monitors the achievement of 2030 CSR targets and is in charge of regulatory environmental reporting.

The Group Procurement Department defines the principles and rules of the procurement Charter and Governance. Internal controls are defined to cover all procurement processes, from the selection of suppliers through to the payment of the final invoice.

The Corporate Secretariat helps to make the Group's operations and the decisions of its managers legally secure, particularly in the following areas: commitments, litigation, arbitration, studies and actions to protect the criminal liability of the Group and its managers, embargo, company law, stock market regulation, intellectual property law, competition law and regulation and financial law.

Within the Corporate Secretariat, the Legal, Ethics and Compliance Department manages the Legal Division and legal framework of the Group's activities. The Ethics, Compliance & Privacy Department, which is attached to it, manages the Ethics Division and ensures compliance with ethical principles.

The Group's Human Resources Department sets the framework and all rules aimed at ensuring compliance with local legislation, compliance with human resources management practices in terms of the Group's social and societal commitments, in terms of employment, diversity and inclusion, respect for human rights, health & safety, and data confidentiality and integrity.

The Transformation & Geographies Department is responsible for supervising the Transformation Office, the Health & Safety Department, and the General Department for Projects. It also manages the Group's geographical platform's Regional hubs, as well as the Global Business Support structure responsible for the Group's shared services centers.

Within the Transformation and Geography Office, (i) the Transformation Office Department is responsible for supervising and managing the Group's transformation projects, (ii) the Group's Health & Safety Department is responsible for all activities at the Group level relating to the health & safety of individuals and process safety in terms of the objectives set by the Group in these areas (No Life at Risk – No Mind at Risk – No Asset at Risk) and relating to crisis management, and (iii) the Projects Operational Department supervises and supports the Group's industrial projects.

The Group Digital and Information Technology Department (GDIT) defines the internal controls relating to the management of information systems and their security for both the management systems and industrial control systems (ICS). Regular controls are carried out on systems (penetration testing), onsite (ICS controls) and via internal and external risk indicators. Important subjects for internal control, such as the segregation of duties and the management of access rights, are taken into account during the design stage of new information systems and regularly reviewed thereafter under the control of the owners of sensitive applications.

2.3.2.3.4 Third line of management: the Internal Audit Department

Reporting to the Chief Executive Officer, the Internal Audit Department operates throughout the Group in accordance with an annual audit plan based on risk analysis and interviews with the functional and operational managers.

This plan may be expanded at the request of the Executive Committee according to the Group's priorities.

Submitted for approval to the Audit Committee, the plan is designed to cover all of the Group's major risks and challenges that it is able to address and enables the management of activities to be checked.

The Internal Audit presents its conclusions to the Audit Committee, the Group's Executive Committee and the managers of the GBU. It reports to the Audit Committee on its key observations and the progress of related action plans.

2.3.3 INTERNAL CONTROL RELATING TO FINANCIAL INFORMATION

2.3.3.1 Organization and stakeholders

The Reporting, Analysis and Performance Department (DRAP) is in charge of financial reporting, preparing the parent company financial statements of ENGIE, producing the consolidated financial statements, and liaising with the Statutory Auditors and the accounting departments of the AMF. It establishes the Group's accounting principles and oversees their implementation to ensure compliance with the accounting standards. It monitors the evolution of standards and their impact on the Group's financial statements, ensures the quality and consistency of the analysis carried out and the positions adopted. The department establishes the analysis and reports required by Executive Management for the economic and financial coordination of the Group. It draws up and maintains the Group's management control toolkit and oversees the rolling out of these toolkits to the various entities. It guides the Accounting and Management Control Divisions in defining and implementing processes and tools. It coordinates the Group's performance program.

The Tax Department is responsible for defining and rolling out the Group's tax policy. It coordinates the validation of tax returns and transfer pricing documentation and ensures that tax data are uniformly reported. It is hierarchically responsible for all tax activities. Generally speaking, it is closely supported by the Finance Departments of the GBU and the hubs, which assume responsibility for tax in terms of compliance and transparency.

The Financial Systems and Processes Department defines the strategy in terms of processes and Information Systems for the finance function. It determines and manages the policies, rules and standards for IT processes and solutions specific to the Finance Function. Applications and networks are rolled out evenly across the entities. The Financial Systems and Processes Department oversees the implementation of the Group's IS security policy within the sector and monitors and plans IS spending and investments.

The consolidated reporting entities all use the SAP BFC software package for the consolidation of the Group's financial statements and the SAP BPC software package for the Group's management reporting. SAP BFC is jointly managed by the Accounting IT Center of Expertise (which handles administrative tasks and system configuration and provides operating assistance to users) and the Information Systems Department, which is in charge of specific underlying networks.

The Investor Relations Department is in charge of relations with institutional investors and analysts. With regard to management information, the DRAP is the sole source of information for the Investors Relations Department, including for other information from the legal reporting process and falling within the framework of regulated information, within the meaning of the AMF regulations. Lastly, the department oversees and coordinates the process of market communication (financial information and information on major transactions) in collaboration with the Corporate Secretariat.

Through the functional lines, all of these corporate departments oversee the internal control of their respective fields via the Finance Departments of the GBU and regional hubs. They are responsible for the production of the parent company financial statements of legal entities and their transcription in the IFRS framework, as well as the implementation of internal control procedures at all operating subsidiaries and decentralized management control (see Section 2.3.3.3 "Setting objectives and coordination"). The consolidation of these data transcribed into IFRS standards is carried out by Corporate.

The Finance Department also uses the current "Missions and operating principles of financial communication" procedure, which sets out management principles for the Group's financial communication and defines the activities relating to institutional investor and analyst relations as well as market intelligence.

2.3.3.2 Consolidation process

The **DRAP** is in charge of producing the consolidated financial statements. It is supported by the management reporting teams of the GBU and the hubs. It updates the accounting standards manual and closing instructions shared before the consolidation phases.

Each of these entities carries out controls in its own area of responsibility to ensure that Group accounting standards and policies have been circulated and applied correctly. Corporate implements second-tier controls of information prepared by the GBU and hubs, which do the same regarding data provided by the reporting entities.

The Chief Executive Officers and Chief Financial Officers of the GBU, as well as the Chief Financial Officers of the geographical hubs, attest to the quality and comprehensiveness of the financial information provided to the Group in a representation letter. Discussions with the Statutory Auditors enhance the quality of financial information, particularly in the case of complex situations that are open to interpretation.

2.3.3.3 Setting objectives and coordination

The Group's four GBU and business entities produce a Medium Term Business Plan (MTBP), a budget and updates to the budget during the course of the year. The **DRAP** prepares instructions for this purpose for each GBU, including details such as macroeconomic hypotheses, financial and non-financial indicators, the timetable and the segmentation of the scope of activity. Each GBU is responsible for sending these instructions to the reporting entities within its scope after tailoring them to the specific characteristics of its business activity.

The Executive Committee approves for each GBU the objectives set for the following year, the corresponding budget and the outlook beyond the current year derived from the budget process and the MTBP. The testing process for the impairment of goodwill and long-term assets is based on this data. The Group's consolidated budget and MTBP are presented in a joint meeting to the Audit Committee and the Strategy, Investment and Technology Committee before being submitted to the Board of Directors.

2.3.4 MANAGEMENT OF INTERNAL CONTROL

Management plays a key role in coordinating the internal control system according to a cycle that is generally annual by ensuring, with respect to the principle of reasonable assurance, that it remains relevant to the challenges and risks within its scope of responsibility. As part of the Group's internal control program and its methodology guidelines, it ensures that the following five actions are carried out:

- an analysis of the general control environment;
- an assessment of the risks of process malfunctions;
- the creation or update of the controls deemed appropriate;
- a regular assessment of the efficiency of the systems in place and the potential implementation of corrective measures as part of a continuous improvement approach;
- communication and commitment at all levels.

For all of these actions, the Group provides the entities with the necessary tools and each entity uses and adapts these tools according to their specific requirements.

More specifically, with regard to the assessment of the efficiency of the systems in place, the Group continued in 2023 with the initiative relating to the development and roll out of automated controls through the use of data available in transactional processes to contribute to the management of the risks of non-compliance (for example, compliance with embargo measures or the regulation governing payment terms).

Several dozen controls are therefore currently automated in the areas of procurement, sales and taxation. The information resulting from the implementation of these automated controls and their monitoring is included in the documentation supporting the results of the control assessment.

For the entities benefiting from the introduction of this solution, the benefits seen from the implementation of these controls relate to:

- **the level of coverage** through the ability to process all data versus a sample-based approach which, by nature, is more limited;
- **support provided to line managers** in their activities to continuously improve the functioning of the processes in question and the quality of data through access to lists of anomalies to be addressed as well as indicators and scorecards to facilitate the monitoring of actions;
- **the traceability of controls**, thanks to the sharing of their results at all levels of the organization allowing the functional departments involved to coordinate the internal control system in a more accurate manner for the control activities automated in this way.

The solution provides added value by better covering the risks inherent to the business, as it strengthens the existing internal control system and makes it more digital. The Group has implemented a governance process to accelerate rollout and extend the controls, particularly on financial aspects.

In terms of the concept of commitment, management's responsibility is made official by the drafting and signature of an annual letter of acknowledgment which sets out the manager's point of view on the efficiency of the internal control system within their scope of responsibility by attaching the major action plans deemed suitable to address any weaknesses identified.

This commitment is applied throughout the chain of management to provide Executive Management and the Audit Committee with reasonable assurance as to the deployment and efficiency of its internal control system.

3

NON-FINANCIAL STATEMENT AND CSR INFORMATION

French ordinance 2017-1180 dated July 19, 2017 and French Decree 2017-1265 dated August 9, 2017 transposed European Directive 2014/95/EU, also called the non-financial reporting Directive (NFRD), as regards disclosure of CSR information by companies via the Non-Financial Statement (NFS).

Pursuant to this legislation, the ENGIE Group's NFS comprises the following elements:

- a presentation of the governance of CSR performance in Section 3.1 "Corporate Social Responsibility," together with: the Board of Directors' diversity policy, described in Chapter 4 "Corporate Governance," the Vigilance Plan described in Section 3.9 "Vigilance Plan," and the rules of ethics described in Section 3.8 "Ethics and compliance";
- a description of the Group's activities presented in a summary form by major business segment in Section 3.2 "Business model," and in a detailed form in Section 1.6 "Description of the Group's activities";
- an analysis of the CSR risks relating to the areas referred to in the NFRD Directive, detailed in Section 3.3 "Analysis of the main CSR risks and challenges."

3.1 CORPORATE SOCIAL RESPONSIBILITY

The fundamental principles of Corporate Social Responsibility (CSR) are elaborated on in the Group's purpose which is enshrined in its bylaws (see the "ENGIE at a glance" Section).

Rethinking the global energy landscape has today become a necessity in the face of global warming. The urgency of climate change requires the implementation of a lower-carbon, more decentralized, more digitized and more pared-back energy system.

That being said, the quest for positive impacts on the climate must not come at the expense of the population and nature. This threefold challenge involving the Climate, Nature and Humanity drives the Group's societal approach.

3.1.1 CSR POLICY AND GOVERNANCE

ENGIE's Corporate Social Responsibility policy sets out the Group's CSR priorities and commitments to bring together everyone's skills, create shared value for all its stakeholders and contribute to the achievement of the Sustainable Development Goals defined by the United Nations. By acting for a positive impact on people and the planet, the Group contributes to ensuring its leadership, over the long term, as a benchmark player in energy transition. This policy is detailed in Section 1.5.1.

The Societal Responsibility Department (CSR Department) relies on a network of designated coordinators in the business units (GBU, GEMS (Global Energy Management & Sales) and Nuclear) and geographical entities (national and regional hubs). To engage employees as widely as possible on these subjects, the CSR Department uses a network of Chief Sustainability Officers (CSO) across the business lines and regional hubs.

The CSR Department provides regular presentations to the Board of Directors' Ethics, Environment and Sustainable Development Committee (EESDC) on the latest CSR topics (Science-Based Targets or SBT, tracking CSR objectives and commitments, discussions with civil society, CSR ratings, etc.).

The CSR Department takes joint leadership with the Finance Department of the Green Financing Committee, overseeing projects likely to be financed by green bonds regularly issued on the market by the Group.

The CSR Department has leadership of the Climate Mitigation Committee, in which the Finance Department and the relevant GBU participate. This committee is notably responsible for overseeing the Group's decarbonization commitments, in line with the Science Based Targets.

The CSR Department takes joint leadership with the Finance Department and the GBUs concerned of the Adaptation climate Committee, charged with overseeing the achievement of financial transparency commitments made in the TCFD initiative (Task Force on Climate related Financial Disclosures) and with monitoring the Group's plans to adapt its assets to climate change.

The CSR Department, together with the Finance Department, also heads up the CSRD Implementation Committee set up in 2023 to roll out the action plan needed to implement the new European CSRD (Corporate Sustainability Reporting Directive).

The CSR Department takes joint leadership with the Legal, Ethics and Compliance Department of the Duty of Vigilance Committee, charged with overseeing measures to prevent serious violations relating to human rights and fundamental freedoms, the health & safety of individuals and the environment that might arise from the activities of the Group and the subsidiaries it controls.

The CSR Department regularly meets with a range of stakeholders (NGOs, investors, rating agencies, customers, opinion leaders, and experts), and organizes panels and discussion forums, as well as a Stakeholder Committee, to work on the sustainability of offerings and projects related to the Group's operational teams. Employees receive regular training on themes related to sustainable development and stakeholder engagement.

Each year, before its Shareholders' Meeting, ENGIE publishes an integrated report on its overall financial, environmental, social and societal performance. It discusses this report in advance with its stakeholders to improve its relevance.

3.1.2 2030 CSR OBJECTIVES

The Group has set itself CSR objectives for 2030 in line with its purpose and its new strategic plans: 18 objectives overseen at EESDC level and 13 objectives overseen by the Executive Committee. These objectives are presented in Section 1.5.2.

Each objective has an Executive Committee member as a sponsor and a manager. They work in partnership with the division concerned to take the necessary action to achieve the objective. The CSR Department coordinates and monitors these CSR objectives for senior management, the EESDC and the Board of Directors.

3.1.3 CLIMATE TRAJECTORY (RELATED TO THE RECOMMENDATIONS OF THE TCFD: TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES)

3.1.3.1 Climate governance

The Board of Directors validates the climate transition strategy and its associated objectives. This subject is central to its work, particularly when the Board holds its strategy seminar and makes investment decisions, which are prepared by the Strategy, Investment and Technology Committee (SITC).

Regarding climate, the Board relies on the work of the Ethics, Environment and Sustainable Development Committee (EESDC), which is specially charged with reviewing the risks and opportunities connected with climate change and making its recommendations to the Board.

The Ethics, Environment and Sustainable Development Committee (EESDC) studies and decides on climate-related issues in particular the Group's climate policy, points concerning the implementation of TCFD recommendations and decarbonization objectives. This role was confirmed by its inclusion in the Internal Regulations of the Board of Directors.

In order to fulfill this mission, the EESDC relies on analysis of climate-related risks and opportunities (see Sections 2.2.2.2 and 3.1.3.3), as well as other more specific elements (e.g. progress on the adaptation plan). Climate risk is one of the seven primary risks reviewed by the Board of Directors on an annual basis. These reports are prepared by the CSR Department, which also includes a chapter dedicated to climate change in its CSR reporting to the EESDC.

The CSR Department leads the climate Mitigation Committee which steers the Group's decarbonization objectives to ensure that the Group's decarbonization trajectory is in line with the commitments made under the SBTi initiative. This process relies in particular on a CO2 Medium-Term Plan for the annual trajectory up to 2030, and on Quarterly Business Reviews for infra-annual steering. The CSR Department also oversees the Group's adaptation work with support from the Research & Innovation teams (see Section 1.3). All of this work is carried out in close coordination with the Strategy Department and the Finance Department, as well as with all the Global Business Units.

The Group has also set up information sessions for directors so that they can ensure that they have sufficient skills to fulfill their roles. The climate is one of the training topics.

The CSR Department also makes proposals to the Appointments, Compensation and Governance Committee on the criteria for compensating the Chief Executive Officer, the COMEX members and other Group employees via the long-term incentive scheme in relation to ENGIE's main non-financial challenges. In particular, they take into account changes in greenhouse gas (GHG) emissions linked to energy production.

The Audit Committee identifies the primary risks, including climate risk and the integration of climate considerations into the assumptions used for financial guidance and the calibration of risk insurance coverage.

Finally, the Strategy, Investment and Technology Committee integrates climate challenges and objectives in its investment decisions.

3.1.3.2 Strategy

In line with its purpose (see the "ENGIE at a glance" Section) and the Say on Climate resolution adopted by the April 21, 2022 Shareholders' Meeting, the decarbonization of the economy is at the heart of the Group's strategy. This also takes the form of long-term commitments to achieve Net Zero Carbon across all scopes (Scopes 1, 2 and 3) by 2045 and of medium- to long-term commitments that project GHG emissions on a path compatible with the Paris Agreement (see Section 3.1.4).

In order to define its commitments, the Group has studied the resilience of its business model by comparing it to different decarbonization scenarios.

These commitments are already reflected in the Group's processes: for example via the allocation of annual carbon budgets until 2030 to the main businesses (GBU) integrated within the Group's investment processes, and regular reporting of the consumption of these budgets within the context of new investments.

The impact of climate change on the Group's strategy is being studied as well. A process was launched in 2022 with the issue being approached by country or by major climate region where ENGIE has an interest. The study covers four areas:

- the impact of climate change on country risk;
- the value of existing assets;
- the strategic objectives out to 2030;
- the strategic issues specific to the countries in question.

The updated climate risk mapping for the second half of 2022 confirmed the identified risks and is presented in Section 2.2.2.

Moreover, climate change can bring new opportunities. It encourages the development of new technologies and solutions, particularly in terms of:

- development of renewable energy for electricity;
- development of green gas (biomethane and green hydrogen);
- more offers of decarbonization support and solutions for our customers.

3.1.3.3 Risk management

Climate change carries risks for the Group (see Section 3.3).

The transition risks to which the Group is exposed mainly result from the strengthening of emissions regulations and decarbonization policies, changes in market and consumer behavior, and technological developments. The Group has been setting itself greenhouse gas emissions targets since 2012. Since 2017, the Group has reduced its direct emissions by 70% and total emissions by 40%. It is set to achieve ambitious objectives by 2030 (certified by SBTi) and Net Zero Carbon in 2045. As well as the emissions of its own industrial assets, the Group acts throughout its value chain, including suppliers, work practices, and support for customers as they decarbonize their footprint.

Risks include, in particular, the transformation required toward a complete decarbonization of gas networks: the reduction in the volume of gas in certain networks (transmission, storage or distribution) or in certain sectors (buildings, electricity production) and the imposition of stricter carbon criteria for methane. To date, these represent the greatest risks to ENGIE's activities, particularly its gas networks. In addition, these risks also concern the development of green gas production (promising technologies to industrialize) and renewable electricity production (mature but strained supply chain).

Physical risks are inherent in the assets and activities of the Group that might be exposed to the impacts of climate change. The collaboration of the CSR Department with the Group's operating entities has made it possible to identify the climate indicators that affect the Group's activities (heat waves, water stress, flooding, strong winds, landslides, forest fires, coastal erosion, heat stress). The Group has also forged a partnership with the Pierre Simon Laplace Institute to obtain climate change data at various degrees of warming.

With these items, the Group is able to make a list of priority operating sites in terms to assess their local resilience to climate change. In addition to risk management, insurance coverage and short-term continuity plans are being drafted, as well as a plan to adapt our high-risk assets for 2030 and 2050.

Analyses are also carried out on ENGIE's entire generating fleet, to provide better visibility on the long-term potential for contracting our production with our customers.

3.1.3.4 Indicators and targets

ENGIE has a robust panel of key performance indicators (KPI) that enable it to measure its carbon footprint with all the desired level of detail. These indicators allow it to precisely control changes in its GHG emissions.

In addition to the SBTi objectives presented in Chapter 3.1.4, the Group's 2030 targets are:

- 43 Mt CO_2 eq. related to energy production (scope 1 and 3.15);
- 52 Mt CO_2 eq. related to the use of products sold (scope 3.11);
- 30% reduction in methane emissions from gas networks between 2017 and 2030;
- 100% of the top 250 preferred suppliers (excluding energy) certified or aligned with the SBT initiative by 2030;
- 45 Mt CO_2 eq. of customer GHG emissions avoided by ENGIE's offers and products in 2030.

The results of the decarbonization targets are shown in Section 1.5.2.

These targets give an initial estimate of emissions in 2030: [20 ; 27] Mt CO2 eq. for scope 1, [1 ; 2] Mt CO_2 eq. for scope 2 and [100 ; 135] Mt CO_2 eq. for scope 3. These data are forward-looking estimates, updated annually at the time of the Medium-Term Plan (MTP). They have no target value, and are shared as part of the Group's commitment to external transparency.

3.1.4 SCIENCE-BASED TARGETS CERTIFICATION

The Science-Based Targets (SBT) initiative aims to encourage companies to take ambitious climate action by validating the compliance of their forecast chronicles of CO_2eq emissions with the commitments of the Paris Agreement.

Mindful of its environmental responsibility, in May 2021 ENGIE committed to a well-below 2°C trajectory by 2030 with a view to being Net Zero Carbon by 2045. In February 2023, the Group obtained SBTi "well-below 2°C" certification for its decarbonization trajectory.

For this, the Group is committed to reducing (see Section 1.5.2):

- by 66%, the carbon intensity of production (Scope 1) and energy consumption (Scope 2) between 2017 and 2030;
- by 56%, the carbon intensity of energy sales produced (Scopes 1 and 3) and purchased (Scope 3) between 2017 and 2030;
- by 32.5%, other GHG emissions, including Scope 3 of purchases, fixed assets and upstream fuel and electricity purchase chain between 2017 and 2030.

It should be noted that ENGIE has set a reduction target for carbon intensity linked to energy generation and consumption (scopes 1 and 2) that goes beyond SBTi requirements, with a commitment of -66% over the 2017-2030 period instead of the -55% required by SBTi.

This certification demonstrates ENGIE's aim of becoming a major player in the energy transition to a carbon neutral world.

In this context, ENGIE is committed to ending its coal activity in 2025 for continental Europe and in 2027 for the rest of the world for all its coal assets.

This exit from coal will be achieved, in order of priority, through closures, conversions and disposals of power plants. If the closure of a coal-fired power plant is indeed preferable to its disposal from an environmental point of view alone, its implementation faces two limits: ENGIE is almost never the sole decision-maker in this matter and closure may not be possible if the coal-fired power plant contributes to the energy security of a State or a region.

Whenever ENGIE determines to dispose of a coal-fired power plant, it weighs CSR considerations in choosing a buyer. The proceeds from the disposal also enable the Group to finance the development of renewable capacities that are beneficial to the climate.

Concerning natural gas, the Group's ambition is to gradually replace fossil gas by green gas through the development of biomethane and green hydrogen. These measures complement the Group's commitment to the strong development of renewable energy for electricity, in its ambition to transition to a low-carbon society.

3.1.5 EUROPEAN TAXONOMY

3.1.5.1 Methodology for the classification of activities

In order to direct European industrial investments toward sustainable activities and achieve carbon neutrality by 2050, the European Union has adopted, with Regulation 2020/852 of June 18, 2020 and four delegated acts - (2021/2139) dated June 4, 2021, (2022/1214) dated March 9, 2022 and (2023/2485 and 2023/2486) dated June 27, 2023 - a European taxonomy approach which lists the economic activities deemed environmentally sustainable.

The Group followed a four-step process to identify the activities which are eligible and aligned in accordance with the European Regulation governing the taxonomy of sustainable activities (2020/852) across all the countries in which the Group operates for 2023. For eligible activities, the process covered all six objectives of the taxonomy. However, after analyzing the economic activities covered by all the objectives, the Group is mainly concerned with the mitigation objective in line with its decarbonization strategy (see Section 3.10. Appendix – Taxonomy tables).

The **first stage** consisted of studying the eligibility of activities and dividing the Group's economic activities into two categories: eligible and non eligible. To do so, the Group determined which of its activities strictly corresponded to an economic activity described in one of the delegated acts (2021/2139), (2022/1214) or (2023/2486). The main activities deemed eligible were those of GBU Renewables (wind, solar, hydropower and geothermal electricity production), GBU Energy Solutions (heating production and distribution with or without gas or biomass cogeneration, energy efficiency services), and the GBU FlexGen & Retail (electricity storage, production of electricity from natural gas). For GBU Networks, activities relating to greening injected, transported and distributed natural gas were taken into account in proportion to the green gas transported in the networks. For nuclear production, the extension of the two Belgian units Doel 4 and Tihange 3 was the subject of an agreement between the Belgian State and the Group, which led, subject to the closing expected in 2024, to the creation of a legal structure dedicated to the two extended nuclear units equally owned by the two parties. This dedicated company will be consolidated using the equity method. Given the definition of CAPEX according to the Taxonomy regulation, investments made in the Group's nuclear activity are outside the scope of the Taxonomy analysis exercise. Therefore, only the drawing rights on two French power plants owned and identified as eligible by EDF were considered as eligible by the Group.

Non-eligible activities mainly relate to sales of electricity and gas as a marketer or trader.

The **second stage** consisted of determining among the eligible activities, those who made a substantial contribution to the mitigation or adaptation to climate change objective by assessing their compliance with the technical review criteria presented in the delegated acts. The criterion of 100 gCO_2 / kWh in the life cycle analysis does not currently qualify the Group's natural gas-fired power generation assets on its own. Among the technical review criteria, the activity is considered as aligned if:

- for hydroelectric generation: the hydroelectric power plant was a "run of the river" type or can demonstrate a power-flux ratio of more than 5 W/m^2;
- for the heating networks: the energy system was efficient as defined by the EU (a system using at least 50% of energy from renewable sources, 50% in residual heat, 75% heat produced through cogeneration or 50% using a combination of this energy and heat);
- for the installation of energy efficiency equipment or energy performance services in the buildings: the activity is related to one of the activities described.

The **third stage** related to compliance with technical review criteria ensuring no prejudice to the other environmental objectives (Do No Significant Harm- DNSH). Risk management relating to climate change, water resources, the circular economy, the erosion of biodiversity and air pollution is covered by a specific section of our environmental policy (see the Group's website: https://www.engie.com/en/group/social-responsibility/csr-goals). The compliance assessment was carried out by environmental coordinators for each activity based on the following main elements:

- the analysis of risks relating to climate change (physical risks), water stress, pollution (NOx, SOx, PM), the protection of protected zones which is updated each year as part of environmental reporting on sites in operation;
- the preparation of an environmental management plan as part of the Group's voluntary CSR objectives;
- EMAS and ISO 14001 certification for facilities with the highest environmental impact such as hydropower production sites.

The **fourth stage** related to the Group's compliance with minimum safeguards. This compliance is achieved thanks to the policies of the Group's Ethics, Compliance & Privacy Department and in particular through the policy relating to human rights which refers to major international standards, and the Integrity and Ethics Compliance guidelines for the establishment of anti-corruption and fair competition procedures, and through the analysis of risks and duty of vigilance action plans, as well as the system for whistleblowing and reporting ethics incidents. A description of the system and the vigilance plan are available in this 2023 Universal Registration Document (see Sections 3.8 and 3.9) and on the Group's website: www.engie.com/en/ethics-and-compliance/whistleblowing-system and www.engie.com/en/ethics-and-compliance/vigilance-plan.

Activities considered as aligned are those which correspond favorably to the four stages described above.

The results are also the subject of a follow-up note at the EESDC.

3

3.1.5.2 Calculation method for indicators

Regulation 2021/2078 dated July 6, 2021, requires this Non-financial statement (NFS) to publish, as of 2022, the rate of eligibility and alignment of business activities for listing in this taxonomy using three indicators defined by said taxonomy:

- revenues;
- capital expenditure (CAPEX);
- operating expenses (OPEX).

Revenues, CAPEX and OPEX indicators used for these eligibility rate calculations are strictly in line with the taxonomy definitions.

Revenues refers to the Group's published revenues (see Note 7 "Sales" of Section 6.2 "Notes to the consolidated financial statements"), i.e. it excludes revenues from entities consolidated using the equity method (like Ocean Winds, a partnership with EDP Renovàveis in offshore wind). Moreover, revenues from an energy production site eligible for the taxonomy must be retained even if the final sale to an external third party is carried out by the Group's marketer (GEMS), and not directly by the entity producing the sustainable energy.

The CAPEX indicator defined by the taxonomy is different from the one used by ENGIE in its management dialog and in its financial communication to the market. In particular, the taxonomy does not include financial investments in entities consolidated using the equity method, as well as Design Build Own Operate (DBSO) disposals including tax equity received.

ENGIE CAPEX and taxonomy CAPEX can be reconciled as follows:

Data at December 31, 2023, in millions of euros	Capital expenditure (CAPEX) [(1)]	Taxonomy CAPEX
Acquisitions of property, plant and equipment and intangible assets	7,328	7,328
(-) Change in tangible and intangible investment liabilities		*790*
Entry into scope of tangible and intangible investments arising from "Business combinations"		2,226
Changes in scope – Acquisitions	1,338	
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	1,392	
(+) Cash and cash equivalents acquired	*204*	
Acquisitions of investments in equity method entities and joint operations	237	
Acquisitions of equity and debt instruments	1,675	
Change in loans and receivables originated by the Group and others	1,585	
(-) Disposal impacts relating to DBSO activities	*(62)*	
(-) Financial investments Synatom / Disposal of financial assets Synatom	*(3,082)*	
Right of use assets (IFRS 16)		710
TOTAL	**10,614**	**11,055**

(1) See Note 5.6 of Section 6.2 "Notes to the consolidated financial statements"

Since 2022, ENGIE has adapted its chart of accounts to strictly adhere to the definition adopted by the European regulation for the **OPEX indicator**, i.e. direct costs not recognized as assets for research and development, the renovation of buildings, leases, maintenance and repairs, and any other direct expense relating to the routine maintenance of property, plant & equipment.

The 2023 results are presented in the three tables below, with a breakdown of the results by segment.

2023 revenues used by the taxonomy

Segment	Eligible revenues (€ million): A	Aligned revenues (€ million): B	Total Revenues (€ million): C	Percentage of eligibility of revenues: (A/C)	Percentage of alignment of revenues: (B/C)
Renewables	5,357	4,996	5,512	97%	91%
Networks	470	379	6,873	7%	6%
Energy Solutions	7,738	6,826	11,033	70%	62%
FlexGen & Retail	5,175	1,428	21,707	24%	7%
Nuclear	815	815	118		
Other (of which GEMS)	81	73	37,322	0%	0%
TOTAL	**19,635**	**14,517**	**82,565**	**24%**	**18%**

2022 revenues used by the taxonomy

Segment	Eligible revenues (€ million): A	Aligned revenues (€ million): B	Total Revenues (€ million): C	Percentage of eligibility of revenues: (A/C)	Percentage of alignment of revenues: (B/C)
Renewables	6,102	5,735	6,216	98%	92%
Networks	469	467	6,961	7%	7%
Energy Solutions	7,514	5,838	11,552	65%	51%
FlexGen & Retail	9,001	1,696	23,939	38%	7%
Nuclear	372	372	35		
Other (of which GEMS)	10	0	45,163	0%	0%
TOTAL	**23,468**	**14,109**	**93,865**	**25%**	**15%**

2023 Capital expenditure (CAPEX) used by the taxonomy

Segment	Eligible CAPEX (€ million): A	Aligned CAPEX (€ million): B	Total CAPEX [(1)] (€ million): C	Percentage of eligibility of CAPEX: (A/C)	Percentage of alignment of CAPEX: (B/C)
Renewables	4,687	4,668	4,707	100%	100%
Networks	357	261	2,099	17%	12%
Energy Solutions	818	705	1,040	79%	68%
FlexGen & Retail	2,062	1,555	2,348	88%	66%
Nuclear	45	45	170	27%	27%
Others	23	23	692	3%	3%
TOTAL	**7,992**	**7,258**	**11,055**	**72%**	**66%**

(1) A part of the Group's CAPEX is financed by Green Bonds, according to the provisions of a reference framework that ENGIE has defined for its green emissions (see Section 5.3 "Green bonds"). Although the estimate is not easily quantifiable, these assets generate, for the most part, eligible and aligned revenues.

2022 Capital expenditure (CAPEX) used by the taxonomy

Segment	Eligible CAPEX (€ million): A	Aligned CAPEX (€ million): B	Total CAPEX (€ million): C	Percentage of eligibility of CAPEX: (A/C)	Percentage of alignment of CAPEX: (B/C)
Renewables	4,491	4,327	4,504	100%	96%
Networks	345	345	2,155	16%	16%
Energy Solutions	602	514	936	64%	55%
FlexGen & Retail	384	76	784	49%	10%
Nuclear	109	109	224	49%	49%
Others			587	0%	0%
TOTAL	**5,930**	**5,370**	**9,191**	**65%**	**58%**

2023 Operating expenses (OPEX) used by the taxonomy

Segment	Eligible OPEX (€ million): A	Aligned OPEX (€ million): B	Total OPEX (€ million): C	Percentage of eligibility of OPEX: (A/C)	Percentage of alignment of OPEX: (B/C)
Renewables	515	507	553	93%	92%
Networks	93	60	907	11%	11%
Energy Solutions	723	489	876	83%	56%
FlexGen & Retail	267	35	631	42%	6%
Nuclear	35	35	198	18%	18%
Others	0	0	6	0%	0%
TOTAL	**1,633**	**1,126**	**3,172**	**51%**	**35%**

2022 Operating expenses (OPEX) used by the taxonomy

Segment	Eligible OPEX (€ million): A	Aligned OPEX (€ million): B	Total OPEX (€ million): C	Percentage of eligibility of OPEX: (A/C)	Percentage of alignment of OPEX: (B/C)
Renewables	571	556	591	97%	94%
Networks	38	37	800	5%	5%
Energy Solutions	556	460	766	73%	60%
FlexGen & Retail	240	38	531	45%	7%
Nuclear	33	33	207	16%	16%
Others	0	0	6	0%	0%
TOTAL	**1,438**	**1,124**	**2,901**	**50%**	**39%**

In 2023, ENGIE recognized stable taxonomy-eligible **revenues** of 24% and increased aligned revenues of 18% driven by Energy Solutions activities (25% and 15% respectively in 2022), taxonomy-eligible **CAPEX** of 72% and taxonomy-aligned CAPEX of 66%, up compared to 2022 (65% and 58%), due to the development of battery activities led by the GBU FlexGen, and taxonomy-eligible **OPEX** of 51% and taxonomy-aligned OPEX of 35%.

In 2023, as was the case in 2022, these Group figures mask great disparities from one business line to another.

The majority of **GBU Renewables** activities are eligible (97% for revenues, 100% for CAPEX) and almost all aligned (91% for revenues, 96% for CAPEX).

The majority of **GBU Energy Solutions** activities are eligible (70% for revenues, 79% for CAPEX) and mostly aligned (62% for revenues, 68% for CAPEX).

The activities of the **GBU FlexGen & Retail** are minimally eligible and aligned with the taxonomy for revenues (24%), whereas, thanks to the development of battery activities, CAPEX has become predominantly eligible and aligned (88% and 66% in 2023 against 49% and 10% in 2022).

The activities of the **GBU Networks** are also minimally eligible and aligned. On the other hand, the three gas network activities (transport, distribution and storage) will gradually become eligible and aligned as they are converted to renewable gas and hydrogen storage.

Nuclear activities are eligible and aligned for those corresponding to drawing rights on French plants identified as eligible and aligned by EDF.

Finally, the **Other** activities (including *GEMS*, which sells energy to companies, and which offers energy management services and solutions to support the decarbonization of the Group and its customers) are not eligible for the taxonomy.

it should be noted that 90% of the 2024-2026 growth CAPEX plan (see Note 5.6 of Section 6.2.2 "Notes to the consolidated financial statements") is eligible and 83% is aligned, which is significantly higher than the percentages calculated across all CAPEX (growth and maintenance). These eligibility and alignment ratios in relation to growth CAPEX reflect the Group's commitment to a carbon-neutral economy, which is demonstrated through its financial investments. In addition, in its growth CAPEX, ENGIE has taken into account the CAPEX incurred to extend the life of the two nuclear units in Belgium from 2025 to 2035, in accordance with the agreement signed with the Belgian State, the closing of which is expected in 2024.

The taxonomy analysis of the 2024-2026 CAPEX plan is presented in the tables below and includes the CAPEX indicator defined under taxonomy and the CAPEX growth indicator as monitored at Group level (see Note 5.6 of Section 6.2.2 "Notes to the consolidated financial statements").

Capital expenditure (CAPEX) used by the taxonomy

	2024-2026 plan		2023-2025 plan	
Segment	**Percentage of eligibility**	**Percentage of alignment**	**Percentage of eligibility**	**Percentage of alignment**
Renewables	100%	100%	100%	100%
Networks	31%	22%	22%	22%
Energy Solutions	80%	72%	79%	71%
Other activities	54%	38%	57%	16%
Capital expenditure used by the taxonomy (Growth and maintenance CAPEX)	**72%**	**65%**	**67%**	**62%**

Growth CAPEX

	2024-2026 plan		2023-2025 plan	
Segment	**Percentage of eligibility**	**Percentage of alignment**	**Percentage of eligibility**	**Percentage of alignment**
Renewables	100%	100%	100%	100%
Networks	76%	58%	53%	53%
Energy Solutions	82%	70%	73%	66%
Other activities	76%	60%	50%	22%
Growth CAPEX (1)	**90%**	**83%**	**80%**	**76%**

(1) See Note 5.6 of Section 6.2.2 "Notes to the consolidated financial statements."

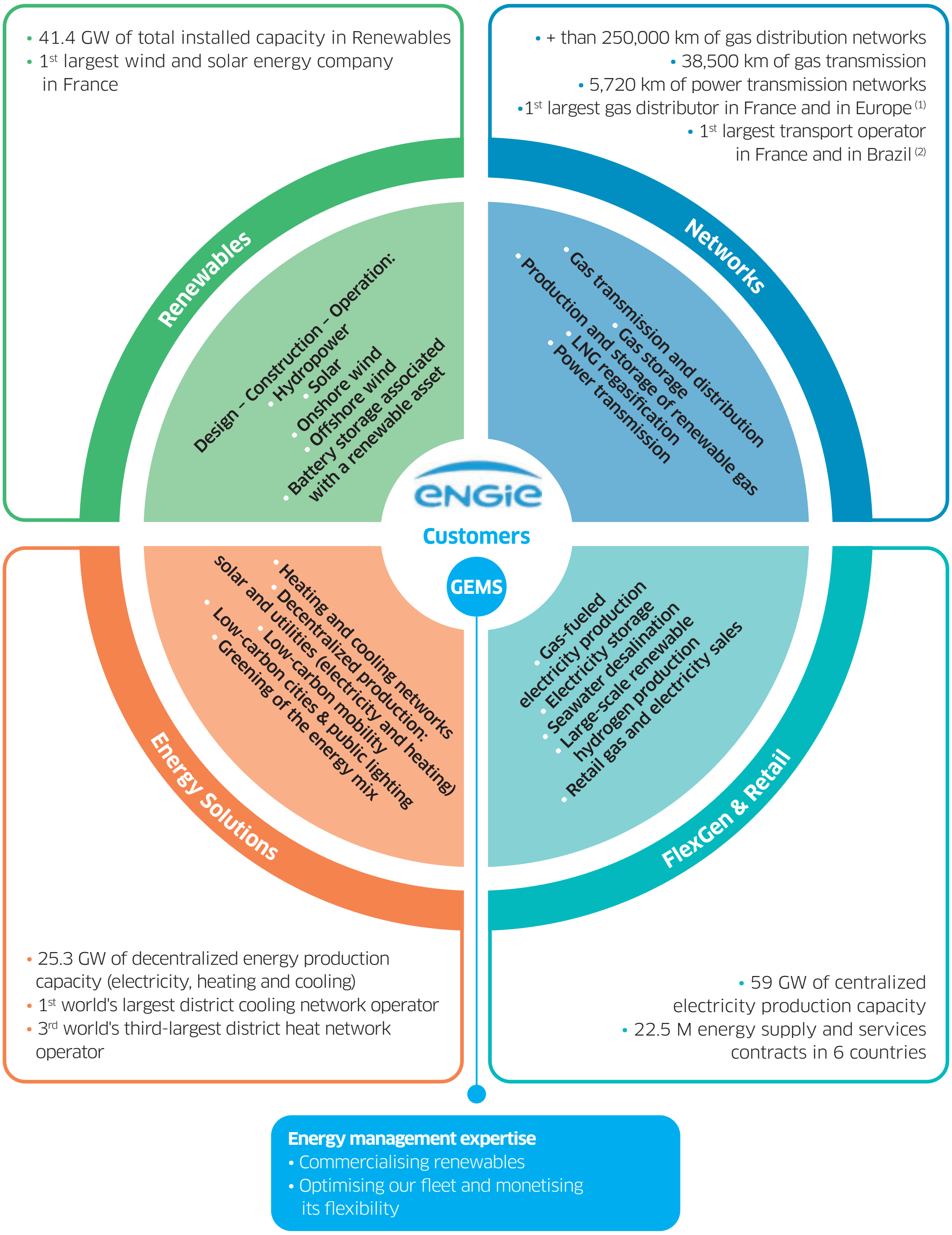
The calculation of eligibility and alignment in terms of 2024-2026 CAPEX supported by expected expenditure for GBU Renewables and GBU Energy Solutions activities which represent more than half of the Group's CAPEX expenditure.

The tables presenting the standard templates used for the information related to 2023 data on the Revenue, CAPEX and OPEX indicators according to the Commission Delegated Regulation (EU) No. 2021/2178 dated July 6, 2021, as well as those containing the standard models for the publication of information related to nuclear and gas activities according to Commission Delegated Regulation (EU) No. 2022/1214 dated March 9, 2022, can be found in Section 3.10 "Appendix – Taxonomy tables."

3.2 BUSINESS MODEL

The acceleration of the energy transition is shifting the sector's value toward more environmentally friendly activities and services that are closer to the end customer. It has also created a need to provide responses tailored to each region, incorporating a good understanding of local situations and resources. ENGIE is involved in raising awareness of, and co-constructing, the energy transition with its stakeholders.

The Group's activities, detailed in Section 1.6 "Description of the Group's activities," can be represented as follows:



(1) Through independent subsidiaries.
(2) Through an independent subsidiary.

The Group's four business segments (Renewables, Networks, Energy Solutions, FlexGen & Retail) and Other activities utilize capital or resources of different kinds and create value according to five areas, as shown below. This presentation covers the International Integrated Reporting Council (IIRC) principles.

Value creation for ENGIE

RESOURCES

Financial Capital
equity capital, borrowed capital, etc.
See Section 6.2 "Consolidated financial statements"

Industrial Capital
industrial capital, capital expenditure, expenditure on development and maintenance, etc.
See Section 6.2 "Consolidated financial statements"

Intellectual Capital
workforce and R&D and innovation expenditure, etc.
See Section 1.3 "Research and innovation"

Human Capital
workforce, staff and training costs, etc.
See Section 3.4 "Social information"

Societal Capital
internal and external committed stakeholders, etc.
See Section 3.6 "Societal information"

Natural Capital
volumes and expenditure for the purchase of raw materials, other supplies, expenses related to environmental preservation, etc.
See Sections 3.5 "Environmental information" and 3.7 "Purchasing, outsourcing and suppliers"

THE BUSINESS MODEL

Renewables

Networks

Energy Solutions

FlexGen & Retail

Other activities including GEMS and Nuclear

VALUE CREATION

A sustainable energy transition
renewable power generation capacities, proportion of renewable energy in the portfolio, rate of waste recycling, rate of reduction in CO_2 emissions and other pollutants, % of production sites with an environmental plan established in consultation with stakeholders, etc.
See Section 3.5 "Environmental information"

A profitable energy transition
organic growth in revenue and EBITDA, remuneration of shareholders, ROCE, etc.
See Sections 1.4.3 "2023 key financial figures" and 6.2 "Consolidated financial statements"

An energy transition for the future
investments in innovation and digital solutions, number of labs created, etc.
See Section 1.3 "Research and innovation"

An energy transition for everyone
recurrent amount of taxes paid, amount of local purchases, % of SMEs among suppliers, number of customers entitled to social tariffs, number of beneficiaries with access to energy
See Sections 3.6 "Societal information" and 3.7 "Purchasing, outsourcing and suppliers"

An energy transition that brings together
compensation policy, rate of employee shareholding, level of employee engagement, accident frequency rate, % of industrial sites that have established a system of dialog with stakeholders
See Sections 3.4 "Social information" and 3.6 "Societal information"

3.3 ANALYSIS OF MAIN CSR RISKS AND CHALLENGES

To identify the main CSR risks, ENGIE used the most recent version (2020) of its matrix of challenges, called the “materiality matrix” which was created to better reflect the expectations and priorities of its stakeholders (internal and external) and its management and to target its strategy and actions more effectively.

This results in 20 challenges, divided into four categories, namely: seven material, two major, seven decisive and four fundamental.

The fundamental challenges are long-lasting issues that form the essential founding basis for the responsible conduct of the Group’s industrial and commercial activities. Therefore, they were not ranked or compared with other challenges.

The other challenges were assessed following interviews with around thirty stakeholders and the analysis of around fifty questionnaires. They were cross-classified using a weighted rating system based on the number of respondents with the aim of balancing the weighting of each type of stakeholder.

They were then classified according to three categories of increasing materiality:

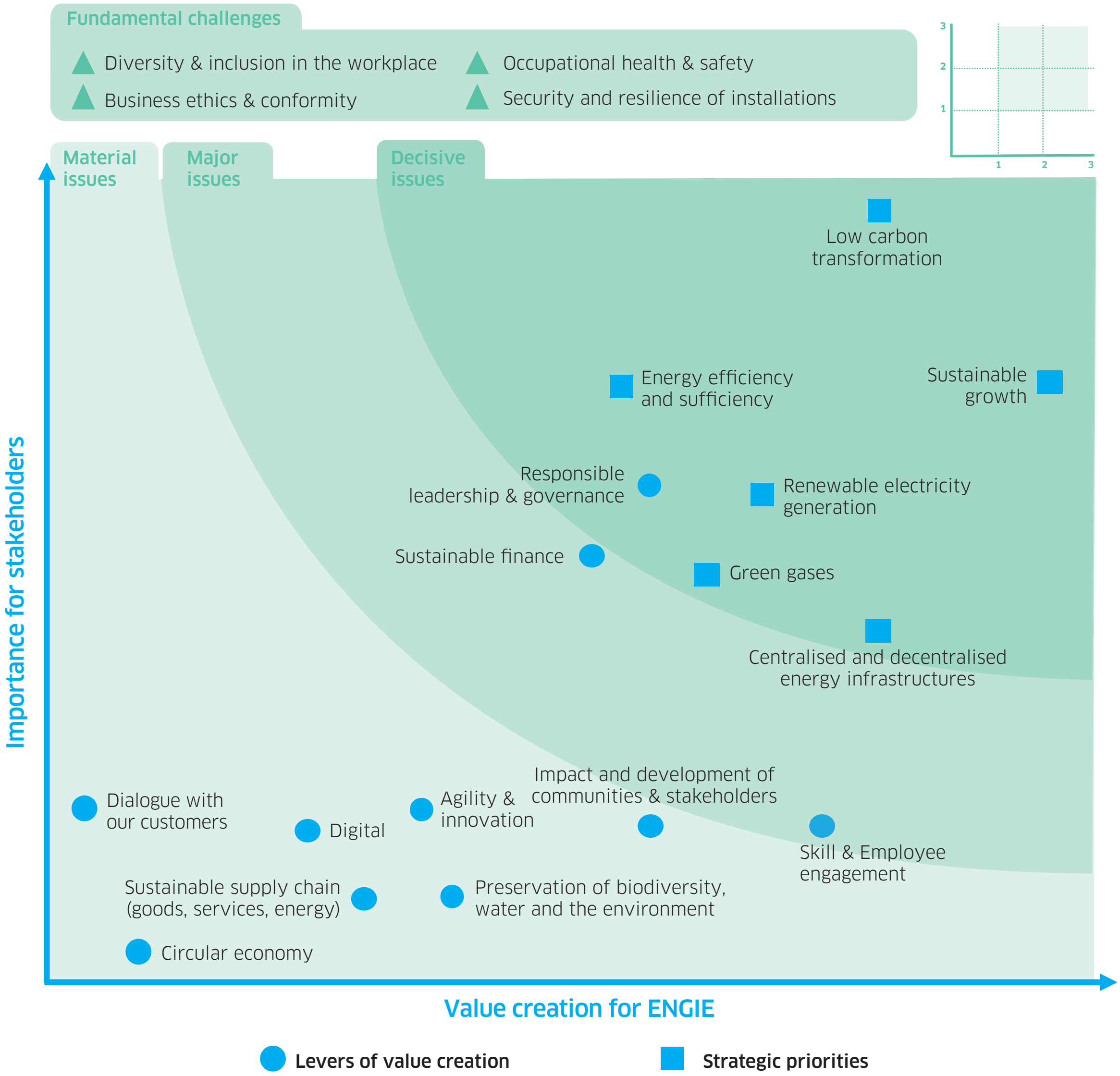
- the material challenges that create value for the Group;
- the major issues that make the most significant contribution to this value creation;
- the decisive issues that make an essential contribution to it, six of which constitute the Group’s strategic priorities.

The challenges are positioned on the matrix:

- according to their importance for internal and external stakeholders (vertical axis);
- according to the impact in terms of value creation for ENGIE (horizontal axis).

All issues are classed as medium or high materiality.

The method used to construct the matrix can be found on the Group’s website at the following address: https://www.engie.com/en/group/social-responsibility/engie-materiality-matrix



The definitions of the challenges are provided in the following tables:

Challenge	Definition
1. Responsible leadership & governance	Ensure exemplary and transparent leadership and governance, adapted to the strategic challenges; ensure transparency and integrity of information through reliable communication, effective management of potential controversies and ENGIE's brand image; ensure the clarity of the Group's objectives; ensure that the Group's actions are consistent with its purpose.
2. Digital	Put the Group's digital expertise at the service of the energy transition by offering customers innovative and differentiating solutions and services; leverage these technologies to improve the Group's operational efficiency and to strengthen cohesion between employees through new collaborative tools.
3. Sustainable growth	Ensure the resilience of the Group's business model as well as the growth of net financial income / (loss) over the long term; guarantee value sharing with all stakeholders (incentive-based compensation for senior management and all employees; ensure shareholder attractiveness and loyalty); limit the risk of stranded assets; ensure stability in terms of financial and CSR ratings.
4. Safety and resilience of installations	Ensure the operating safety of facilities and business continuity by guaranteeing: the safety and surveillance of the Group's sensitive sites (nuclear and industrial), the resilience and adaptation of facilities to climatic risks, the cybersecurity of industrial control systems, the confidentiality and protection of the personal data of employees and customers; ensure the dismantling of nuclear sites under the required security conditions.
5. Employees' skills and commitment	Encourage employees to take ownership of ENGIE's purpose, strategy and values by making them actors in their deployment; strengthen the relationship of trust between management and employees; explore and develop new ways of working adapted to employees' needs; ensure quality social dialog within the Group; to capitalize on employees' skills and support them in their professional development; attract and develop talent; strengthen intrapreneurship in the Group's practices.
6. Occupational health & safety	Guarantee health & safety as well as optimal working conditions for employees, subcontractors and temporary workers in all geographic areas where the Group operates.
7. Diversity & inclusion in the workplace	Promote equal opportunities and make equal treatment a reality; ensure non-discrimination with respect to both employees and candidates; promote diversity of profiles and experience at all levels of the company.
8. Circular economy	Encourage circularity throughout the value chain by guaranteeing the recycling, reuse and recovery of resources in operations; control the consumption of resources (responsible consumption); ensure efficient use of raw materials.
9. Preservation of biodiversity, water & the environment	Prevent and control the impact of the Group's operations on biodiversity, water and the environment (noise pollution, soil pollution, water and air pollution); be a player and driving force in environmental protection and contribute to the restoration of natural habitats through targeted and concrete commitments.
10. Low-carbon transformation	Acting positively for the environment and the climate by ensuring a clear and ambitious shift toward low-carbon activities, by withdrawing from carbon activities, by developing offers aimed at reducing the carbon footprint of the Group's customers, by controlling the carbon footprint of the supply chains and working practices.
11. Renewable electricity production	Strengthen investment in a competitive and sustainable portfolio of renewable energy power generation activities and ensure their local acceptability; anticipate new renewable energy sources and be a player in their deployment.
12. Green gases	Sustainably develop the entire green gas value chain (biomethane, hydrogen); raise awareness among customers and stakeholders of the role of green gases as levers for resilience and performance in the energy transition.
13. Centralized and decentralized energy networks	Pursue the development of gas and electricity energy networks as well as decentralized networks (heating and cooling networks, networks of charging stations for electric vehicles, urban public lighting networks, etc.); take advantage of new technologies for the intelligent and connected management of networks and network infrastructure.

Challenge	Definition
14. Agility & innovation	Change the corporate culture toward greater agility and openness to innovation; strengthen the ability to evolve (adaptation of business models and Group organization, transformation of working methods, development of intrapreneurship, etc.) in the face of changes in the Group's environment (expectations, uses, etc.).
15. Dialog with our customers	Engage in a strategic dialog with current and historical customers in order to best support them in their low-carbon transformation; make all customers aware of the Group's values and commitments; develop a quality partnership relationship and adapt to the specificities of ENGIE's geographical locations; commit to long-term performance (energy, carbon, etc.) with customers.
16. Business ethics & conformity	Ensure responsible business conduct through robust and transparent ethical practices in operational activities (e.g. anti-corruption, taxation).
17. Impact & development of communities and stakeholders	Work for the respect of human rights throughout the value chain; maintain a continuous and quality dialog with stakeholders; develop new partnership dynamics; contribute positively to territorial development, while respecting local communities and taking into account changing needs; contribute to a fair and efficient energy transition; encourage a more inclusive and equitable economy.
18. Sustainable finance	Work toward sustainable finance through: promoting responsible financial instruments (Green Bonds, etc.), integrate ESG issues into the investment process in order to encourage the development of sustainable activities; demonstrate the alignment of ENGIE's actions with the growing expectations of investors and CSR rating agencies; anticipate and adapt to regulatory changes in this area.
19. Sustainable supply chain (goods, services, energy)	Promote ENGIE's CSR practices throughout its supply chains; foster quality dialog with its suppliers; forge strategic partnerships for sustainable development; control the social and environmental risks related to the activity and geographic location of suppliers of goods, services and energy; favor a diversified panel of suppliers in order to guarantee business continuity.
20. Energy efficiency & sufficiency	Support an individual and collective approach to technical changes, uses, practices and organizational methods aimed at reducing energy consumption; at all levels of the Group: daily work practices, operations, supply chain and at customers' sites through offers as well as at network level.

These 20 challenges generate CSR risks and opportunities. These CSR risks are classified by nature into the following categories:

- environmental;
- societal;
- social; and
- governance.

The main United Nations Sustainable Development Goals (SDGs) that could be impacted by these risks are also indicated.

The risk analysis included in Chapter 2 "Risk factors and internal control" is different from the analysis of these CSR risks. In Chapter 2, risks relate to "net specific material risks." They are assessed with an overview of their progression. They are specific to ENGIE's activities and could have a financial impact in the short or medium term in the context of investment decisions concerning ENGIE. They are classified as "net" considering their potential residual impact once the measures taken by the Group to reduce them have been taken into account.

The risks included in this Section are CSR-related, not necessarily specific to ENGIE's activities, and may have a medium- or long-term impact. These are gross risks not mitigated by ENGIE's management measures.

These different approaches explain the differences between the list of risks presented in Chapter 2 and those presented in this Section.

Environmental risks

Challenge 2: Digital
Challenge 4: Safety and resilience of installations
Challenge 8: Circular economy
Challenge 9: Preservation of biodiversity, water and the environment
Challenge 10: Low-carbon transformation
Challenge 11: Renewable electricity production
Challenge 12: Green gases
Challenge 13: Centralized and decentralized energy networks
Challenge 20: Energy efficiency & sufficiency

	Associated CSR risks	Associated opportunities	Associated SDGs
A	*Process safety:* the risk of harm to the integrity of persons or property due to the Group's industrial activities.	Sales of services: digitization, robotization, security and monitoring of sensitive sites, help with adapting customer facilities to climate change, and help with the decarbonization of customer portfolios	
B	*Nuclear safety*: the risk of the release of radioactive material from the Group's nuclear plants following an accident.		
C	*Cyber attack on industrial systems:* the risk of an attack affecting the command systems or IT systems for the Group's industrial or services facilities.		
D	*Malicious damage to tangible and intangible assets:* risks related to malicious acts affecting the Group's industrial or tertiary sites and facilities, which make up its tangible assets, as well as those affecting information, which is part of the Group's intangible assets, whether conveyed on computerized or physical media or even verbally.		
E	*Contribution to climate change*	Sales of services: reducing the carbon footprint of industrial sites, environment management plans Program to restore flora and fauna Mobilization of stakeholders: customers, employees, regions and NGOs	
F	*Transition relating to climate change*		
G	*Loss of biodiversity*		
H	*Water stress*		
I	*Waste management*		
J	*Atmospheric pollution*		
K	*Pollution of the surrounding environment*		

Societal risks

Challenge 3: Sustainable growth
Challenge 15: Dialog with our customers
Challenge 17: Impact and development of communities and stakeholders
Challenge 18: Sustainable finance
Challenge 19: Sustainable supply chain

	Associated CSR risks	Associated opportunities	Associated SDGs
L	*Societal acceptance:* risk of opposition from the local population or associations during the presentation, installation or operation of certain equipments that may call into question the holding of various permits and authorizations, the obtaining or renewal of which with the competent regulatory authorities involves long and costly procedures.	Co-construction of offers with stakeholders Continuation of industrial activities Development of the access to energy offer in unserved regions Tackling fuel poverty with adapted offers Group's societal role beneficial to its internal and external reputation	
M	*Management of major projects:* risks in the execution of major industrial projects including inadequate consideration of dialog with stakeholders, non-compliance with costs and construction deadlines, non-achievement of operating performance, disruption in the supply of raw materials, sensitive components and the shortage of energy needed for the projects which can be explained by geopolitical tensions.		
N	*Reputation:* risks impacting the Group's brand image due to its inability to establish and maintain the trust of stakeholders and to obtain the benefits associated with this, notably due to insufficiently controlled lobbying, its inability to maintain the values and social standards of the company, including with its suppliers or subcontractors, its inability to build and protect its brand image within its environment.		

SOCIAL RISKS

Challenge 1: Responsible leadership and governance
Challenge 5: Employees' skills and commitment
Challenge 14: Agility and innovation

	Associated CSR risks	Associated opportunities	Associated SDGs
O	*Skills:* risk of a shortage of qualified people, unavailability of resources that are flexible according to needs, the loss of key knowledge in the event of departure due to lack of succession plans or due to more attractive conditions in the same geographic area.	Adapting to changes in occupational sectors Appeal of the Group to young people aware of carbon neutrality Digitization improving work efficiency	8 Decent work and economic growth 9 Industry, innovation and infrastructure
P	*Employee commitment:* risk of a lack of engagement among employees in the context of the Group's transformation could result in social movements.		

Challenge 7: Diversity & inclusion in the workplace

	Associated CSR risks	Associated opportunities	Associated SDGs
Q	*Diversity:* risk of non-representativity of the Group's working population with respect to the society in which it operates.	Group's societal role beneficial to its internal and external reputation Inclusivity of the company Reflection of society Attractiveness of the Group	5 Gender equality 10 Reduced inequalities 8 Decent work and economic growth
R	*Iniquity:* risk of discriminatory treatment of employees or job applicants.		

Challenge 6: Health & safety at work

	Associated CSR risks	Associated opportunities	Associated SDGs
S	*Health & safety at work* for employees, subcontractors and temporary workers.	Improvement of operational performance Occupational well-being Employee motivation	3 Good health and well-being 8 Decent work and economic growth
T	*Safe travel*		

GOVERNANCE RISKS

Challenge 1: Responsible leadership and governance
Challenge 16: Business ethics & conformity

	Associated risks	Associated opportunities	Associated SDGs
U	Corruption: risk of criminal wrongdoing by which a person solicits or accepts a benefit with a view to carrying out an act within the scope of his or her duties and which could lead to an infringement of competition law.	Group setting an example as a good citizen Employee motivation	8 Decent work and economic growth 16 Peace, justice and strong institutions
V	*Tax:* risk of non-compliance with tax regulations, reporting obligations and their development.		
W	*Personal data breaches:* risk of erroneous IT processing of personal data that may impact the rights and freedoms of persons concerned.		

Challenge 17: Impact and development of communities and stakeholders

	Associated risks	Associated opportunities	Associated SDGs
X	*Human rights violations*	Group's societal role beneficial to its internal and external reputation	3 Good health and well-being 8 Decent work and economic growth

In accordance with the regulations, these risks are analyzed, on the following pages, by means of:

- a summary of the policies or action plans implemented to limit them;
- indicators established to monitor them, sometimes with targets set;
- and the results of these indicators over three years.

Furthermore, pursuant to the French Act No.2017-399 of March 27, 2017, ENGIE has drawn up a vigilance plan to monitor risks associated with human rights in the broadest sense, including aspects related to health & safety, responsible procurement and the environment. This vigilance plan covers all of ENGIE's activities and its controlled subsidiaries worldwide, as well as those of its main suppliers. The vigilance plan is described in Section 3.9 "Vigilance plan."

3.3.1 MAIN ENVIRONMENTAL RISKS

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 Results	2022 results	2021 results
Risk A: Process safety (see Section 2.2.5.3)				
ENGIE's health & safety policy incorporating process safety Process safety policies specific to the different activities conducted by the Group subsidiaries Action plans implemented by the subsidiaries that integrate feedback as part of a continuous improvement approach	Monitoring of incidents and accidents related to process safety at subsidiary level Assessment of the level of risk control achieved through dedicated internal control standards (IND 2 & 3)	No significant incident at industrial facilities	No significant incident at industrial facilities	No significant incident at industrial facilities
Risk B: Nuclear safety (see Section 2.2.7)				
Nuclear Safety and Radiation Protection Policy Independent supervision of nuclear safety Minimum requirements for systems of management of nuclear actors	Monitoring of significant incidents (above 3 on the INES scale)	No significant incident	No significant incident	No significant incident
Risk C: Cyber attack on industrial control systems (see Section 2.2.5.2)				
Group policy on Security of Industrial Control Systems Technical security standard assessment Qualitative assessment of the maturity level of the cybersecurity culture on the entities Regular cybersecurity audits of sensitive industrial sites Monthly monitoring of KPIs in the Executive Committee	Monitoring of the security rate of priority sites to be secured (sensitive and standard sites) Assessment of the level of risk control achieved through dedicated internal control standards (IND 4)	Maintaining the security of existing sites and securing new sites in accordance with objectives	Maintaining the security of existing sites and securing new sites in accordance with objectives	Maintaining the security of existing sites and securing new sites in accordance with objectives
Risk D: Malicious damage to assets (see Section 2.2.5)				
Group policy to protect individuals and tangible and intangible assets Prevention and protection measures implemented on the basis of the criticality of the geographic location Group Cybersecurity Policy	Monitoring of threats to the Group, particularly from terrorists Monitoring of damage to assets	No significant damage to assets 146 low-impact cyber incidents	No significant damage to assets	No significant damage to assets
Risk E: Contribution to climate change (see Section 2.2.2.1)				
The Group's environmental policy, which specifies: • the environmental challenges faced by the Group, including climate change; • the resources used by the Group to meet these challenges and improve its performance; • the governance elements that contribute to the implementation of the Group's environmental policy.	**2030 targets:**			
	• 43 Mt of GHG emissions (scopes 1 and 3) from energy production, in line with the SBTi commitments	52	60	65
	• 52 Mt of GHG emissions from use of sold product, in line with the SBTi commitments	53	61	66
	• 0 Mt of GHG emissions from working practices (after offsetting)	0.3	0.3	0.3
	• 58% of renewable electricity capacity	41%	38%	34%

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 Results	2022 results	2021 results
Risk F: Transition relating to climate change (see Section 2.2.2)				
The Group's environmental policy	**2030 target:** • 100% of activities, projects and sites (including those that are being decommissioned) with an environmental plan established in consultation with stakeholders	66%	53%	37%
Risk G: Loss of biodiversity				
The Group's biodiversity policy which aims to: • avoid the direct or indirect impacts of its activities and those of its value chain on biodiversity; • failing this to reduce them; • or even to offset them as a last resort.	**2030 target:** • 100% of industrial activities with ecological site management (zero phytosanitary products and respect of natural habitats)	58%	34%	28%
Risk H: Water stress				
The Group's water policy, which focuses in particular on the management of water used in energy generation and wastewater treatment processes	**2030 target:** • Water consumption rate of 0.1 m^3 per MWh of energy produced	0.275	0.301	0.342
Risk I: Waste management				
The Group's circular economy policy, which aims to ensure that each site or activity works on the recovery and / or recycling of its waste	**2030 operational objectives**: • 80% reduction in the quantity of non-hazardous waste disposed of vs 2017 (2,773,419t) • 95% reduction in the quantity of hazardous waste disposed of vs 2017 (386,783t)	-73% 753,711t -93% 26,797t	-47% 1,459,706t -94% 23,506t	+4% 2,875,114t -91% 33,601t
	% of non-hazardous waste recovered	83%	80%	84%
	% of hazardous waste recovered	24%	21%	15%
Risks J and K: Air pollution and pollution of the surrounding environment				
The Group's environmental policy which encourages the reduction of emissions into the air, water and soil	**2030 operational objectives**: • 75% reduction in NOx emissions vs 2017 (92,209t) • 98% reduction in SO_2 emissions vs 2017 (159,623t) • 60% reduction in total particle emissions vs 2017 (7,353t)	-71% 27,037t -98% 3,396 -61% 2,832	-63% 34,197t -95% 7,418t -54% 3,398t	-46% 49,819t -34% 106,028t -21% 5,820t
	NO_x (t)	27,037	34,197	49,819
	SO_2 (t)	3396	7,418	106,028
	Total particles (t)	2,832	3,398	5,820
	Mercury (kg)	104	139	347

3.3.2 MAIN SOCIETAL RISKS

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
Risk L: Societal acceptance				
The Group's societal policy, which specifies: • the Group's societal challenges; • the resources it uses to meet these challenges; • the governance elements that contribute to implementation of the policy.	**2030 target:** • 100% of its activities, projects and sites (including those that are being decommissioned) with a societal plan established in consultation with stakeholders	49%	46%	36%
	Number of participants in the "Stakeholder engagement" e-learning module	842	104	N/A
Risk M: Management of major projects (see Section 2.2.5)				
Investment procedure for projects passing through the Group Investment Committee and GBU which provides for a risk analysis and a self-assessment matrix of 10 key CSR criteria for the Group's activities.	Risks analysis via a matrix of 10 CSR criteria (climate change mitigation, climate change adaptation, water, biodiversity, circular economy, air pollution, social rights of workers, stakeholder engagement, responsible procurement, controversies)	No indicator	No indicator	No indicator
Risk N: Reputation				
Protection of the brand	NPS satisfaction rate of BtoC customers (*Net promoter Score between -100 and +100 inclusive*) based on the difference between promoters (respondents giving a score of 9 or 10) and detractors (respondents giving a score of 0 to 6)			
	France (8,645,911 contracts excluding regulated tariff contracts at end-December 2023)	+32	+32	+19
	Belgium (3,831,068 contracts at end-December 2023)	0	+1	+2
	Netherlands (686,626 contracts at end-December 2023)	+31	+37	NC
	Italy (901,131 contracts at end-December 2023)	+34	+37	+29
	Romania (2,154,402 contracts at end-December 2023)	+47	+38	+49
	Australia (690,540 contracts at end-December 2023)	-6	-2	+5
	2030 target: • 45 Mt CO_2 avoided by our customers through ENGIE's offerings and services	25	28	27
Environmental policy	Number of environmental complaints and convictions	0 complaint and 0 conviction	20 complaints and one conviction	13 complaints and two convictions

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
Ethical Code of Conduct (which has replaced the Ethics Charter and the Practical Guide to Ethics since 2023) Code of conduct for relations with suppliers	Ethical malfunctions monitored using the My Ethics Incident reporting tool (part of the management feedback system)	222 incidents, proven or non-proven	305 incidents, proven or non-proven	205 incidents, proven or non-proven
Group procurement Charter that sets out the obligations and commitments applicable to ENGIE in terms of its relations with suppliers	**2030 targets:** • 100% of the top 250preferred suppliers (excluding energy procurement) SBT certified or aligned	24%	23%	20%
	• Ratio of 100 on responsible procurement (excluding energy): CSR assessment and inclusive procurement	54	38	40
Promotion of access to energy for populations living far away from networks, including in Africa	**2030 operational target:** • 30 million recipients with access to affordable, reliable, and clean energy from 2018 (excluding the Rassembleurs d'Énergies fund) *NB: due to the Group's geographical refocusing and work related to dual materiality, this target will be amended in 2025 to reflect the Group's ambition in terms of social, environmental and anti-poverty impact*	12 M	9.5 M	7 M
Vigilance Plan (see Section 3.9)				

3.3.3 MAIN SOCIAL RISKS

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
Risk O: Skills (see Section 2.2.6.1)				
The Group's mobility and development policy, which is based around: • ENGIE Skills, which is aimed at developing skills early to prepare for the future; • ENGIE Mobility, which fosters internal mobility; • and is supported by ENGIE University.	**2030 target:** • 100% of employees trained during the year	86%	84%	82%
	Monitoring of number of hires (permanent and fixed-term)	16,195	16,974	15,522
	Monitoring of voluntary turnover rate (resignation)	5.4%	6.5%	5.2%
The Group's innovation policy, which is based on: • the ENGIE Fab entity to implement new businesses; • the ENGIE New Ventures investment fund to support start-ups. The Group's research & innovation policy that relies on the ENGIE Research entity, which brings together several Labs and centers of expertise and engineering	R&D expenditure	€142 M	€135 M	€138 M

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
Risk P: Commitment (see Section 2.2.6.1)				
The Leadership Way, which defines four key behaviors: caring – demanding – open – bold. These behaviors enable us to meet five objectives: Prepare the future – Cultivate and give responsibility – Act and challenge the status quo – Deliver results – Adopt inspiring behavior on a daily basis.	Employee engagement rate through the worldwide annual "ENGIE&Me" survey	87%	86%	83%
Privileged places for consultation between management and employee representatives: The European Works Council and the French Group Works Council	These bodies monitor and sign Group collective bargaining agreements	October 4, 2023, second meeting of the World Forum responsible for ensuring the implementation of the Global Agreement	September 8, 2022, first meeting of the World Forum responsible for ensuring the implementation of the Global Agreement	Global agreement on fundamental rights and social responsibility signed in January 2022
Risk Q: Diversity (see Section 2.2.6.1)				
Group diversity policy Diversity label	Percentage of female employees	26.5%	26.2%	25.1%
	2030 target: • 40% to 60% female managers	31.2%	29.9%	28.9%
Employment of young people	**2030 target:** • 10% of apprentices in the Group's workforce on permanent and fixed-term contracts in France excluding regulated entities GRDF and GRTgaz	8.5%	8.5%	7.2%
Risk R: Iniquity (see Section 2.2.6.1)				
Professional equality policy	**2030 target:**			
	• Pay equity: < 2% gender pay gap worldwide	1.92%	1.73%	-
Risk S: Health & safety at work (see Section 2.2.6.2)				
Group health & safety policy that sets out the fundamental principles that have to be met for all the ENGIE entities, in order to respect the integrity of people and assets. It constitutes, for every person, a reference point to ensure that health & safety are incorporated within all the actions of the Group. 2021-2025 health & safety action plan, divided into three prevention axes: No Life At Risk, No Mind At Risk, No Asset At Risk.	Total lost-time injury frequency rate for employees and subcontractors operating on site with controlled access (site equipped with an access control system, e.g. badge type) **2030 target:** This indicator will be extended from 2024 to all people working for the Group, with a strengthening of the target for 2030 from 2.3 to 1.8.	1.8 on a 2023 objective of 2.0 or less	2.0 on a 2022 objective of 2.4 or less	2.5 on a 2021 objective of 2.8 or less

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
The Group's health & safety transformation plan "ENGIE One Safety." European agreement on the improvement of well-being at work	**Target:** Fatality rate of people working for the Group of zero each year Monitoring of health & safety results by the Executive Committee, the EESDC and the Board of Directors	0.019	0.014	0.045
Annual communication campaign	Deployed throughout the Health & Safety functional line	Communication campaign on the Five Safety Essentials	Communication campaign on electrical risks	Communication focused on preventing Covid-19
Risk T: Safe travel				
Safety rules for international trips Employee access to the ISOS international health & safety portal and to alerts during international trips Employee access to the site analyses and reports of the Group Control Risks on country risks Employee access to e-learning on personal security when traveling abroad (International SOS + Control Risks Group)	Reinforcement of event-detection mechanisms Reinforcement of pre-mission e-learning courses (according to the destination's risk level) TravelTracker system to monitor individuals traveling abroad Alert system for personnel who are internationally mobile	No significant event	No significant event	No significant event

3.3.4 MAIN GOVERNANCE RISKS

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
Risk U: Corruption				
Anti-corruption policy based on: • the Ethical Code of Conduct (which has replaced the Ethics Charter and the Practical Guide to Ethics since 2023); • the integrity reference system; • the Ethics Compliance reference system; • specific third party assessments policies, business consultants, gifts, invitations, conflicts of interest, lobbying in particular and supplier relations; • ethics and CSR clause in the general terms of sales.	System for whistleblowing and reporting ethics incidents Control process Annual compliance procedure by means of a specific reporting system INCOME COR 4 internal control program Internal and external audits including the ISO 37001 certification audit. ISO 37001 certification was received in 2018, confirmed in 2019 and 2020; ISO 37001 certification renewed in 2021 and confirmed in 2022 and 2023. Annual publication of the communication on the progress of UN Global Compact Principle 10	222 proven or unproven incidents reported in My Ethics Incident, including 8 cases of alleged corruption	305 proven or unproven incidents reported in My Ethics Incident, including 20 cases of alleged corruption	205 proven or unproven incidents reported in My Ethics Incident, including 19 cases of alleged corruption

Policies or action plans established to cover or remedy risks	Steering resources or KPIs, objectives	2023 results	2022 results	2021 results
	Alert system: ethics@engie.com	274 incidents including 32 concerning business ethics cases	225 incidents including 60 concerning business ethics cases	146 incidents including 39 concerning business ethics cases
	The Group is committed to training its senior managers (GMRs) in anti-corruption in 2025	100%	100%	96% of GMRs (including Equans)
	2030 target: >95% of employees most exposed to corruption risk trained	68%	55%	49%
Risk V: Tax				
Tax policy that sets out the rules and principles for the payment of taxes in the countries in which the Group operates	• Tax reporting by country • Adherence to the principles of the United Nations BTeam initiative	See the ENGIE website: https://www.engie.com/en/finance/taxation	See the ENGIE website: https://www.engie.com/en/finance/taxation	See the ENGIE website: https://www.engie.com/en/finance/taxation
Risk W: Breaches of personal data				
Group personal data protection policy	• Assessments of compliance with European GPDR Regulation onsite or for the apps concerned • ISO 27001 certification procedures for certain entities • External audit by a cyber rating agency	NA	NA	NA
Risk X: Human rights violations				
• Human Rights referential and policy • Vigilance Plan • Ethics due diligence policy (suppliers, subcontractors, and commercial partners)	• Checklist on the risk of violating human rights (annual risk review, see Section 3.8.2) • Annual ethics compliance report (quantitative and qualitative indicators, see Section 3.8.6) • System for whistleblowing and reporting ethics incidents (see Section 3.8.4) • Monitoring of the Group Vigilance Plan (see Section 3.9.3)	222 proven or non-proven incidents declared in My Ethics Incident, including two allegations relating to human rights and environmental law (excluding allegations relating to sexual harassment and moral harassment)	305 proven or non-proven incidents declared in My Ethics Incident, including six allegations relating to human rights and environmental law (excluding allegations relating to sexual harassment and moral harassment)	205 proven or non-proven incidents in My Ethics Incident, including 18 allegations relating to human rights and environmental law (excluding allegations relating to sexual harassment and moral harassment)

3.4 SOCIAL INFORMATION

In a complex geopolitical landscape in 2023, and amidst an environmental and energy crisis, ENGIE overcame numerous challenges, thanks notably to its integrated industrial organization.

At the heart of this dynamic and these transformations, its employees' levels of engagement increased in 2023, reaching a rate of 87% according to the ENGIE&Me internal survey (compared to 86% in 2022), with 78% participation.

Employees, as the main driver behind the Group's performance, receive support from ENGIE in terms of professional development and career paths. ENGIE University, through the rollout of its initiatives and profession academies, contributes to supporting this commitment by offering opportunities for training and professional growth.

ENGIE has set itself an ambitious Group goal: to train 100% of its employees each year by 2030. This initiative is part of a vision of continuous development and ongoing acquisition of skills by employees.

The variety of professions and skills, and the diversity of the men and women within the Group remain fundamental pillars of ENGIE's collective performance. This diversity strengthens its leadership position in the Net Zero Carbon transition and opens up a diverse range of career opportunities within the Group.

In order to strengthen its attraction policies and adapt development initiatives to requirements, ENGIE adopted a skills-based approach in 2023, a process for provisional management of jobs and skills (Strategic Workforce Planning). This approach contributes to the growth of ENGIE.

Faced with a highly competitive job market, changing professions and evolving candidate expectations, the ENGIE Group, as a leader in the energy transition with 16,195 new hires in 2023, is recognized as an attractive employer. Particular emphasis has been placed on the professions of the energy transition, thus consolidating ENGIE's commitment to diversifying its workforce, especially illustrated by the level of female representation within teams and management.

At the same time, a change has been seen in the leadership and corporate culture through the rollout of ENGIE Ways of Leading (EWOL) and the Diversity and Inclusion Policy known as "Be.U@ENGIE." These define the behaviors expected of leaders, embodying core values such as Safety & Integrity, ONE ENGIE, Accountability, Trust and Care. In this regard, ENGIE is committed to shaping a professional environment where innovation, integrity, responsibility, trust and care toward individuals are at the heart of its practices and culture.

ENGIE has implemented initiatives aimed at increasing diversity within the company, reflecting the wealth of talent essential to the energy transition. The focus has been on creating a positive, open and caring work environment, in line with the Be.U@ENGIE policy. The objective is clear: to spread the ONE ENGIE culture, to strengthen employee commitment and empower each individual to be valued, enabling them to realize their potential in a fulfilling way.

It is through quantified targets that ENGIE confirms its societal and social commitments:

- an equal pay objective, with a maximum gender pay gap of 2% to be achieved in all entities worldwide by 2030 at the latest;
- an ambition for gender equality and an objective of 40% to 60% of women in management positions by 2030;
- a professional integration objective with a target of 10% of students on work-study programs in 2030 in France excluding regulated entities GRDF and GRTgaz;
- an objective of 100% of employees trained each year by 2030.

Moreover, in a complex global context, the management of stakeholders is of crucial importance, and social dialog is a key driver of competitive advantage for businesses. At ENGIE, social dialog is integrated into the mechanisms rolled out by the Group to ensure the effective implementation of its strategy. In line with the international social dialog, the signing of a global agreement in 2022 and the rollout in 2023 of the ENGIE Care program confirm ENGIE's commitment to a common foundation of social rights guaranteed for all 97,297 ENGIE employees worldwide. This reflects the importance the Group attaches to its social responsibility in line with its purpose (Section 1.1.1) and commitment to the energy transition.

In addition, health & safety at work remain at the heart of the concerns of ENGIE. The Group thus maintains strict standards and is continuing its prevention efforts, with concern for the well-being of its employees and its contractors.

Finally, the ENGIE group is fully aware of the importance of the link between the nation and the army, and of the need to support the actions of its French employees in the country's reserves. It remains open to all requests for its employees to participate in reserve periods. These time-limited and predictable commitments have no impact on the Group's financial performance. They therefore do not require their own analysis in the Group's Extra-Financial Performance Statement.

3.4.1 SOCIAL TRANSFORMATION OF THE GROUP TO SUPPORT THE ENERGY TRANSITION

3.4.1.1 The ONE ENGIE culture

ENGIE's culture is based on its strategic priorities for energy transition and on the commitment of its 97,297 employees in contributing to it. This purpose is supported by their ability to act collectively and individually, regardless of activity or geographic location. ONE ENGIE is a reflection of collective work practices, and is integrated and applied at each level of the organization. These practices are also the conditions for an inclusive culture which allows everyone to be themselves.

Finally, as an Industrial Group, the ONE ENGIE culture is also based on excellence, high standards and exemplary behavior on the part of all employees and their contractors. This is particularly evident in the respect of ethical rules, health & safety at work, and cybersecurity.

All the elements that make up this ONE ENGIE culture are communicated to each employee from the moment they join the company, through a mandatory training session and accountability of the entire management chain.

3.4.1.1.1 The commitment of employees involved in the energy transition

The latest annual ENGIE&Me internal survey reveals that 90% of employees express their pride in belonging to ENGIE, up 4 points from 2022. This survey, with a participation rate of 78%, reveals the reasons for this pride of belonging: 89% of employees believe in ENGIE's objectives, 87% believe in its ability to accelerate the decarbonization of the economy (+7 points compared to 2022), in a socially responsible manner (87%, +4 points compared to 2022).

As ENGIE's employees are the first witnesses to ENGIE's transformation, they are above all the main actors. 91% of employees state that they contribute to the strategic objectives of their entity, through their daily work.

These figures illustrate the strength and impact of this community of 97,297 actors in the energy transition who contribute to a new model of society bringing together economic performance, human progress and respect for the environment. This community is open to society and territorial players. The development of this learning community is a source of individual fulfillment.

3.4.1.1.1.1 Sustainability Academy

The Sustainability Academy enables ENGIE employees to act as internal ambassadors to the Group's strategy and its operational implementation. All of the Sustainability Academy's initiatives are created internally thanks to the expertise and efforts of employees.

It allows every individual to take ownership of the Group's strategy and its operational implementation, while giving them the means to take action at their level regardless of their position.

In 2023, all of the Group's employees were trained in ENGIE's Net Zero Carbon strategy. This gives them an insight into the levers of success and an understanding of the complementarity of the professions and expertise within the Group's integrated model.

This online training module has been adapted into a "board game" used by the Group's functional and operating entities, particularly when integrating new employees.

Employees have the opportunity to deepen this basic knowledge through several days of training on ENGIE's business model, low-carbon technologies and energy markets.

The Sustainability Academy also allows employees to engage in the sustainable transformation challenges of models of society. Through a fictional ecology exercise created with experts in the Group, employees confront the societal challenges of the regions and their impacts on ecosystems. This exercise has been conducted in Latin America, France and the AMEA region, involving more than 400 employees, students from French and international partner universities, and apprentices.

Training modules on topics such as stakeholder engagement, energy saving and biodiversity invite employees to understand and rethink traditional patterns of production and consumption.

Lastly, each year the Sustainability Academy brings together employees for 48 hours of sustainability events accessible locally and digitally. In 2023, more than 1,500 employees had the opportunity to speak with operational leaders on climate issues and the preservation of biodiversity at industrial sites. They were also able to discuss with their peers on how they integrate sustainability issues into their business area or to participate in learning expeditions on the sites and those of our partners.

3.4.1.1.1.2 The carbon footprint of employees

Being an actor in the energy transition also means taking one's own share of individual responsibility in the Group's decarbonization trajectory. Each year, ENGIE measures the carbon footprint of its employees in their travel and working methods and aims to be Net Zero Carbon by 2030.

CO_2 emissions are from the use of office buildings, business travel, commuting, digital tools, and the use of the service and function fleet. Annual reporting allows each Group entity and / or country to measure its carbon footprint on databases provided by the Group's Real Estate, IT and Procurement Departments, such as the AMEX database for business travel. Commuting habits are calculated on a declaratory basis by the employees surveyed.

The carbon footprint related to working methods was 268 kt of CO_2 in 2023, i.e. less than 1% of the Group's direct emissions. However, reducing this figure requires daily action by every employee.

To support them, ENGIE has reviewed its policies and has set itself ambitious targets:

- in the greening of its car fleet with 100% of renewals to be electric vehicles by 2030;
- in the efficiency of its buildings with a 35% reduction in energy consumption at Group level by 2030 compared to 2019;
- in responsible digital consumption practices in which employees are trained: for example, extending the life of computers provided, storage of streamlined data and integrating green IT by design into the apps and sites developed;
- in more a moderate and responsible approach to business travel. The Business Travel Policy was revised in 2023 and incorporates a requirement to offset relative CO_2 emissions by the GBU and non-GBU entities.

Since 2019, ENGIE has reduced by 61% the carbon footprint linked to employees' working methods.

3.4.1.1.2 Acting together, as "ONE ENGIE."

Taking an active role in the energy transition engages all our employees in the urgent need to act.

This ONE ENGIE common culture is based on a foundation of harmonized working practices, the ENGIE Ways of Working (EWOW). It ensures that each employee has a positive impact collectively.

Defined in 2021, the EWOW describe the collective behaviors expected of all employees and promote the diversity of their expertise, their jobs and ENGIE's international presence: COLLABORATE, FOCUS ON BUSINESS, PRIORITIZE, COMMIT TO DELIVER and ENGAGE. These five principles make up the barometer that reflects the importance of acting together in the interests of ONE ENGIE and delivering on the operational commitments that are at the heart of ENGIE's purpose (see Section 1.1.1).

The exemplary behavior of the managers embodying the EWOW is a key force behind their adoption. This is why these ENGIE Ways of Working are one of the fundamentals of the ENGIE Group's leadership model, known as the ENGIE Ways of Leading (EWOL).

Updated in 2022, the EWOLs are complementary to the ENGIE Ways of Working and consolidate the foundation of common practices within ENGIE.

The EWOLs are focused around five key commitments common to Group managers:

- **Safety & Integrity:** applying strict standards for the health & safety of people, securing assets, ensuring ENGIE's (cyber)security, integrity and reputation. This also involves building a "Zero Tolerance" culture, to guarantee the right to operate;

- **ONE ENGIE:** implementing the ENGIE strategy by drawing on the EWOW, guided by value creation for ENGIE and its customers, while benefiting from the diversity of ENGIE employees;
- **Accountability:** clearly and precisely defining objectives and responsibilities toward teams and stakeholders, empowering our employees and teams by providing them with the means to succeed and organizing stimulating and honest discussions;
- **Trust:** doing what we say and saying what we do, managing and inspiring, through example, the teams, stakeholders and customers, communicating and acting in a transparent manner;
- **Care:** promoting a culture of shared interest, respect and caring within the teams, improving well-being at work and putting the development of skills and constructive feedback into practice.

The ENGIE Ways of Leading were rolled out to 275 of the Group's Global Leaders at end-2022 and to all Group managers in 2023. They participated in group workshops to adopt the expected behaviors and to be able to embody them with their teams. The ENGIE Ways of Leading have been integrated into performance interviews and the different management processes. The career development and management programs have been adjusted accordingly.

In May 2023, the EWOL week brought together 2,000 managers for conferences and testimonies from ENGIE leaders and inspiring external speakers. An e-learning course on the EWOLs was completed by 7,000 managers in 2023.

The career development and management programs are adjusted accordingly.

For example:

- during their onboarding, all new executives take an e-learning course on the EWOLs;
- the EWOLs are part of the selection criteria during recruitment or promotion;
- at the annual performance review, the embodiment of EWOLs is assessed alongside the achievement of results.

3.4.2 DIVERSITY AND INCLUSION, AT THE HEART OF THE GROUP'S SOCIAL STRATEGY

3.4.2.1 The Group's human capital

3.4.2.1.1 Workforce and geographic footprint

Present in more than 30 countries, ENGIE had 97,297 employees at the end of December 2023. The workforce increased by 843 employees, i.e. 0.9% compared to 2022, in line with the Group's strategy and development of activities, particularly in the Networks, Energy Services and Renewable Energies areas.

GRI 102-7 /405-1	France	Europe (excl. France)	South America	USA & Canada	Middle East, Asia & Africa	2023	2022	2021
Renewables	2,950	495	1,076	311	243	5,075	4,814	4,882
Networks	17,004	3,147	689	933	0	21,773	21,806	22,542
Energy Solutions	14,887	14,685	1,336	1,989	9,336	42,233	42,661	47,531
Flex Gen & Retail	7,007	4,804	715	87	3,368	15,981	16,148	17,091
Nuclear	0	2,049	0	0	0	2,049	2,057	2,135
Others	4,226	3,577	1,033	1,168	182	10,186	8,968	7,323
o/w GEMS	*1,552*	*1,344*	*0*	*521*	*176*	*3,593*	*3,214*	
Sub-total	**46,074**	**28,757**	**4,849**	**4,488**	**13,129**	**97,297**	**96,454**	**101,504**
Equans	-	-	-	-	-	-	-	69,970
TOTAL	**46,074**	**28,757**	**4,849**	**4,488**	**13,129**	**97,297**	**96,454**	**171,474**
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

	2023									2022	2021
GRI 102-7 /405-1	Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	*o/w GEMS*	Group	%	Group	excl. EQUANS
Managers	**2,624**	**5,784**	**11,048**	**3,847**	**513**	**6,703**	***2,433***	**30,519**	**31.4%**	**29,336**	**30,641**
Men	1,873	3,888	8,183	2,512	418	4,120	*1,619*	20,994	68.8%	20,577	21,789
Women	751	1,897	2,865	1,335	95	2,583	*814*	9,526	31.2%	8,759	8,852
Non-managers	**2,451**	**15,989**	**31,185**	**12,134**	**1,536**	**3,483**	***1,160***	**66,778**	**68.6%**	**67,118**	**70,863**
Men	1,871	11,837	25,475	8,491	1,330	1,532	*478*	50,536	75.7%	50,655	54,210
Women	580	4,152	5,710	3,643	206	1,951	*682*	16,242	24.3%	16,463	16,654
Total	**5,075**	**21,773**	**42,233**	**15,981**	**2,049**	**10,186**	***3,593***	**97,297**	**100%**	**96,454**	**101,504**
Men	3,744	15,725	33,658	11,003	1,748	5,652	*2,097*	71,530	73.5%	71,232	75,999
Women	1,331	6,048	8,575	4,978	301	4,534	*1,496*	25,767	26.5%	25,222	25,505
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

As of December 31, 2023, the Group workforce comprised 30,519 managers i.e. 31.4% of the total workforce, and 66,778 non managers, i.e. 68.6%. The proportion of managers continues to increase, from 30.4% in 2022 to 31.4% in 2023.

Likewise, the proportion of female managers in the workforce has increased and represents 31.2% of managers compared to 29.9% in 2022 (see Section 3.4.2.3).

3.4.2.1.2 Contract types and trends

At the end of December 2023, 89,240 employees were on permanent contracts, making up 91.7% of the workforce. 4,382 employees were on fixed term contracts, i.e. 4.5% of the workforce.

Furthermore, with 3,675 young people on work-study contracts, i.e. 3.8% of the workforce, ENGIE has confirmed and continues to maintain its commitment to young people. Work-study programs combine practice and theory. These programs are also an important source of recruitment (see Section 3.4.2.2.2).

	2023								2022	2021
GRI 102-8	**Renewables**	**Networks**	**Energy Solutions**	**Flex Gen & Retail**	**Nuclear**	**Others**	*o/w GEMS*	**Group**	**Group**	**excl. EQUANS**
Permanent	91.1%	94.4%	90.7%	88.3%	100.0%	94.0%	*94.4%*	91.7%	91.5%	91.4%
Fixed-term	3.6%	0.8%	5.8%	8.1%	0.0%	2.8%	*2.6%*	4.5%	4.7%	4.8%
Work-study contract	5.2%	4.8%	3.5%	3.5%	0.0%	3.2%	*3.0%*	3.8%	3.9%	3.8%
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

3.4.2.1.3 Workforce by age bracket

	2023								2022	2021
GRI 405-1	**Renewables**	**Networks**	**Energy Solutions**	**Flex Gen & Retail**	**Nuclear**	**Others**	*o/w GEMS*	**Group**	**Group**	**excl. EQUANS**
< 25 yrs old	2.1%	2.6%	3.9%	3.5%	1.6%	1.5%	*1.7%*	3.1%	3.0%	2.8%
25-34 yrs old	24.8%	20.5%	24.5%	21.9%	14.6%	22.3%	*22.5%*	22.7%	22.8%	23.2%
35-44 yrs old	38.3%	31.7%	28.1%	32.5%	34.7%	33.7%	*37.3%*	30.9%	31.2%	28.9%
45-54 yrs old	24.6%	30.3%	24.6%	27.8%	21.7%	27.9%	*28.1%*	26.7%	27.0%	26.8%
> 55 yrs old	10.2%	14.8%	18.9%	14.3%	27.3%	14.6%	*10.4%*	16.5%	15.9%	18.2%
% reporting	*100%*	*100%*	100%	*100%*	*100%*	*100%*	*100%*	*100%*	100%	*100%*

3.4.2.2 Promotion of diversity

3.4.2.2.1 Policy

At the Group level

In 2022, for the first time, ENGIE adopted a Global policy for Diversity, Equity and Inclusion (DEI). This policy has a dual objective of helping the Group progress in terms of the representation of the diversity of populations and in making all work environments inclusive. There is no place for either discrimination or harassment in any form.

This policy:

- is aimed at all employees and contractors of the Group;
- must adapt and be modified to local legal and cultural contexts;
- is designed to change Group culture;
- is scalable over time; and
- contributes to performance.

The priority subjects defined for 2022 and 2023 are:

- gender equality (notably with the Fifty-Fifty program);
- inclusion of LGBTQ+ people (lesbian, gay, bisexual, trans, queer and all other sexual orientations and minority gender identities);
- origins (including nationalities, ethical origins, skin color, religion, social background, education and non-standard career paths);
- generations (the integration of young people and the employability of seniors);
- and the skills of people with disabilities.

The new Be.U@ENGIE policy allows each employee to feel free to be themselves (Be.Unique) to fully contribute to the Group's collective ambition (Be.United). A road map has been rolled out across all regions from 2023 and is being specifically monitored for ENGIE's 10 priority countries (United States, Brazil, Chile, United Arab Emirates and Kingdom of Saudi Arabia, Belgium, Spain, Portugal, Germany, Italy and France).

A DEI World Steering Committee has been set up, bringing together country and business entity managers. An Operational Committee has also been established with the DEI managers of the major regions of the world.

Awareness-raising actions have been carried out at HR and Global Leaders conventions, and during ENGIE University's temporary campuses. ENGIE relied on the widespread rollout of the Diversity Fresco, a tool developed by its partner, Essec Business School. This raised awareness among more than 700 people in the Group. A network of DEI Ambassadors has been set up, known as the Bees, responsible for carrying out concrete actions in their working environment, and for coordinating Diversity Fresco workshops. The first cohort met at a seminar in Paris in February 2023 to be trained in facilitating this type of workshop. A series of 10 video portraits of employees was produced to enable better understanding of the issues related to each of the policy's priority dimensions. Thematic action plans have been developed on each of the dimensions, with the support of a sponsor member of the Executive Committee. The achievements were presented to the Executive Committee in October 2023.

In France

For many years, the Group has implemented a Diversity, Equity and Inclusion policy that is proactive, ambitious and innovative. It aims to combat discrimination and promote equal opportunity and treatment.

This measure has been recognized by the award of the Diversity label for the first time in 2012, confirmed by regular audits and extended in 2022. The last renewal audit took place in October 2023 and allowed the Group to present its latest actions in the promotion of diversity and professional equality.

3.4.2.2.2 Gender diversity

ENGIE aims to become a benchmark for professional and pay equality. Two new Tier 1 non-financial targets were set and approved by the Board of Directors:

- pay gap between women and men less than 2% on equivalent positions at the Group level, by 2030;
- gender equality, with an objective of 40% to 60% of women in management positions by 2030.

For ENGIE, diversity, professional equality and inclusion are innovation and performance drivers. It is one of the Good Governance criteria defined by the Human Rights Council, for improved decision-making and societal responsibility.

ENGIE launched and has implemented the Fifty-Fifty program since 2020. It is based on a systematic approach aimed at creating the conditions conducive to achieving professional equality between women and men. ENGIE's target is to reach at least 40% women in executive positions by 2030. This program involves more than 30,000 people worldwide, making ENGIE the pioneer in the energy sector by committing to such an ambitious target.

This program came in response to demand from the Society, ENGIE's customers, and its stakeholders. Its road map is based on six pillars: structuring and governance, diagnostics and certification, communication and awareness, organizational and HR process adaptation, employee training and development, and external resonance and partnerships. For ENGIE, it means becoming a best-in-class in this area, and attracting and retaining the best talents.

At the end of December 2023, women made up 26.5% of the Group's workforce and the proportion of women in management was 31.2%. The proportion of women on the Operational Management Committee (OPCOM) is 40.7% (22 women and 32 men), up 5.5 percentage points compared to 2022. The proportion of women on the Group Executive Committee is 40% (four women and six men).

For several years, the Group's appointments policy has strengthened gender diversity. The Group seeks to develop mixed talent pools, comprising executive managers with strong potential, thus helping to increase female representation in these two bodies. Most appointments are made from this talent pool, comprising around 740 people, 41% of whom are women.

	2023								2022	2021
GRI 405-1	**Renewables**	**Networks**	**Energy Solutions**	**Flex Gen & Retail**	**Nuclear**	**Others**	*o/w GEMS*	**Group**	**Group**	**excl. EQUANS**
Proportion of women in workforce	26.2%	27.8%	20.3%	31.2%	14.7%	44.5%	*41.6%*	26.5%	26.2%	25.1%
Proportion of women in management	28.6%	32.8%	25.9%	34.7%	18.5%	38.5%	*33.5%*	31.2%	29.9%	28.9%
% reporting	100%	100%	100%	100%	100%	100%	*100%*	100%	100%	100%
Proportion of women among new hires	36.7%	36.7%	23.4%	28.9%	7.7%	47.9%	*42.5%*	29.0%	28.2%	24.6%
Proportion of women among new management hires	38.5%	40.6%	29.3%	44.5%	13.2%	43.6%	*36.6%*	35.6%	30.5%	27.2%
% reporting	100%	100%	100%	100%	100%	100%	*100%*	100%	100%	100%

Since 2021, each entity has benefited from a "Fifty-Fifty toolbox," tailored to the professions and cultural environments of each region, mainly focused on:

- **The training and development of employees**

At the global level:

- two "Diversity, Professional Equality and Inclusion" programs have been rolled out since May 2021: one online program for all employees and one on-site and remote program for the Group's leaders and managers;
- in 2022 and 2023, the Group continued to roll out the Wo+Men to Lead personal development program, for male and female leaders. In 2023, all women in the Top 50 were trained;
- a partnership with the Women Initiative Foundation has been focused since 2020 on training employees in inclusive leadership, in cooperation with major international universities;
- the rollout of the "License to Recruit" (Permis de recruter) program was launched in 2023, to train managers and the HR Division in inclusive recruitment (e.g. conducting recruitment interviews without discrimination, diversifying recruitment sources to favor categories of people who have difficulty accessing employment, such as people with disabilities and young people identified by local missions in France);
- other training programs have been designed and rolled out across the countries of the Group to reach the entire target population.

- **Communication, team awareness raising and the sharing of best practices**

- events are offered to all employees during the year: to mark International Women's Day, to raise awareness among managers and HRs in the identification of bias and stereotypes in recruitment;
- a "Sexual Harassment and Sexist Action" guide was compiled in 2022 and shared with the Human Resources and Ethics Divisions in each of the Group's countries, led by the Executive Committee which sought to reaffirm the Zero Tolerance policy on this subject;
- in 2023, ENGIE launched a worldwide guide to best practices to be adopted in companies to prevent and support employees suffering from domestic violence. ENGIE is one of the first groups in France to deal explicitly with this subject in the context of the working environment;
- awareness raising workshops have been organized by the entities' Executive Committees since 2021. These workshops aim to raise awareness among managers, helping them build equality-driven action plans within their entity;

- since 2022, a guide dealing with the myths around professional gender equality has been made available in several languages. It has also inspired a series of podcasts on the subject;
- the Fifty-Fifty Awards, a competition open to all to award the teams that are most invested in gender diversity, has been organized annually within ENGIE since November 2021. In 2023, it was integrated into the "ONE ENGIE Awards" at Group level in order to place professional equality at the heart of the strategic objectives;
- an online media platform containing plenty of resources (videos, testimonies, articles, best practices) was created on the Group's e-learning platform in November 2021;
- conferences and the sharing of best practices targeting "Diversity, Professional Equality and Inclusion." These are available throughout the year to ENGIE employees looking to launch new DEI initiatives within their scope. This network called Change Drivers was founded in November 2019.
- The ChangeMakHers network, created in 2021, brings together leaders trained to bring about change within the organization and showcase ENGIE's commitment outside the Group, through conferences, partnerships and round tables.

- **Diagnosis and EDGE certification**
  - in December 2023, 17 entities in 10 countries obtained EDGE certification in Diversity and Inclusion. This certification offers international recognition of gender equality and covers the corporate culture, recruitment, promotion, mentoring and training of its managers;
  - since 2021, 25 questions relating to "diversity, professional equality and inclusion" were included in the ENGIE&Me annual engagement survey. They cover five key topics: recruitment and promotion, corporate culture, flexibility at work, access to training and equal pay. Three questions relate to sexual harassment and allow the Group to objectively measure its progress each year;
  - in May 2021, the findings of the audit of the processes used to assess talent, in order to make them more inclusive, were reported. Recommendations are regularly applied or updated.

- **External resonance and partnerships**

To promote gender equality within its business lines, ENGIE is raising awareness in France among young female audiences in schools, through associations such as *Elles Bougent*. This association promotes the role of women in technical divisions in France. Furthermore, as part of its partnership with *Le Laboratoire de l'Égalité*, ENGIE has been helping since September 2019 to develop an artificial intelligence pact. This ensures that new technologies underlying HR processes that incorporate Artificial Intelligence are not discriminatory in terms of gender.

Moreover, in France, as part of its commitment to the apprenticeship foundation, *Fondation Innovations Pour les Apprentissages* (FIPA), ENGIE has undertaken to start a school class dedicated exclusively to young women, *les Ingénieuses*, which aims to help them becoming Engineers. In Peru and Brazil, for example, ENGIE offers scholarships to young women for engineering studies.

ENGIE participates in numerous discussion forums and conferences on the theme of gender equality in France and internationally. This is to inspire cultural change in other companies and among societal players. It is by acting together that gender equality will produce long-term lasting effects.

Finally, the Fifty-Fifty program received an award at the Digital HR Awards in October 2023, for the quality of its content, for its significant results three years after the start of its rollout and for its societal impact.

3.4.2.3 Professional gender equality

3.4.2.3.1 Principles of the compensation policy

The Group policy on compensation is committed to providing personalized, equitable, and market-competitive compensation to all individuals, aligning with their performance and level of responsibility. The Group uses external information provided by specialized firms to establish its positioning in relation to the local reference market. It also ensures compliance with the minimum wages applicable in the different countries in which it operates. Particular attention is paid to equal pay, with the calculation of the index (see Section 3.4.2.3.2). The overall compensation structure consists of a base salary and, depending on the level of responsibility and the country, variable compensation schemes to reward collective and individual performance. The variable compensation provisions for the Group's executive managers include CSR objectives for at least 10% of the total.

3.4.2.3.2 Professional and pay equity

As part of its CSR policy and to support its purpose, ENGIE had made the decision to extend the French obligation to calculate the professional and pay equity index to all of its companies abroad with more than 250 employees.

In 2022, in line with its ambition and for greater readability, the Group decided that it would focus on the equal pay indicator from among the professional and pay equity index indicators. It measures the difference between the compensation of women and men in equivalent positions. ENGIE has decided to set a maximum gap objective of 2% at the Group level. The scope of this indicator covers entities with more than 50 employees in France and more than 250 internationally.

For 2023, the difference in compensation between women and men stood at 1.92% and represented 84% of the Group's workforce. The result is in line with the Group's objective. It is 0.19 points higher than the 2022 result due to an upward trend in the indicator abroad, in connection with the inclusion of new companies. France, with a score of almost 1%, remains at a very good level, unchanged since 2022.

All of the Group's companies use a measurement tool developed by the Group HRD, EQUIDIV. The tool offers an automatic and standard calculation of the index based on individual data. EQUIDIV provides priority remedial actions to advance professional and pay equality between women and men.

3.4.2.3.3 Preventing and combating sexist behavior and sexual harassment in the workplace

On November 22, 2017, ENGIE signed a European Agreement for an indefinite period on professional equality between women and men, the fight against discrimination and violence, and the prevention of sexual harassment. Sexist behavior was the subject of a specific article.

In 2022, the Human Resources Department, in cooperation with the Ethics, Compliance & Privacy Department, introduced a practical guide aimed at all ENGIE countries and entities. This guide aims to align definitions and help the latter draw up their own program to prevent and combat sexist behavior and sexual harassment. The awareness-raising campaign began with a webinar in October 2022, committing each entity to building an action plan for "Zero Tolerance."

At the same time, ENGIE is committed to taking all necessary measures to prevent incidents of sexual harassment. Reporting tools have been put in place to enable any deviant behavior to be flagged:

- at the global level, the whistleblower platform administered by the Ethics, Compliance & Privacy Division;
- and in France, the "AlloSexism" helpline, which allows not only presumed victims to make a report, but also managers, HR and Sexism Representatives to benefit from a legal support service.

ENGIE took part in the 2021 BVA / #StOpE on Sexism scale for the first time, and participated again in 2023. Despite improving figures, ordinary sexism is still strongly felt by women who responded to the survey. In two years, there has been a clear improvement in the perception of employees on the Group's commitment to dealing with this subject and on the awareness of possible channels of recourse, including the Sexism Representatives.

ENGIE committed to preventing and combating domestic violence on the occasion of the International Day for the Elimination of Violence against Women. In 2023, the Group published a commitment and good practices booklet to be implemented and adapted locally. A communication campaign was also launched in the press, making reference to this commitment and with the inclusion of the Government emergency number on its bills.

In fact, ENGIE systematically includes the freephone number 3919 on the energy bills sent to the 8.2 million domestic and business customers it serves in France. This is the number for the telephone service set up by the French Government that provides a helpline with information and guidance to victims of gender-based and sexual violence.

3.4.2.4 Inclusion and job-seeking support

ENGIE is highly committed to this subject and develops many innovative initiatives in partnership with its ecosystem to promote learning.

3.4.2.4.1 Social and professional inclusion of young people

As a founding member of the *Collectif des entreprises pour une économie plus inclusive* ("Group of companies for a more inclusive economy"), the Group has been, since 2018, taking action countrywide, alongside around 40 large companies and public authorities. For example, an escape game was created to raise awareness of ENGIE's professions among young people. The strength of the *Collectif* is the ability of companies to share their experience and allow everyone to benefit from shared know-how and a local network.

These actions promote the inclusion of young people, particularly those who have been distanced from employment or come from the most disadvantaged areas. In particular, ENGIE has undertaken to host 3000 young people from priority neighborhoods for a period of three years, from their final year of middle school until they start their working lives. With the *Collectif*, ENGIE is committed to hosting at least 10% of work-study students from priority urban neighborhoods (QPV) or free urban entrepreneurial zones (ZFU) or students with disabilities by 2025. In addition, ENGIE is part of the *Collectif*'s commitment to be present locally in the regions with the launch of a new local *Collectif* in Le Havre, of which Catherine MacGregor is the sponsor.

The *Collectif* launched an extensive program in September 2022 to encourage the development of community mentoring among its members with the aim of reaching 1% of mentors among all employees of the 36 member companies by end-2023. In this regard, ENGIE has committed to developing its external mentoring by launching a solidarity mentoring platform in March 2023 bringing together partner associations, in addition to the existing internal scheme.

In 2023, ENGIE took part, alongside the companies within the *Collectif*, in the *Salon Jeunes d'Avenir* (Youth of the Future trade show) in the Ile-de-France region. This event was an opportunity for Technician Ambassadors to present the Group's professions and for several female site managers to share their experience with young women looking for work-study contracts and career advice.

The Group is also committed to the social and professional inclusion of people in severe difficulty or in a situation of exclusion. This is particularly thanks to the initiatives undertaken by the ENGIE FAPE (*Fondation Agir pour l'Emploi* – Act for Employment Foundation). The ENGIE FAPE's initiatives are based on the solidarity of Group employees, retirees and companies with job seekers and all those seeking to find a way out of poverty. It grants subsidies to structures and players involved in integration who mobilize to design and implement sustainable projects for the benefit of the most vulnerable populations.

ENGIE joined the Alliance for Youth in December 2015, initially at European level and then at global level in 2019. The Alliance for Youth is the first private initiative, initially pan-European (with 300 companies), launched by Nestlé to develop employability and combat youth unemployment.

The Alliance's considerable regional network allows ENGIE entities, if they wish, to undertake initiatives in the regions. They can collaborate with local businesses that are also engaged in developing youth employability, bringing education and business together, and in learning.

The various institutional, associations and corporate partnerships also facilitate the employability of young interns and apprentices, both internally and externally. This is the case, for example, with ENGIE's significant involvement in the Economic Inclusion Summit organized in Bercy by the Mozaïk HR Foundation, in November each year.

Close attention is paid during all stages of the recruitment process, for interns and apprentices in particular, to ensure a more inclusive recruitment process.

3.4.2.4.2 Employees with disabilities

In 2019, ENGIE joined around a hundred companies by signing the "Manifesto for the inclusion of people with disabilities in economic life" in France. As part of this manifesto, ENGIE actively participates in three working groups: digital accessibility, international policy and education.

In France, ENGIE's commitments mainly involved recruitment and integration of people with disabilities, support and job retention, awareness-raising, communication and collaboration with the sheltered sector.

Managers are invited to follow e-learning courses designed to raise their awareness of all aspects of disability in the company.

In addition, ENGIE designed a program specifically for the Group's young work-study students and interns. The aim is to make them aware of any personal disabilities that they may have, in order to assist them, if necessary, in obtaining recognition of their disability. This program also aims to raise their awareness of their future role as managers and was rolled out in 2023.

ENGIE employs approximately 1,608 employees with disabilities in France, representing an employment rate in France of 3.5% in 2023.

The collaboration with the protected and adapted work sector (ESAT and adapted companies) makes the inclusive vision of the Group's CSR commitments a reality. It aims to ensure the viability of indirect jobs, promote the local economy and encourage professional integration.

In 2019, ENGIE set up an inter-departmental working group on digital accessibility. The work carried out by this working group has made it possible, in particular, to put the ENGIE multi-year digital accessibility scheme online. Internal and external site audits were carried out and a guide was made available to the community of disability representatives. A dedicated committee and a network of correspondents (IT and Human Resources) should be operational in early 2024 to monitor the rollout of the action plan.

In Brazil, the *Gera Inclusão* program launched in 2023 has integrated 15 young people with disabilities into the work environment.

3.4.2.4.3 LGBTQ+ (lesbian, gay, bisexual, trans, queer and all other sexual orientations and minority gender identities)

On December 6, 2017 ENGIE signed the *L'Autre Cercle*'s LGBT+ commitment charter. In October 2020, in France, ENGIE published the practical guide "LGBT+, understanding to act together" in order to raise awareness of the question of LGBT+ in the workplace. ENGIE participated in the 2020 edition of *L'Autre Cercle*'s 95 LGBT+ & *Allié.e.s au Travail* Role Models in France. Two employees were designated in the LGBT+ leaders and *Allié.e.s Dirigeant.e.s* Role Models category. In 2021, ENGIE stepped up its actions to boost diversity and combat discrimination, with:

- the launch of "Friends", the Group's network of LGBTQ+ and Straight Allies employees;
- the worldwide publication of a new guide, Understand each other to better act together;
- the training of 150 Human Resources staff in France;
- the provision of a training / awareness-raising catalog for management committees, managers, employee representative bodies and all employees;
- the participation for the second time in the "Role Models" of *L'Autre Cercle*, with two candidates presented.

In 2022, ENGIE North America was awarded for the second year running by the Human Rights Campaign (score 95/100). Actions taken to improve equal treatment for LGBTQ+ employees in the United States were recognized.

International

In 2023, ENGIE organized an international event on gender identities in business. Co-designed by the Group's LGBTQ+ network, Friends, this webinar brought together more than 500 participants online and in-person. Led by the partner *Têtu Connect*, from an informative approach it showed the reality of the issue at ENGIE through testimonials from employees and the organization *Allié.e.s*, under the patronage of Jean-Sébastien Blanc, Group Human Resources Director. To mark the occasion, ENGIE published the first worldwide guide on "Cultivating gender identities in business," co-created with American and French entities.

The inclusion of LGBTQ+ people has also been the subject of numerous speeches and awareness-raising sessions at the U.Camps organized by ENGIE University, in the regions of North America, South America, Europe and France.

In France

As part of its partnership with the association *L'Autre Cercle*, ENGIE contributed to the drafting of the Visibility or Invisibility of Lesbians at Work (VOILAT) guide.

ENGIE employees have the opportunity throughout the year to participate in dinner debates organized by *Têtu Connect* in order to better understand the issues related to the inclusion of LGBTQ+ people.

In addition, the ENGIE Foundation offers support through its sponsorship of charity evenings for HIV / AIDS research and gives the Group's LGBTQ+ employee network, Friends, the opportunity to participate.

3.4.2.4.4 Origins

The "Origins" dimension is one of the priority dimensions of the new Be.U@ENGIE policy. It covers issues of diversity and inclusion relating to ethnic, social and religious origin, as well as atypical educational and professional backgrounds, migrants and refugees.

While the "social origin" dimension has been addressed in France for some time, the "ethnic origin" dimension is more recent to the Group.

Ethnic origin

When it set to work in 2023, the Group's first task consisted of bringing together, on two occasions, a group of around ten employees of all ages who had been exposed in their working lives to issues of ethno-racial discrimination or racism. These workshops allowed them to talk openly in a secure environment. Also taking part were two experts, Marwan Mohammed, sociologist and researcher at the CNRS and Tara Dickman, founder of the association "Le Next Level." They shared their practices in France and the United States, as well as benchmarks from other companies. Initial areas for action were set out around data collection and measurement, awareness-raising, and the Group's commitment to zero tolerance for all forms of racism and ethno-racial discrimination.

Social origin

ENGIE is a long-standing player in social inclusion, having carried out many actions in relation to social origin, targeting both young people (Section 3.4.2.4.1) and other populations.

ENGIE is part of the *Collectif des entreprises pour une économie plus inclusive* ("Group of companies for a more inclusive economy"), and is also sponsor of the Working Group for apprenticeship and vocational training. In this area, various actions are organized with the other companies of the *Collectif* to help people excluded from the workforce to find employment and encourage employees in the companies to become mentors.

For example, one of the Group's entities, ENGIE Solutions, renews two key actions each year:

- since 2012, it has been supporting young people with its educational partners and the Overseas Agency for Mobility (Agence d'Outre-Mer pour la mobilité or LADOM) who are training on work-study programs as part of its "Ultra Marins Program" (French Polynesia, New Caledonia, Réunion and French Guiana);
- with APAVE and the *Pôle Emploi* state employment agency in the Val-d'Oise department, it is working to increase the number of women in technical professions through the "Energy Diversity" program. In this context, women are invited for an immersion period in the company, giving them the opportunity, after nine months of training, to obtain a professional qualification as an HVAC (heating, ventilation and air-conditioning) maintenance technician. Each year, one woman from the group becomes a role model to promote the retraining of women in technical professions.

Religious diversity

In 2019, the Group published the *Repères pour les managers* (Points of reference for managers) guide for France, giving managers the opportunity to learn more about different religions, the French legislative framework and good practices for managing certain situations in their daily work.

In 2023, Storengy France decided to organize awareness-raising sessions for its employees on social, cultural and religious diversity at its head office, for around 200 employees.

For employees on storage sites, sketches were performed, raising the awareness of 40 on-site employees about stereotypes and racism.

3.4.3 HUMAN RESOURCES ATTRACTION AND DEVELOPMENT POLICIES

To implement the appropriate development policies and actions, ENGIE has a strong skills-based approach. These skills are guided via a process of provisional management of jobs and skills (Strategic Workforce Planning). In relation to industrial and financial forecasts, this approach provides a quantitative and qualitative three-year mapping of strategic and distinctive skills. Each business line of the Group must acquire these skills to have the capacity to implement its strategy and roll out the associated action plans. This vision is organized around the ENGIE Jobs reference system. It lists, through a continuous improvement approach, more than 300 reference professions and the skills associated with each to:

- anticipate the volumes and recruitment profiles for each of the Group's business lines and geographic areas;
- roll out training plans tailored to skill needs in critical business lines of the future;
- prepare the appropriate career paths to meet emerging challenges.

These data are consolidated at the Group level. They enable the building of a global vision of changes in professions and skills, in particular in:

- mature technologies (wind, solar);
- new technologies (battery electricity storage, green gases);
- cross-functional skills (health & safety, data, digital, risk management).

3.4.3.1 Hiring and employer brand

3.4.3.1.1 Recruitment: strategy and objectives

The recruitment strategy is aligned with ENGIE's purpose and the transition to a carbon-neutral economy. It has to deal with a highly competitive job market, changing occupations and constantly evolving candidate expectations.

The Talent Acquisition Policy, which was launched in 2020 based on five key principles, spearheads this strategy. ENGIE has thus developed its methods, strengthened the professionalization of its HR teams and cultivated its agility. The Group continues to develop strategic partnerships globally with LinkedIn, Indeed and Glassdoor and has engaged in efforts to develop closer ties between the employer brand and the recruitment policy.

In 2023, a major development in the recruitment division was the rollout of the new digital recruitment tool SEZAME. This tool provides the division and the business line with greater visibility as regards candidates, reinforces the feedback culture and improves the candidate experience. This new HR ecosystem is crucial to developing recruitment practices and processes.

The Group is also continuing its efforts to strengthen the performance of the division's recruiters through a "License to recruit" (Permis de recruter) training program for the Group's 200 recruiters. In 2023, 80 recruiters took the course. This training will continue in 2024 and will be offered to each new ENGIE recruiter. It has also been adapted for managers with rollout started in 2023.

At end-2023, within the World scope, 16,195 recruitments were made compared with 16,974 in 2022. These recruitments were down by 4.6% compared with 2022 (-779 hires) and respond to challenges to acquire new skills and maintain existing technical know-how, in a Talents market that is under increasing pressure.

These recruitments help support the transformation committed by the Group and progress differently according to country, activity and socio-professional category. In France, 6,895 employees were hired, of which 3,901 on permanent contracts and 2,994 on fixed-term contracts.

Internationally, there were 9,300 hires in 2023, of which 6,894 on permanent contracts and 2,406 on fixed-term (or equivalent) contracts, with a notable increase in North America and South America.

70% of recruitments relate to positions in the technical, engineering and business development areas.

The recruitment of managers was also up to 13.6% with 3,936 managers hired in 2023, of which 1,401 female managers representing 35.6% of this population. In total, 29% of recruitments were women, with 4,705 females hired in 2023.

	2023								2022	2021
GRI 401-1	Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	*o/w GEMS*	Group	Group	excl. EQUANS
Permanent hires	**627**	**1,226**	**6,265**	**1,521**	**78**	**1,078**	***403***	**10,795**	**11,085**	**9,440**
Women	199	398	1,412	406	6	482	*159*	2,903	2,845	2,323
Men	428	828	4,853	1,115	72	596	*244*	7,892	8,241	7,118
Fixed-term hires (1)	**359**	**789**	**2,601**	**1,184**	**0**	**467**	***160***	**5,400**	**5,889**	**6,082**
Women	163	340	663	377	0	258	*80*	1,801	1,946	1,929
Men	196	448	1,938	807	0	209	*80*	3,598	3,943	4,153
TOTAL	**986**	**2,015**	**8,866**	**2,705**	**78**	**1,545**	***563***	**16,195**	**16,974**	**15,522**
% reporting	100%	100%	100%	100%	100%	100%	*100%*	100%	100%	100%

(1) Including work-study students.

3.4.3.1.2 Employer brand

The development of an attractive employer brand that is consistent with the Group's locations and hiring needs is a major challenge.

In the internal ENGIE&Me survey, 84% of employees would recommend ENGIE as an employer, placing it at a higher level than the Energy & Utilities benchmark.

The beginning of 2023 saw the rollout of an ENGIE employer brand communication kit on its digital ecosystem. A new employee career site has been developed since March 2023, "ENGIE Jobs – Discover our job offers," as well as ENGIE's Corporate Life (*Vie d'Entreprise*) page on LinkedIn and the Indeed and Glassdoor World pages.

In 2023, ENGIE was listed in the following rankings:

- ENGIE rose two places compared to 2022 to reach 16th place among the most valued French brands (Brand Finance);
- In France, through Universum's CSR index published in January 2023, second-year graduate students highlighted the companies they considered to be the most committed and mobilized. For this target, ENGIE positions itself 8th out of 61 CAC 40 companies and former scale-up companies recognized for their attractiveness. The Group ranked second in terms of environmental commitments.

In 2023, ENGIE was ranked in the Universum rankings as follows:

- 2-3 years post-baccalaureate: 13th place (compared to 11th in 2022) among students and 12th among those with more experience. This attractiveness is even higher among its priority targets in terms of studies and business sector;
- Engineering students (4-5 years post-baccalaureate): 21st place

L'Usine Nouvelle then Le Figaro highlighted ENGIE's 2023 recruitment dynamics in France, ranking it 6th and 10th respectively among companies recruiting in France.

In the Capital Employer Awards, published at the start of 2023, two ENGIE Group subsidiaries appear in the top 30 companies: GRTgaz (2nd) and GRDF (21st). ENGIE is listed in the Energy category (5th) as are other Group subsidiaries such as CNR (6th) and CPCU (8th).

Internationally, ENGIE receives favorable assessments and high ratings: 3.98 on Glassdoor and 3.7 on Indeed, which have increased since the implementation of moderation actions in the summer of 2023.

3.4.3.1.3 Onboarding Path

Employee engagement begins from the moment employees join ENGIE: the first few days, weeks and months are crucial in building loyalty, strengthening team spirit and developing a sense of belonging and pride toward the Group and their entity. New employees realize that joining an ENGIE entity, wherever it is in the world, means joining a Group whose activities contribute to a common strategy of decarbonization and that their action is central to this model.

In this regard, ENGIE developed an "Onboarding Path" in 2023 which aims to create a positive and common ONE ENGIE experience for all at the time of joining and during the onboarding process.

This course provides in eleven languages:

- to newcomers: the fundamental elements related to Group strategy and the ONE ENGIE culture (see Section 3.4.1.1.2);
- to HR and managers: the common key elements of the onboarding experience within the Group and good practices developed by the entities;
- to all: the option to use a board game, "Transition makers' Journey," in physical or digital version to discover or deepen their knowledge of ENGIE. The various dimensions of the serious game cover ENGIE's integrated value chain, its international geographical presence, its strategic objectives and the associated strengths and risks.

These tools complement the onboarding experiences already rolled out at local level in the entities.

3.4.3.1.4 Attractiveness of the Group and Employment of young people

The rollout of the ENGIE Brand and the Employer Brand continues in France and internationally with varying levels of reputation according to the country. Either countries use the resources and ecosystem provided by the Group to promote and strengthen the employer brand locally or they adapt these resources to their needs according to the market.

The visibility and recruitment campaigns, either carried out jointly by the Group and the countries, or driven by local initiatives, help reinforce this attractiveness among all Talents.

At the regional level, the teams draw on the Ambassador Communities (Technicians, Alumni, Young Professional Network, Women), to attract, recruit and retain targeted populations.

In France, a focus has been placed on the Employment and Employability of Young people, notably through the Work-Study Program, ENGIE's Apprentice Training Center, the welcoming of Interns, including those in their final year of middle school.

Improving the onboarding and integration of Young Talent allows the Group to achieve three objectives:

- increasing female representation within teams;
- recruitment in new professions and hard-to-fill positions; and
- more generally, greater Diversity and Inclusion (Young people distanced from employment, the disabled, etc.).

3.4.3.1.5 Academic relationships

To consolidate its leadership position and attract the most promising young talents, ENGIE is fully committed to strategic academic relationships. These relationships are essential to promote ENGIE to a key audience: students from the leading engineering and business schools and universities. Academic partnerships serve as a springboard for young talent, reflecting ENGIE's future and ambitions, while meeting critical needs in terms of professional skills and leadership.

In 2022, ENGIE adopted a strategy and policy focused on the values of diversity, inclusion, equity and parity, with a particular focus on technical professions in engineering. Academic relations have been enriched with the creation of a community of ambassadors and alumni, responsible for projecting ENGIE's image and promoting parity, particularly through the Change MakHers community of the Fifty-Fifty program. Targeted communication initiatives, such as film shoots with JobTeasers and participation in the Junior Enterprises regional and national conferences, have strengthened the attractiveness of ENGIE's employer brand.

These academic initiatives are accompanied by a special focus on diversity and equal opportunities, particularly in schools of excellence. Partnerships with institutions such as ESSEC, Ponts et Chaussées and Polytechnique have been established, with the appointment of a female mentor in a leadership role and the creation of a diversity fresco, or with scholarship funding. Awareness-raising and orientation actions are also carried out in high schools and middle schools with ENGIE experts.

ENGIE enters into privileged relationships with numerous target schools: Centrale Supélec, IFPEN / IFP School, Mines ParisTech, Polytechnique, Arts et Métiers ParisTech, INSA Lyon, Mines Nancy, Centrale Lyon, Ecole des Ponts ParisTech, IDE Paris, CY Tech (ex EITSI), ESTP, CESI Ecoles d'Ingénieurs, Telecom Paris, IMT Atlantique, INP Grenoble, EFREI, HEC, ESSEC , ESCP, INSEAD, KEDGE, Audencia, NEOMA, Grenoble EM, EM LYON, SKEMA, EDHEC, MBS (Montpellier Business School), ESG (Paris / Bordeaux / Toulouse), Université Paris 1 Sorbonne, CY Cergy Paris Université, Université Paris Dauphine, Sciences Po, IAE, Université Paris Saclay, Ecole 42, EPITA, EPITECH, ENSIMAG. These partnerships give their students the opportunity to join the ENGIE adventure through work-study programs, internships and the hosting of PhD students and students researching specific areas.

Examples of international partnerships:

- Partner universities in the United States:
  - Howard University: this university historically intended for African American students (HBCU) is recognized for its commitment to diversity;
  - University of Houston: this university is recognized for the diversity of its student population;
  - Boston University: this university has a business partnership with ENGIE North America, including a commitment to hire two interns each year, highlighting its commitment to education and professional diversity.
- Partner schools in Romania: in collaboration with the Ministry of Education, four middle schools, local town halls and an NGO, these schools engage in dual education and inclusion in technology and society.
- EMI Rabat School in Morocco: it is noted for its female representation initiative, with 35% women in its student population. The EMI Women Engineers Club, established in 2009, plays a key role in promoting female leadership in engineering in Morocco.

Academic events in France and internationally:

- The ENGIE Academic Challenge, an international Group event, illustrates ENGIE's openness and commitment to carbon neutrality by bringing together students from all over the world. This initiative is a testament to ENGIE's proactive approach to meeting its strategic objectives and preempting the talent needed for its development. This event brought students from seven countries in Europe to compete in 2023, following the France edition with 13 leading French higher education establishments in 2022. The next event will take place in Brazil in April 2024.
- Fictional ecology, organized by ENGIE University at the U.Camp in 2023, is a creative approach where participants imagine futuristic scenarios to address environmental challenges. Here, students, experts and teachers designed a fictional city of 2045, exploring decarbonization solutions to environmental, societal and economic issues. It was a stimulating event, generating innovative ideas and increased awareness of climate issues. One edition took place in Paris in June 2023 and another in Dubai in October 2023 (with the following schools: UOWD, American University of Sharjah, Heriot Watt University, Khalifa University, Montfort University).

In 2022, ENGIE conducted no less than 31 Group initiatives in targeted schools, ensuring the inclusion of both elitist and less elitist institutions, with a view to strengthening inclusion. The approach to academic relations has been reconsidered to make it more qualitative, with clear performance indicators ensuring the effectiveness of these initiatives.

ENGIE's participation in the International Summit of the Alliance for Youth in Brussels in September 2022 is an additional example of its commitment to employment, employability and training, illustrated by innovative initiatives such as the ApprentiSwap program.

ENGIE is a premium partner of the CNJE (National Confederation of Junior Enterprises). A Junior Enterprise is an educational association that offers consulting services to companies. The CNJE brings together 200 organizations for 25,000 students.

This partnership continues to give rise to excellent networking opportunities and wonderful projects. At the heart of it is a shared identity: societal commitment and innovation. ENGIE meets the needs of Junior Entrepreneur students by supporting them in their professional career and training them. In return, the close relationship forged with these committed young people allows the Group to remain dynamic and to listen to the needs and aspirations of students, future employees, customers and suppliers of the Group.

ENGIE is thus positioned as a key player, not only in the energy sector, but also in the training and development of young talents, essential to its future growth.

3.4.3.1.6 The Communau'Tech: Technician Ambassadors

Technical professions account for nearly 70% of recruitment needs. These jobs are currently in severe shortage, particularly the maintenance, operation, multi-technical, air conditioning, ventilation and heating professions. To attract new talent in this sector, a network of committed technicians was created five years ago with 10 volunteers from the various Group entities in order to promote their professions and encourage others, especially young people, to take up these job roles.

ENGIE's Communau'Tech is a network of Technicians engaged in the field who strive to make their profession shine with passion and to attract new talent. This system promotes male and female technicians and creates an attractive image of hard-to-fill positions.

The voluntary Technician Ambassadors take part in events for specific professions, jobs forums and trade fairs organized by the Group or technical experts to explain and promote technical professions. They contribute to Group debates and take part in reports and testimonials, webinars and experiments. Members of the Communau'Tech work with schools. They make young people aware of environmental and climate issues and the importance of professions in the transition to carbon neutrality. Lastly, they help to recruit young people to the Academy of Energy Transition, ENGIE's Apprentice Training Center. They explain their professions to generate interest in them.

The Communau'Tech now has 460 Technicians (340 in France and 120 in the European subsidiaries including Italy, Romania and Belgium) of which 52 are women.

The goal is to build a community of 500 Ambassadors at the international level by the end of 2024.

Every year, Communau'Tech comes together to participate in a training session, bootcamp, marketplace and experiential workshops. On July 3 and 4, 2023, 120 technical ambassadors participated in the session during the U.Camp organized in Paris. Attendees enjoyed a variety of new experiences, which created rewarding discussions, interactivity and a pride of belonging. During this session, newcomers were awarded their ENGIE Technician Ambassador diplomas by Communau'Tech sponsors, the Deputy Director of Group Human Resources and the Deputy CEO of ENGIE Solutions.

3.4.3.1.7 Apprenticeships

In an increasingly tight work market, ENGIE relies on young people and apprenticeships as a path of excellence toward its future professions and even greater inclusiveness in its recruitments.

In its Work-Study Program, ENGIE aims to achieve:

- 10% of apprentices in the Group's workforce on permanent and fixed-term contracts in France excluding regulated entities GRDF and GRTgaz at the end of 2030;
- a level of transformation into permanent or fixed-term contracts in the technical or digital divisions in France of 50%.

This Group commitment and the significant efforts by employees targeting the heart of the societal needs of the region have been a success. The Group had 3,675 young people on work-study contracts at the end of 2023.

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In France, ENGIE has 2,406 students following work-study programs excluding regulated entities GRDF and GRTgaz.

The percentage of staff undertaking work-study programs compared to permanent and fixed-term contracts was 8.5% in France excluding regulated entities GRDF and GRTgaz at the end of December 2023. This rate is equivalent to 2022. ENGIE is the leading employer of work-study program students in the industrial sector, in terms of number and volume, and aims to reach a rate of 10% by end-2030.

To attract rising talent, visibility and recruitment campaigns were carried out and inclusive recruitment efforts made.

Support through training initiatives for tutors, which are key to the project's success (TUT'OR platform) as well as for the Community of work-study program students (Young Talent Community) contributes to professional development. ENGIE has therefore always worked closely with the major French business schools, Universities and Apprentice Training Centers.

Finally, the Group is committed to the employment of young people and each year organizes "*le mercato*" of graduates (dedicated Internet site, employment days) to encourage internal mobility and recruitment on permanent, fixed-term and Volunteer for International Experience contracts. At the same time, an external system ("*Engagement Jeunes*" platform) registers volunteers in a qualified pool of talent shared with the partners of the "*Collectif des entreprises pour une économie plus inclusive*" (Group of companies for a more inclusive economy).

3.4.3.1.8 Apprentice Training Centers

In November 2020, ENGIE opened its own Apprentice Training Center in France: the "Academy of Energy Transition." This human-scale Academy will welcome more than 400 students by the end of 2024. Located in Ile-de-France and several French regions (Auvergne-Rhône-Alpes, Occitanie, Provence-Alpes-Côte d'Azur, Hauts-de-France, Nouvelle-Aquitaine and Pays-de-la-Loire), the Apprentice Training Center (CFA) offers diploma courses ranging from the vocational Baccalaureate Diploma to Bachelor degrees for young people aged 16 to 29 and for adults looking to retrain. In close partnership with training bodies, that are recognized for their professionalism and know-how, the aim of these courses is to meet the changing needs of the Group and to attract more young people, particularly women, to the Group's professions of the future.

In addition to the academic training courses on offer, the Academy also offers additional fully digital contextualized ENGIE modules to its work-study students. Thanks to virtual reality, the Academy also works on designing training modules relating to the Group's challenges in terms of health & safety at work. Virtual reality helmets are being rolled out in all classes to train work-study students in electrical safety and lock-out.

The Group has also taken action to identify, train and promote tutors, who are key players in the successful integration of work-study students. Days for training, collective intelligence and the sharing of practices are organized in several cities in France. They bring together voluntary tutors from all Group entities and give them the opportunity to develop their skills and discuss their role as a tutor and the relationship with young people.

As part of the promotion of the Group's technical professions and its role in supporting the sourcing of candidates, the Apprentice Training Center organizes Tech Days in different regions of France. These days allow us to introduce young people from training institutions to all of the Group's professions. They are also open to an external audience to generate applications from qualified candidates.

ENGIE's Apprentice Training Center has also set up pre-apprenticeship courses. They are aimed at welcoming young people without diplomas or qualifications for a seven-week course within the Group. In addition to academic refresher modules, young people can discover the maintenance professions, meet Technician Ambassadors, visit ENGIE sites and talk to different stakeholders (national police, RATP, CRIPS, etc.) as part of citizenship training. They are also invited into one of the Group's entities for three weeks for a discovery and observation internship with a view to signing an apprenticeship contract. These courses resulted in a positive outcome rate of 60% (entry into employment or training, apprenticeship contract, POEC employment training scheme, etc.).

3.4.3.2 Training and Development

The Group offers its employees opportunities to develop their skills through a range of training programs, career paths and personal development actions. It helps develop employability by adapting skills to changes in occupations and technologies. The ecological transition and technological accelerations due to digitization and artificial intelligence are transforming the professions of employees. They are also creating tensions in terms of qualified personnel in the Group's many businesses, whether traditional or newly emerging. To tackle this, ENGIE is implementing a social strategy to increase skills in three areas: advance skills management to prepare for the future; enhanced internal mobility to serve its four main businesses; and, lastly, professional training objectives for all employees. They are being implemented in order to favor the enrichment of tasks, the renewal of experiences, and the consideration of employee initiatives and empowerment. This strengthens their engagement and fosters their development and employability, serving the sustainability of the Group's activities. This strategy is part of the training and development policy in place since 2017.

3.4.3.2.1 Training: 100% ambition

Developing skills and maintaining employability are crucial areas for the Group's competitiveness and performance and for its ability to roll out its strategy. Since February 2020, ENGIE has been pursuing its non-financial objective of training 100% of employees by 2030.

To achieve this goal, ENGIE offers a skills development approach which highlights key skills by population and the related key training needs. In 2022, this strategy included the implementation of Learning governance and the creation of a quarterly Learning decision-making body. These bring together Training managers at the Group's Global Business Unit and regional level, with a view to aligning and prioritizing the skills needs of employees. In 2023, efforts focused on the implementation of the Group Learning Management System (LMS) in terms of strategy, governance, process and communication. The LMS will be rolled out in early 2024 for Group employees, and will, in particular, provide for stricter management in the rollout of the Group's mandatory training courses.

In this context, in 2023 ENGIE identified three mandatory training courses, on health & safety, Ethics and Cybersecurity, to be carried out in e-learning format by all employees. The Group has also made two new training programs mandatory for executives to master ENGIE's strategy and also the means to execute it through the ENGIE Ways of Leading ("EWOLs"). Since the second half of 2023, a management path for all executives has also been rolled out at the international scale to strengthen the managerial and leadership culture and skills of the Group's executives. It allows for adaptation to the executives' needs, according to their managerial experience. The rollout has been entrusted to ENGIE University.

In addition to the prioritization of key skills and the development of the profession academies of the Global Business Unit, ENGIE is committed to instilling a Learning culture. Moreover, ENGIE seeks to offer regular opportunities to learn, by promoting flexibility in learning approaches. In 2021, the Group set up a Mobile Learning platform. This facilitates access for employees to training modules on Business fundamentals and Group Culture such as health & safety, hydrogen and energy saving. The emphasis on this approach is such that the mandatory training on the Group's strategy for executives of the Group is hosted on this mobile platform.

As a result of the implementation of all these systems, ENGIE trained 86.1% of its employees in 2023.

3.4.3.2.2 ENGIE University

For more than 15 years, ENGIE University has been supporting the professional and personal development of employees, in particular executives and managers. In addition to being a Qualiopi certified training center, ENGIE University is a place for strategic thinking regarding Group Learning and Development policies, as well as current and future Skills subjects.

Since 2021, ENGIE University has stepped up the implementation of programs enabling every employee to learn about the Group's new strategy. In 2023, in addition to the Sustainability Academy programs, ENGIE University created short e-learning courses on the ENGIE Ways of Leading and the ONE ENGIE strategy. Board games have also been designed to facilitate the onboarding path and employee engagement (see Section 3.4.3.1.3). The Sustainability Learning Days were organized over a continuous 48-hours period in fall 2023, which allowed all Group employees, regardless of their time zone, to take part in the event as either a trainer or trainee. In total, more than 1,300 individuals took part in Speed Learning sessions, conferences and Learning Expeditions on subjects relating to business transformation, the decarbonization of customers and internal transformation.

With hybrid modes of working continuing to be popular, ENGIE University decided to maintain on-site programs and digital versions (e-learning and virtual classes, U.learnGO mobile app). This allows as many employees as possible, throughout the world, to continue to receive training.

The year 2023 saw the organization of four "U.Camps," ENGIE University's temporary traveling campuses which gather several hundred employees for one week at a single site in France or internationally. This on-site event brings together employees from a range of entities and business lines for high-quality training courses and social events. It is a major contributor to the culture and engagement at ENGIE, at the same time as offering a learning experience to participants to reinforce their feeling of belonging, improve performance and accelerate the Group's transformation. In total, more than 2,500 people participated in the training sessions, social events and marketplace at the U.Camps in Houston, Brussels, Paris and Dubai in 2023.

As the transformation of the Group also entails the evolution of business lines, ENGIE University has been developing Academies for its four Global Business Units and certain divisions (Procurement, HR) since 2022. These Academies, some of which were still under construction at end-2023, offer courses for:

- an improvement in the professionalization and operational excellence of employees;
- the establishment of a shared culture;
- the discovery of the Group's professions, promoting career development;
- and the promotion of internal and external expertise within entities.

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Proportion of employees trained

	2023								2022	2021
GRI 404-2	Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	*o/w GEMS*	Group	Group	excl. EQUANS
Proportion of women trained	94.9%	67.5%	81.8%	95.2%	100.0%	91.1%	*86.5%*	83.3%	82.8%	80.3%
Proportion of men trained	96.4%	85.5%	85.5%	90.4%	100.0%	82.9%	*78.6%*	87.1%	84.1%	82.6%
Proportion of employees trained	**96.0%**	**80.2%**	**84.8%**	**91.9%**	**100.0%**	**86.5%**	***81.8%***	**86.1%**	**83.8%**	**82.0%**
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

Training hours

	2023								2022	2021
GRI 404-1	Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	*o/w GEMS*	Group	Group	excl. EQUANS
Total number of training hours	190,350	789,671	658,149	392,927	140,933	156,319	*45,531*	2,328,349	2,126,584	2,254,023
Average nb. of hours per person trained	**40**	**46**	**19**	**28**	**67**	**18**	***16***	**28**	**27**	**28**
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*98.6%*	*100%*

Breakdown of training hours by topic

	2023								2022	2021
GRI 404-1	Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	*o/w GEMS*	Group	Group	excl. EQUANS
Business techniques	33.3%	32.7%	33.8%	43.0%	63.7%	28.6%	*33.8%*	36.5%	38.8%	41.7%
Quality, safety and environment	42.5%	16.7%	44.0%	31.1%	27.2%	9.9%	*8.7%*	29.0%	28.2%	30.8%
Languages	6.6%	1.0%	2.3%	1.0%	0.1%	11.9%	*11.4%*	2.4%	2.4%	2.3%
Management, personnel development	12.2%	7.7%	9.9%	10.4%	0.0%	32.9%	*31.2%*	10.1%	23.8%	17.8%
Others	5.3%	41.9%	10.1%	14.4%	9.0%	16.7%	*14.8%*	22.0%	6.9%	7.4%
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*98.6%*	*100%*

3.4.3.3 The talent policy

The Group Talent Policy contributes to ENGIE's performance by developing its human capital.

It is geared toward all employees and is aimed at anticipating requirements in terms of skills, securing key positions and improving the loyalty of employees.

Economic, social and environmental developments have impacted both the needs of the Company and, for employees, the ways of working, relationships at work and drivers of motivation and engagement. In order to tackle it, ENGIE is drawing on the quality of the "talent experience" of employees, from the moment they are hired and during their careers, through:

- a Talent cycle that encourages regular meetings between the manager and the employee during the year:
  - a performance interview to review the past year, on both "What" (what has been achieved) and "How" (how it was achieved, particularly in relation to the Group's values, EWOWs and EWOLs), as well as setting objectives for the coming year. The results of this interview feed into the annual compensation campaign;
  - a development interview to identify skills development needs, in the current role, or to prepare for future career developments and formalize the individual development plan;
  - a mid-year interview to check the progress of objectives and adjust as necessary;
  - in addition, a career interview with his/her HR Business Partner is possible for any employees who wish, to express a desire for mobility or prepare for the next steps in his/her career.
- a bottom-up approach to identify key positions within the Group, ensuring the implementation of succession plans and the identification of high-potential talent, from the entities to the Group's managing bodies. The 2023 "People & Position Review," conducted at a country level before being rolled out at a regional level, was then consolidated by business line and function. This approach allows the Group to take a cross-divisional view when identifying more than 3,000 of its key positions as well as more than 6,000 talents that have the potential to fill these positions;
- personalized career paths that meet the Group's needs primarily by prioritizing a cross-divisional approach, incorporate the aspirations of employees and draw on the diversity of the Group's business lines and geographic locations. A pilot was launched in 2023 within two GBUs and one of the supports functions to check the operational performance of the Career Path approach and prepare for widespread rollout in 2024;
- personalized development plans based on common tools (mentoring, feedback, personality questionnaires, short-term career moves, training, etc.) and specific programs proposed over time, in particular to the Talents identified as having the potential to hold Global Leader positions or key positions in the Group (the Boost program);
- a cross-divisional approach to developing the leadership of the Group's experts, ExpAND.

3.4.3.3.1 Talent strategy: a real challenge to develop and retain the Group's talents

The Group registered a 12.7% decrease in departures in 2023: 9,186 departures compared with 10,528 in 2022. Talent retention and management actions have limited the combined impacts of changes in the economic context and skills shortages. The resignation rate fell by 1.2 percentage points to an overall rate of 5.4% for the Group. It remains more pronounced internationally with a resignation rate of 11.4% in AMEA and 9% in North America. In France, the resignation rate is further reduced, reaching 3.7%.

Particular attention has also been paid to the evolution of managers' resignation rates, with a greater reduction in the resignation rate for this category (-2 percentage points compared with -1.2 percentage points for all employees). The specific action plans identified last year, which, tailored to individual or more collective needs, appear to have borne fruit and continue to be implemented. These aim in particular to:

- improve the ability of managers to identify, develop and retain their employees;
- offer rapid solutions in response to changes in the market;
- when necessary, improve the employee experience throughout all stages of their careers;
- monitor and anticipate the changes in trends locally.

GRI 401-1	2023 Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	o/w GEMS	Group	2022 Group	2021 excl. EQUANS
Departures	285	953	5,460	1,669	84	735	*218*	9,186	10,528	9,883
Retirements	42	452	449	168	66	66	*13*	1,243	1,309	1,325
Resignations	159	243	3,378	955	13	451	*163*	5,199	6,275	5,301
Dismissals	84	258	1,633	546	5	218	42	2 744	2 944	3 257
including contractual terminations	*35*	*55*	*373*	*253*	*0*	*87*	25	*803*	*897*	*1 185*
Resignations rate	**3.2%**	**1.1%**	**8.0%**	**6.0%**	**0.6%**	**4.5%**	***4.7%***	**5.4%**	**6.5%**	**5.2%**
Turnover rate*	**4.9%**	**2.3%**	**11.9%**	**9.4%**	**0.9%**	**6.7%**	**5.9%**	**8.2%**	**9.6%**	**8.4%**
% reporting	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

* Excluding retirements.

GRI 403-2	2023 Renewables	Networks	Energy Solutions	Flex Gen & Retail	Nuclear	Others	o/w GEMS	Group	2022 Group	2021 excl. EQUANS
Absenteeism rate	4.7%	7.8%	6.0%	6.6%	5.7%	5.5%	*6.5%*	6.4%	6.6%	5.4%
Absenteeism rate due to sickness	1.9%	3.4%	3.0%	4.2%	4.7%	1.8%	*2.0%*	3.2%	3.6%	3.2%
% reporting	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

3.4.3.3.2 Career management (Career Paths)

Career management is a key element of the Group's HR strategy to optimize talent retention in the Group. In order to meet the changing skills needs of the Group and employees' expectations, it is important to better anticipate the development of skills and to provide more visibility on possible career developments within the Group.

The different areas of work that were strengthened in 2023 are:

- succession plans for the Group's key positions, to better adapt the development plans;
- communication on examples of career paths within the Group, to provide inspiration;
- definition of the expected experience and skills for certain key positions in the Group, for greater transparency.

In 2023, the Group established common rules and a reference framework in which the Global Business Units can organize career development and also create cross-divisional exchanges between the different GBU according to the Group's needs, at all levels of the organization.

The launch of the new HRIS has enabled the integration of career path-related features such as the presentation of Talent profiles, as well as a more refined search for Talents among all employees.

New rules have also been shared with the various Group entities in order to propose common rules for supporting employees in their short- and medium-term career paths, with the aim of encouraging employees to prepare for their future mobility.

3.4.3.3.3 ENGIE Boost: the program for future leaders

ENGIE Boost is a system for identifying, developing and retaining talent with high leadership potential at all levels of the organization in order to prepare them to occupy strategic roles at the Group. It comprises three programs:

- Rise! and Pulse! are managed at the Group level: over a 24- to 36-month period, they prepare leaders who are likely to rapidly take strategic responsibility within ENGIE;
- A third program, Up!, which is managed by the GBU, entities and geographic areas, focuses on talent likely to move into key positions within the Group.

Inclusion in the Boost programs at Group level is managed by the Talent & Diversity Department. They ensure a consistent, coherent approach by implementing People Reviews with the GBU and the support functions. In 2023, the Pulse! program brought together 93 Talents with the potential of moving to one of the Group's 300 strategic positions during their next career move (of which 36.6% were women and 43% international employees). The Rise! program brought together 197 Talents with the potential of moving to one of the Group's 360 strategic positions in two or three career moves (of which 56.3% women and 45.7% international employees).

Inclusion in the Up! programs is managed locally, through the People Reviews of the GBU, regional hubs, divisions and entities. In total, 900 talents take part in the ENGIE Boost initiative's Up! programs.

These programs are an opportunity for employees to accelerate the development of their leadership skills, their knowledge of the Group and its strategy. This enables them to ensure that they are in the best position for future development toward a key role. It is also an opportunity to create an active and diverse community of leaders who are able to engage their teams in the service of the Group's strategy. In 2023, Booster Week was held for the first time, bringing together the participants of the Rise! and Pulse! programs for a week-long event based around leadership, marketplace and keynote programs, interventions by Executive Committee members and approaches to preparing for the next career steps. This event was an opportunity for everyone involved to better understand the diversity of the Group and the richness of its business lines.

3.4.3.3.4 ExpAND: the program for Experts

ENGIE has been developing the ExpAND program since 2020, which aims to identify, develop and recognize Group experts in a cross-divisional manner. This program complements specific programs dedicated to improving technical skills in key areas for the Group, directly managed by the GBU.

The ExpAND program develops communities of expertise and makes the "ExpANDers" ambassadors for ENGIE both inside and outside the Group. It is also a development program based on individual applications and co-option. It allows experts to develop their "soft skills," such as leadership and communication. By the end of the first three campaigns, 853 ExpANDers had been identified: 62 Global, 468 Key and 323 Local in one of the 31 expertise lines identified, either technical, technological or functional. The three levels of experts have been established – Global, Key and Local – according to their impact scope and their exposure.

As expertise management is a key issue for the Group, this program is currently refocusing on the Group's strategic areas of expertise, in line with business needs, strategic workforce planning and knowledge management. The redefined ExpAND program should make it possible to identify experts more systematically and strengthen the development of their leadership skills and career path.

3.4.3.4 Group mobility

Mobility practices are strongly encouraged and promoted within ENGIE and a Group Mobility policy sets out the foundation of the seven major mobility principles within the Group since September 2019. The fluidity of resources and employees' ability to evolve are a measure of how their employability and sense of belonging to the Group is being maintained. In this way, mobility between the Global Business Unit and entities is facilitated. They are a necessary condition for the Group's transformation and agility. Committees meet to facilitate the matching of positions with internal profiles and carry out follow-up on the Group's own internal HR platform.

ENGIE thus encourages the mobility within France and internationally of all of its talents as part of an approach aimed at supporting each of their career plans. These career moves may be for shorter or longer periods.

In terms of international mobility, and by way of example, in 2023 the Group validated:

- a new policy of short-term assignments (from 2 to 12 months), which aims to support and encourage employees wishing to gain experience abroad, especially for young employees at the start of their career;
- a more precise segmentation of possible career moves abroad over the longer term (beyond 12 months), to align a more appropriate variety of compensation and support packages with the profiles concerned.

ENGIE also continues to operate an effective, innovative, win-win system for employees and managers: *Skill'Lib*. This is a skills-based marketplace that offers short-term missions to employees according to the skills that they have acquired or are developing. This system promotes learning through experience for employees. At the same time, it enables managers to quickly access relevant internal skills that meet their business needs. It perfectly meets the Group's strong need for reactivity and agility, in terms of both resources to carry out temporary missions as well as the development needs of the Group's Talents.

3.4.4 WORKING CONDITIONS AND SOCIAL DIALOG

3.4.4.1 Social protection, employee savings plans, compensation and employee shareholding

3.4.4.1.1 Social protection and pensions

ENGIE ensures that it adheres to the best practices of major international groups. The Group ensures the competitiveness of its entities' systems in relation to local practices in terms of social protection and pensions. ENGIE monitors the performance of the social protection and retirement plans in place in its various entities, thanks mainly to a unique digital tool allowing for the mapping, benchmarking and assessment of programs.

This facilitates the pooling, and therefore optimization, of its plans. The entities also have access to international insurance networks which provide optimized subscription options, with the potential to share local and global surpluses.

Within the France scope, ENGIE signed a Group agreement in July 2022 to set up a "PERO" (Plan d'Epargne Retraite Obligatoire – mandatory company retirement savings plan) insurance scheme common to all of the Group's French entities. The Group PERO has been gradually rolled out since 2023 in the majority of entities and allows employees to benefit from additional income at the time of their retirement. The PERO is led by a joint monitoring committee that brings together employee representatives and the Group Human Resources and Finance Departments each year.

3.4.4.1.2 ENGIE Care program

In 2020, ENGIE launched its ENGIE Care program, aimed at establishing a minimum level of social protection for all its employees, regardless of their status, employer or the country to which they belong.

The ENGIE Care program provides for four pillars of social protection and a gradual roll-out.

In 2020, the first two pillars were rolled out across the world, allowing all employees to benefit from:

- health coverage, guaranteeing reimbursement of at least 75% of costs in the event of hospitalization.
- protection for the employee's family or loved ones in the event of their death by paying a benefit equal to at least 12 months' salary.

In 2022, the global agreement on fundamental rights and CSR incorporated the ENGIE Care program into the fundamental social rights of the Group's employees. It also required all Group entities to implement the other two pillars of the ENGIE Care program by the end of 2024. The following is thus guaranteed to each employee:

- the payment of a capital amount equivalent to at least 12 months' salary, in the event of total and permanent disability to work;
- full pay for a minimum of 14 weeks in the event of maternity leave and a minimum of four weeks for paternity leave. This Parenting pillar contributes to strengthening the work-life balance and equal opportunities for women and men.

ENGIE Care thus raises the level of social protection for its employees and helps contribute to employee retention and strengthens ENGIE's CSR policy.

3.4.4.1.3 Group employee savings plans policy

3.4.4.1.3.1 Savings plans

In France, since the end of 2009, the Group's employees have had access to a Group Savings Plan (Plan d'Épargne Groupe – PEG). The plan includes employee shareholding funds as well as a large range of diversified savings options. The total is more than €2 billion in assets at the end of 2023. Provisions have also been introduced in certain countries outside of France. These allow employees to save under terms adapted to local laws.

3.4.4.1.3.2 Retirement savings plans

In France, since 2010, all employees may, at their own pace, build funds for retirement through contributions to the Collective Retirement Plan (*Plan d'Épargne pour la Retraite Collectif* – PERCO). Outside France, plans exist in some countries that allow employees to supplement their pensions by making voluntary contributions on favorable terms.

3.4.4.1.3.3 Principles of non-financial management

As part of these plans, in France, ENGIE only selects management companies whose investment policies take environmental, social and governance (ESG) criteria into account. As such, they are all signatories to the United Nations Principles for Responsible Investment. In addition, a specific ESG policy has been defined in consultation with social partners, regarding aspects such as job creation and sustainable development goals. The Group Savings Plan (PEG) is now almost entirely composed of Article 8 SFDR (Sustainable Finance Disclosure Regulation) products. The Collective Retirement Savings Plan (PERCOL) is entirely composed of Articles 8 or 9 SFDR products, including a SRI (Socially Responsible Investment) labeled fund.

3.4.4.1.3.4 Solidarity funds

In France, the ENGIE solidarity employee mutual Fund (FCPE) called *Rassembleurs d'Énergies Flexible* is one of the largest dedicated solidarity funds in the French market. This fund is classed as an impact fund and has supplemented the range of Group Savings Plan and Retirement Savings Plan investment products since 2012. It enables employees to take part in a social initiative that is consistent with their occupations.

3.4.4.1.4 Profit-sharing and incentive plans

Due to the coexistence of separate legal companies, there is no common collective profit-sharing and incentive plan for the Group. Collective variable compensation systems are widely developed in the subsidiaries. In 2023, the overall volume of employee profit-sharing, incentive plans and employer contributions for the different French subsidiaries reached €167 million.

At the ENGIE S.A. level, an incentive agreement was signed with all the representative trade unions on June 30, 2021 for a period of three years. This agreement provides for the payment of an envelope of 7.5% of the principal compensation in the event that targets are exceeded (financial targets for 4.5% and non-financial for 3%). The agreement notably includes a non-financial criterion related to the reduction of the carbon footprint of employees.

The incentive amount paid out in 2023 for 2022 was €16,452,556. The agreement setting up the employee profit-sharing system for ENGIE S.A. was signed on June 26, 2009. The application of the statutory profit-sharing formula for 2022 resulted in non-payment to employees in 2023.

3.4.4.1.5 Employee shareholding

With an employee shareholding level of more than 3%, ENGIE has a long-standing dynamic and innovative shareholding policy. In December 2023, ENGIE received the FAS-IAS (French Federation of Employee and Former Employee Shareholders' Associations) Index Grand Prize for its LINK employee shareholding program. The breakdown of the shares held directly or indirectly by employees is provided in Section 5.4.2.2.

In 2022, ENGIE organized an employee shareholding operation in 21 countries as part of the Link 2022 program. In an uncertain geopolitical and economic context, almost 25,600 employees demonstrated their strong commitment to the Group's project by subscribing to the different formulas offered. The subscribed volumes represents close to 16,400,000 shares, i.e. 0.66% of the share capital. To allow employees to participate in the Group's growth and share these results, ENGIE plans to repeat this type of operation in 2024, with the addition of the option to invest through profit-sharing and incentive plans in France.

3.4.4.1.6 Performance Shares and long-term incentives

ENGIE grants Performance Shares, which are described in Section 4.2.6.

These shares, which have a vesting period of three years, are subject to internal and external performance conditions. This plan is not reserved for senior managers only and ENGIE has a particularly wide allotment policy.

In 2023, a new plan with new internal and external performance conditions was proposed and will be submitted for approval by the Shareholders' Meeting on April 30, 2024. It is expected that around 5,200 employees worldwide benefit from this plan.

3.4.4.2 Social dialog

Quality social dialog is conducted with commitment at the appropriate level: global, European and corporate. It made it possible to implement the Group's reorganization projects in a constructive and responsible manner, with collective bargaining agreements where necessary to set out the conditions of this social dialog and support measures for the restructuring.

Within national, European and, since 2022, global representative bodies and through national, European and global collective bargaining agreements, ENGIE involves its social partners in the implementation of its social ambition, which has been opened and broadened to take into account environmental and social challenges.

3.4.4.2.1 Representative bodies, right of association and union rights

At Group level, social dialog is organized around three bodies that are privileged forums for consultation between management and employee representatives: the French Group Works Council, the European Works Council (EWC) and the World Forum.

3.4.4.2.1.1 The French Group Works Council

The French Group Works Council represents the 46,074 Group employees located in France and has 30 full members. The French Group Work Council is a body for information and discussion with representatives of institutions representing the employees of French companies. It meets twice a year.

3.4.4.2.1.2 The European Works Council (EWC)

The EWC is the body that represents 74,831 Group employees in Europe; it is composed of around 30 members. The EWC aims to maintain and improve social dialog around the Group's policies and strategies; it is also a body that provides information and consultation on projects and cross- border subjects. The body holds two plenary meetings each year and is supported by a Secretariat which meets around 10 times a year, working groups and expert reports.

3.4.4.2.1.3 The World Forum

The World Forum is a conventional body for global social dialog composed of 18 members representing the Group's 97,297 employees across the world. It strives for a balanced representation between the countries and geographic areas in which the Group operates. Its purpose is to ensure the effective implementation of the global agreement signed in January 2022. Its first meeting was held on September 8, 2022. This meeting was an opportunity to review the progress of the ENGIE Care program and the achievement of objectives set out in terms of professional equality, parity and training on the international scale.

3.4.4.2.2 European agreement

In addition to the Group agreements in force at global, European and France level, this year saw the renegotiation of the European agreement governing the functioning of the European Works Council. The ENGIE EWC remains the central body for Group social dialog, equipped with the means to fully assume its role.

3.4.5 NOTE ON THE CALCULATION METHOD FOR SOCIAL INDICATORS

3.4.5.1 Scope of reporting

The indicators published in this report relate to fully consolidated companies, whose capital and management are under the control of ENGIE. The social indicators are fully consolidated, regardless of the percentage of the company's capital owned. The reporting scope is the same as the Group Finance Department. Data is submitted by the Global Business Units and regional hubs created as part of the Group's organization established in 2021. Following the disposal of EQUANS in October 2022, data relating to this scope of activity was excluded from the social indicators published in 2021 and 2022. A reporting level is attached to each indicator, according to the Group's workforce covered.

3.4.5.2 Consolidation methods

The content of the report is based on indicators selected to reflect the main social and societal impacts of the Group's activities. The indicators are chosen in accordance with the Global Reporting Initiative (GRI) standards.

The indicators for this report are consolidated using defined procedures and criteria. Data on the organization's structure, employee turnover, working conditions and training were consolidated by aggregation.

3.4.5.3 Tool

The social indicators are coming from Group social reporting (GSR). These are set out in a shared Group database that may be viewed on request. The collection, processing and reporting of data entered by the local entities, subsidiaries controlled by the ENGIE Group, is carried out in the SyGMA consolidation tool, in accordance with the IFRS financial scope.

3.4.5.4 Control

The social data are successively consolidated and verified by each operating entity before verification at the Group Human Resources Department level. ENGIE's statutory auditors then verify the social information collected and issue a reasonable assurance report. This work is carried out at the same time as the work of the independent third party responsible for verifying the non-financial performance statement published in the ENGIE Group's management report.

3.4.5.5 Additional information on some indicators

3.4.5.5.1 Employment

Administrative employees are recognized under "senior technicians and supervisors." The Belgian entities in the energy sector do not declare "workers, employees and technicians" (Electrabel).

Contractually, unskilled or low-skilled workers have employee status. This might cause an underestimation of this category. The French concept of cadres (managers) (≥ 300 points on the Hay Guide Chart, the universal job classification and evaluation system) is sometimes difficult to understand in other countries. This can lead to a slight underestimation because some entities may take only their senior management into account.

3.4.5.5.2 Employee flows

Indicators in this Section have been calculated on a current scope basis, i.e. the fully consolidated reporting entities included in the scope of consolidation at December 31, 2023. The "lay-offs" indicator includeS contractual terminations.

3.4.5.5.3 Diversity and equal opportunity

The declared percentage of employees with disabilities provides the best possible information on the inclusion of people with disabilities. The Group does not consider it relevant to provide a reporting percentage for this indicator, since some entities are unable to gather the relevant information due to local regulatory restrictions.

With regard to the gender pay gap, the calculation scope covers entities with more than 50 employees in France and more than 250 internationally. The Group relies on the methodology of indicator 1 of the French EgaPro index.

3.4.5.5.4 Apprenticeships

The work-study rate is a rate indicating the percentage of employees on apprenticeship contracts compared to permanent and fixed-term contracts at the end of the period. The number of apprentices is excluded from the denominator.

Following the revision of the 2030 CSR objectives, the Apprenticeship objective is to reach a threshold rate of 10% in France by 2030, excluding regulated entities GRDF and GRTgaz.

3.4.5.5.5 Training

When the timelines do not allow for all data to be reported, the most recent are provided as well as a forecast of the missing data at year-end.

The definition of the indicator was changed in 2020 to ensure both on-site and e-learning training courses. The format and duration of a training may vary but must include a description of educational content. The breakdown of training hours by topic does not include e-learning hours.

3.4.5.5.6 Organization of working time

The working hours of personnel within the Group companies are organized within the legal framework for working time, which changes from country to country.

Days of absence per person are calculated according to the Group convention of eight hours of work per day.

3.4.6 HEALTH & SAFETY POLICY

3.4.6.1 Performance

The Group's performance in terms of health & safety is as follows:

- a total lost-time injury frequency rate for employees and subcontractors operating on site with controlled access of 1.8 (2.0 in 2022), which is below the maximum target for the year of 2.0;
- a severity rate of lost-time accidents for employees of 0.07;
- a fatality rate [1] of 0.019. This fatality rate is defined by the international standard GRI-403 (published by the Global Reporting Initiative) relating to the publication of performance indicators covering health & safety in the workplace. The fatality rate concerns all people working for the Group.

The number of fatalities following injuries directly related to work among Group employees, temporary workers and subcontractors was six in 2023, two Group employees and four subcontractors. In addition to this were four employee fatalities and six subcontractor fatalities due to natural causes occurring in the workplace or during working time with no direct link to professional activities.

The prevention of serious and fatal accidents led to the definition and implementation of an ENGIE health & safety transformation plan, ENGIE One Safety, which is presented in Section 3.4.6.3.

3

3.4.6.2 The health & safety management system

Health & safety policy

The Group's health & safety policy sets out the key principles for the management of health & safety. A reviewed version of this policy was published in 2022 as part of the introduction of a global framework agreement covering fundamental rights and ENGIE's social responsibility. The agreement incorporating the policy is available on the Group's website at the following address: www.engie.com/en/news/international-social-agreement.

The Group's health & safety policy is implemented through thematic Group health & safety rules and technical standards to control the Group's major risks in particular.

The Group's health & safety performance indicators are defined in the General Organization Procedure GOP01.

Health & safety governance

Occupational health & safety is led by the Group's health & safety Department, which reports to the Transformation & Geography Department.

A Group Health & Safety Management Committee chaired by the Group's Health & Safety Vice President, including the health & safety managers of the four GBU and of the Nuclear entity, meets every fortnight. The role of this committee is to define the indicators to be monitored and the objectives, to decide on actions to be implemented and to ensure the operational roll-out of the Group's health & safety transformation plan, ENGIE One Safety.

In addition, the Group's performance in terms of health & safety at work is presented and discussed at meetings of the:

- Executive Committee;
- Ethics, Environment and Sustainable Development Committee (EESDC);
- Board of Directors.

In 2023, all in-depth analyses of fatal workplace accidents were presented to the Executive Committee in the presence of the operating manager involved and to the EESDC. Regular updates were also provided at meetings of the Board of Directors and the Operational Management Committee (OPCOM).

Health & safety performance criteria are incorporated into the annual variable portions of compensation of the Chief Executive Officer (see Section 4.2.1.2) and other members of the Executive Committee. The annual variable portions of executives also include health & safety performance criteria within their scope of activity. A malus system is in place for executives who have had a fatal accident within their scope.

The health & safety performance is shared with managers and the Group's Health & Safety functional line. They are distributed within the entities via managers and made available to all employees on the Group Intranet.

3.4.6.3 ENGIE One Safety transformation plan

Following fatalities in 2021, a specialist consultant was charged with carrying out a full assessment of the Group's health & safety culture and organization.

After having analyzed its serious and fatal accident prevention system and following the recommendations made by the consultant during their assessment, the Group has drawn up, in partnership with its operating entities, a major health & safety transformation plan called ENGIE One Safety. The aim of this plan is to sustainably eradicate serious and fatal accidents affecting individuals who work for the Group – employees, subcontractors, temporary workers, etc.

As part of the implementation of this transformation plan, several topics have been addressed to define and / or strengthen the provisions to be implemented in order for the Group to achieve its long-term objective of zero severe and fatal accidents as early as possible.

(1) The fatality rate is defined as the number of fatal accidents following injury multiplied by 1 million divided by the number of hours worked.

3.4.6.3.1 ENGIE's Safety Essentials

The analysis of fatal accidents that have occurred in the past led the Group to make a simple observation: some concrete rules, if they had been respected, would have prevented most of these accidents. These rules have been called the "Life Saving Rules."

These Life Saving Rules are part of the basic provisions put in place to combat severe and fatal accidents, provisions that are known as the "Safety Essentials." In addition to the nine Life Saving Rules, these Essentials are:

- the identification and handling of HiPo (events with high potential of severity) and other incidents related to the prevention of serious accidents (e.g. failure to respect a Life Saving Rule);
- "Stop the Work" if the safety conditions are not met;
- the "Last Minute Risk Assessment" to be carried out before starting or resuming any activity;
- "Shared Vigilance," which involves also ensuring the safety of people working in the same environment.

Set up a few years ago, the Safety Essentials were the subject of a new communication campaign in 2023: new graphics, new materials (Essentials leaflet, posters, screen wallpapers, dedicated badges), a new, more engaging approach to tackling them, new delivery to work teams, especially on the occasion of the World Safety Day held in April.

3.4.6.3.2 ENGIE One Safety Induction

In 2023, the Group developed an e-learning course for all Group employees and subcontractors to embed the Safety Essentials into daily practices. This e-learning course, called "ENGIE One Safety Induction," will be compulsory for all.

This online course, lasting approximately 60 minutes, was designed jointly by the Group's Health & Safety Department and ENGIE University with the learning objectives of:

- understanding why it is essential to take this e-learning course;
- becoming familiar with and knowing how to apply the Life Saving Rules;
- knowing how and when to stop work if it cannot be done safely (Stop the Work);
- understanding the importance of Last Minute Risk Assessment;
- knowing how to intervene when a person does not work safely (Shared Vigilance).

This new learning tool was launched at Safety Stand Down on October 18, 2023 (see Section 3.4.6.5).

3.4.6.3.3 Strengthening health & safety standards and rules

As part of the ENGIE One Safety transformation plan, several new health & safety standards and rules have been developed.

A new Group standard describing the technical requirements to be met for each Life Saving Rule has been rolled out. This standard includes detailed provisions to be followed, based in particular on:

- analysis of the root causes of the Group's severe and fatal accidents;
- comparison with best practices implemented by the Group's peers.

The application of this standard is mandatory for any person working on behalf of the Group.

ENGIE has also developed a new standard dedicated to the management of health & safety risks in industrial projects ("DOP25"). The objective of this standard is to define the processes, methodologies to be applied and deliverables to be produced relating to risk management throughout the various phases of an industrial project, from development through to transfer to operators. Particular attention is paid to risk assessment and identification of safety critical elements.

A review of the company or industrial asset acquisition processes has highlighted the need for enhanced management of the acquisition lifecycle. A new Group Rule for the management of health & safety risks in acquisitions and disposals (GR12) has thus been developed. It sets out the minimum requirements for occupational health & safety and process safety which must be met by ENGIE entities for acquisitions and disposals. The aims of Group Rule GR12 are to:

- correctly assess, prior to acquisition, the health & safety maturity of the target company;
- in the post-acquisition phase, integrate ENGIE's health & safety culture into the acquired companies at the first opportunity in order to prevent accidents as far upstream as possible.

Finally, in 2023, the Group published a new version of its health & safety reporting framework in order to incorporate new proactive indicators (known as "leading KPIs"), focusing on major risk prevention, defined as part of the ENGIE One Safety transformation plan.

3.4.6.3.4 Reinforcement of managerial safety rituals

One of the major areas of the ENGIE One Safety transformation plan is the reinforcement of managerial safety rituals, such as site safety visits. This reinforcement will enable managers to be more effective by sustainably embedding safe behaviors among employees, subcontractors and temporary workers in the face of risks, particularly through the systematic implementation of ENGIE's Safety Essentials.

The managerial safety rituals identified as key to the sustainable achievement of the zero severe and fatal accidents objective are as follows:

- the Managerial Safety Visit (MSV), already widely practiced within the Group; its content has been revised to strengthen discussions with operators on the prevention of severe and fatal accidents;
- the Life Saving Check (LSC), a new ritual focused on compliance with the Group's fundamental rules for dealing with the most frequent major risks;
- the Joint Safety Tour (JST), to be carried out jointly by the Group manager and the manager of the external company;
- the health & safety toolbox talks, a dedicated opportunity for sharing and discussion with employees, temporary workers and subcontractors intended to gather their feedback on the application of the rules, for example difficulties encountered or good practices identified;
- the safety performance review, which should allow the management team of each entity to oversee the implementation of the managerial rituals as closely as possible, ensuring that the realities in the field are taken into account.

The objectives, content and provisions for implementation of these five managerial safety rituals have been compiled in a standard distributed to Group managers.

3.4.6.3.5 New training-coaching for managers

Following the assessment of its organization and health & safety culture by an external consultant, in 2022 the Group set up the experimentation of a new training-coaching program intended for all managers at seven pilot sites. This program is based on an innovative coaching approach and aims to improve the efficiency of managerial safety rituals, such as safety visits, to promote the appropriate safety behavior of employees, temporary workers and subcontractors with regard to risks, in particular to the most serious risks;

In 2023, following feedback from the pilots, the training-coaching program was adjusted and finalized. A rollout plan was put in place, based on the training of trainers-coaches. This rollout plan has two phases: the first for priority 1 entities was launched in 2023, while the second for priority 2 and 3 entities will be rolled out in 2024.

Different versions of the training-coaching have been developed:

- for trainers-coaches (five days);
- for prevention officers and health & safety experts (three days supplemented by coaching sessions in the field);
- for operational managers (two days supplemented by coaching sessions in the field);
- for functional managers (one day).

In 2023, the Group trained more than 240 trainers-coaches who were able to initiate the rollout of training to the priority 1 entities.

The Global Leaders (Group executives) benefited from a specific training session. The members of the Group's Executive Committee and Operational Management Committee (OPCOM) were also trained.

3.4.6.3.6 Internal audits on major risks

As part of its continuous improvement approach, ENGIE has implemented a new Group internal audit process to verify the management of major risks in the entities, with a view to avoiding severe and fatal accidents. It involves the identification of good practices and improvement actions for implementation.

To do this, ENGIE:

- defined the audit process on major risks and put in place the various tools to implement this process;
- defined the audit framework, including, in particular, all of the Group's rules and expectations to ensure that major risks are managed;
- identified and trained a group of around 60 internal auditors;
- set up a Safety Audit Coordination Committee that includes representatives of the Corporate departments involved in these audits (Internal Audit Department, Internal Control Department, Risks Management and Insurance Department, Health & Safety Department) and representatives of the four GBU. In particular, this committee enables the sharing of key information from these different sources;
- defined the Group's annual audit program in coordination with that of the GBU.

The recommendations issued are ranked according to priority. Their implementation is monitored by the GBU.

ENGIE conducted in 2023 24 audits on major health & safety risks that helped operating entities improve and supplement the system already in place.

3.4.6.4 Improving Well-being at Work

For several years, the Group and its subsidiaries have been implementing dedicated measures to improve the Well-Being at Work (WBW) of their employees and thus prevent of psychosocial risks. This axis of prevention is known as No Mind at Risk.

To achieve this, the Group's Health & Safety Department leads a network of Well-Being at Work experts. This network is entrusted in particular with designing the tools for the entire Group.

Since 2021, the Group has been implementing an initiative called "Nine commitments for improvement of Well-Being at Work." Each Group employee is therefore invited to adopt the best behaviors to meet these nine commitments, which cover all areas of WBW. A "Manage through WBW" e-learning course dedicated to managers enables them to better support their teams in this approach.

The Group supplemented the No Mind at Risk prevention initiative by integrating WBW indicators drawn up based on the results of the Group's annual ENGIE&Me survey. These indicators allow each work team to assess its level of compliance with each of the nine commitments. These indicators cover the following topics:

- caring & respect;
- diversity & inclusion;
- organization & content of work;
- work environment;
- caring for yourself and others;
- personal achievement & professional development;
- information sharing & dialog;
- recognition;
- work / life balance.

Guidelines are made available to managers to help collectively build a WBW improvement action plan which meets the specific needs of the team.

A new monthly newsletter for the Health & Safety functional line dedicated to the No Mind at Risk axis of prevention was published in 2023. It presents the Group's news on the subject, good practices and actions implemented locally by the entities, "tips & tricks" as well as focus points on topics of particular interest (e.g. mental load, hyperconnectivity, multitasking).

In addition, and to best respond to the cultural and geographical aspects of WBW, many prevention initiatives are implemented locally in the entities, including the following during year 2023:

- in Belgium , the BODY, MIND & SOCIAL program, which focuses on physical health, mental health and social engagement, particularly with regard to the most vulnerable people;
- in North America , the WELL ON TARGET wellness portal that provides tools to help employees define and achieve targets relating to their well-being;
- in Kuwait, the prevention of heatwave-related risks;
- in Brazil, the *EITO DE OPERAR* project, a program to boost the attention and concentration of operators, to improve well-being at work and the performance of teams through "mindfulness" techniques;
- in France, at ENGIE Solutions, ENGIE Green and Entreprises & Collectivités, several events were organized during WBW Week from June 19 to 23, with the common thread "Work better together with the nine commitments in favor of Well-being at Work and Working Conditions;"

- promoting physical activity and sports in local initiatives.

In France, most of the Group's entities have signed an agreement to implement regular remote working, on the basis of two to three days a week. Currently, around 40% of ENGIE's employees can work remotely, bearing in mind that a large majority of employees have operational and technical activities that do not allow them to work in this way. These agreements for working time and improvements to working conditions helped to boost employee engagement and to contribute to a better Quality of Life in the Workplace.

3.4.6.5 Other actions to strengthen the health & safety culture

In addition to the actions to strengthen the health & safety culture described above, a number of other measures were implemented in 2023.

Coordination of the Health & Safety functional line makes extensive use of digital tools, with a great deal of work going into dissemination of information to the various entities. This work is notably supported by the organization of thematic monthly webinars, presentations of the analysis of fatal accidents and the provision of various technical support.

The Group Newsletter dedicated to health & safety, "Prevention News," has been reviewed to improve the relevance of its content and best meet the entities' needs. This document enables information on all serious accidents, significant hazardous situations and events with high potential of severity (HiPo) to be shared Group-wide, as well as good practices implemented locally.

In addition, as it does every year, the Group opted to mark World Safety Day through a specific event for the various work teams, with the aim of ensuring the engagement of all individuals working for the Group, including employees, subcontractors and temporary workers. The 2023 event was an opportunity to spread the word about the Safety Essentials to all entities. A pocket leaflet was published, to ensure that all operators can have it permanently on their person. Posters, screen wallpapers, digital carousels, stickers and videos of Group executives were made available to the entities to facilitate the process.

The Group organized its annual convention for health & safety managers of the entities and representatives of the health & safety functional line. Over the two days, which brought together nearly 170 people, the progress of the ENGIE One Safety transformation plan and various good practices implemented by the entities were presented. Workshops were organized for reflection on major health & safety issues for the Group. Lastly, this convention was an opportunity to present prizes to the winners of the all-new ENGIE One Safety Awards and for several Group executives to share their vision of health & safety with the participants.

As it does every year in October, the Group organized a Safety Stand Down to commemorate the victims of fatal accidents and this year to reinforce the implementation of the Group's Safety Essentials. The principle behind this event is stop all of the Group's activities and dedicate this particular moment to discussions within the teams around major health & safety risks. This event was an opportunity to launch the ENGIE One Safety Induction e-learning course (see Section 3.4.6.3.2).

3.4.6.6 Dialog with social partners

In 2023, dialog with employee representatives continued at all levels of the Group and particularly with global and European bodies. A permanent health & safety and Well-Being at Work working group is active within the European Works Council (EWC, see Section 3.4.4.2.1.2). It reviewed the performance and actions taken in terms of health & safety and Well-Being at Work.

Moreover, the progress of the ENGIE One Safety transformation plan was presented to the EWC working group as well as during the annual meeting of the World Forum, a body to facilitate discussions between the Group and employee representatives created as part of the global agreement covering fundamental rights and ENGIE's social responsibility.

3.4.6.7 Health & safety data

Additional information regarding the health & safety indicators

	2023	2022	2021
Lost time injury frequency rate for employees and subcontractors working on sites with controlled access	1.8	2.0	2.5
Fatality rate of all people working for the Group	0.019	0.014	0.045

The analyses carried out in this Universal Registration Document concern the entities and activities in which ENGIE has operational management, regardless of the method of financial consolidation.

Results for 2022 and 2021 for employees in the table below are presented excluding EQUANS and other disposed entities.

Concerning the indicator relating to the number of new cases of occupational diseases, we do not consider it relevant to provide a refund rate since some companies cannot collect this indicator due to local regulatory constraints.

	Number of deaths (employees excluding natural causes)			Lost-time injury frequency rate (employees)			Severity rate [(1)] (French framework)			Severity rate [(1)] (ILO framework)			Number of new cases of occupational diseases		
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
Group	2	0	2	2.1	2.3	2.8	0.11	0.15	0.08	0.07	0.06	0.05	17	12	22
Renewables	0	0	0	1.3	0.06	2.1	0.03	0.11	0.14	0.03	0.02	0.06	1	0	0
Networks	0	0	0	2.0	1.9	2.3	0.15	0.17	0.12	0.07	0.06	0.09	1	4	0
Energy Solutions	2	0	2	2.6	2.9	3.5	0.12	0.17	0.20	0.09	0.08	0.12	5	1	18
FlexGen	0	0	0	0.4	1.4	0.8	0.05	0.03	0.01	0.02	0.03	0.01	8	0	0
Retail	0	0	0	3.0	3.1	3.3	0.18	0.19	0.18	0.08	0.07	0.10	2	7	4
Nuclear	0	0	0	2.7	2.7	1.6	0.03	0.06	0.01	0.02	0.04	0.01	0	0	0
Other (of which GEMS)	0	0	0	0.6	0.5	0.8	0.004	0.01	0.03	0.004	0.004	0.02	0	0	0
% reporting	100%	*100%*	*100%*	100%	*100%*	*100%*	100%	*100%*	*100%*	100%	*100%*	*100%*	-	-	-

(1) The evolution of severity rates does not include fatalities.

3.5 ENVIRONMENTAL INFORMATION

ENGIE faces the main environmental challenges: climate change, the quality and availability of natural resources (air, water, soil and energy) and the protection of biodiversity and ecosystems. Although its activities have an impact on ecosystems and natural resources, the Group seeks to measure and reduce this via the environmental management of its activities.

ENGIE's challenges and ambitions in this area are reflected in the Group's environmental policy (available on the following webpage: https://www.engie.com/en/group/social-responsibility/csr-goals) and in the performance indicators deployed across all its activities. The challenges also include the risks identified in the environmental vigilance plan. A team in charge of analysis and coordination is specifically dedicated to environmental responsibility and reports to the Group CSR Department. It has environmental coordinators in each region or country who lead their own networks of coordinators, organize actions, supplement corporate expertise with their knowledge of operations, and implement environmental reporting.

The Corporate Social Responsibility Department produces an annual report which is sent to the Executive Committee and then presented to the Board of Directors' Ethics, Environment and Sustainable Development Committee.

The 2021 to 2023 indicators detailed in this Section are presented excluding EQUANS.

3.5.1 LEGAL AND REGULATORY FRAMEWORK

The Group actively monitors regulatory developments (set out in Chapter 2 "Risk factors and internal controls"), stating its positions while they are being prepared and applying the new rules as soon as they are published. In particular, the Group has been calling for the harmonization of international regulations and greater integration between the various environmental and energy policies. In view of regulatory developments, particularly European ones with the entry into force of the Corporate Sustainability Reporting Directive (CSRD), ENGIE will develop its processes and environmental reporting system in 2024.

3.5.2 ENVIRONMENTAL MANAGEMENT

At the end of 2023, the entities that had implemented an Environmental Management System (EMS) accounted for 75% of relevant revenues[(1)]. The need to obtain external EMS certification is assessed locally with regard to local economic conditions and benefits.

Percentage of relevant revenues covered

Indicator title	ENGIE 2023	ENGIE 2022	ENGIE 2021
By an EMAS certification	8.92%	8.86%	5.00%
By an ISO 14001 (non-EMAS) certification	55.60%	59.11%	55.61%
By another external EMS certification	0.20%	0.03%	2.40%
TOTAL EXTERNAL CERTIFICATIONS	**64.73%**	**67.99%**	**63.01%**
By an internal certification (but not by a certified EMS)	10.15%	7.59%	11.23%
TOTAL INTERNAL AND EXTERNAL EMS	**74.9%**	**75.6%**	**74.2%**

When the implementation of a certified or registered management system is not economically justified, entities are encouraged to define an internal management system ensuring concern for the environment in carrying out their activities. As a result, some Group entities have defined their own management system standard. When an internal or external EMS is implemented, employees take part in awareness and training sessions relating to the environmental issues they encounter at their sites so that they adopt the EMS methodology and make it their own.

(1) Revenues generated after excluding activities not considered pertinent in terms of environmental impact: services, trading, sales, activities, etc.

3.5.3 PERFORMANCE CONTROL AND MEASUREMENT SYSTEMS, A PREREQUISITE FOR ENVIRONMENTAL RESPONSIBILITY

To monitor the implementation of its environmental policy, control environmental risks and encourage the communication of its environmental performance to stakeholders, ENGIE implements a specific reporting system which takes into account the Global Reporting Initiative (GRI) recommendations.

Environmental reporting is closely tied to operational performance reporting, thus becoming a management tool. The Group's Executive Committee transmits this goal of making environmental concerns an integral part of management responsibilities.

3.5.3.1 Methodology elements

Organization and scope

ENGIE conducts its environmental reporting using a dedicated tool that allows data to be reported following a defined methodology. This tool, called EARTH, is an environmental reporting IT solution used to manage the network of environmental correspondents and coordinators; to handle the management and documentation of the scope of environmental reporting; to manage data entry, monitoring and consolidation of indicators; to draft reports; and to provide the documentation necessary for producing and collecting data (reporting procedures and instructions). EARTH covers the entire ENGIE Group.

The legal entities included in the **reporting scope** are those whose operations are relevant in terms of environmental impact and that are consolidated fully or proportionately under the rules of financial consolidation (IFRS). Legal entities whose sole business is energy trading, financial activity or engineering are therefore excluded from the scope, as are legal entities consolidated using the equity method. The entities included in the reporting report on the performance and impacts of the industrial facilities over which they have technical operational control, including facilities operated on behalf of third parties. Nevertheless, ENGIE is rolling out its comprehensive survey of the entities consolidated by the equity method of the GBU Energy Solutions and the GBU Networks to acquire environmental-based information from a wider scope. For the entities consolidated by the equity method of the GBU Renewables, the GBU FlexGen and Nuclear, ENGIE includes primary energy data on the Group's operational performance (Perform tool). The data of entities consolidated by the equity method is only presented in the Scope 3 reporting of the Group's greenhouse gas emissions report. It should be noted, however, that the electricity capacities of entities consolidated by the equity method are also taken into account at 100% in the objective relating to the percentage of renewable energy in the electricity production capacity mix presented in Section 1.5.2.

Thus, in accordance with the rules of **financial consolidation**, 100% of the impact data collected is consolidated when the entities are fully consolidated. For joint venture entities, the environmental impact data are consolidated in proportion to the Group's consolidation rate provided that it has 100% technical operational control or that, as a minimum, this is shared with other shareholders.

For **disposals** occurring during the year, the entities concerned complete the environmental questionnaire with the data available as of the last day of the month preceding the disposal. If it is not possible to collect all the environmental indicators, they are extrapolated on the basis of the main activity (for example, energy production for a power plant) and historical data. For **acquisitions** made during the year, it may happen that their environmental management system is not sufficiently mature to meet all the environmental indicators. In this case, the missing indicators are extrapolated on the basis of the main activity and indicators available in entities with a similar technical profile. A correction of these extrapolated values can be made a posteriori the following year, at the end of the first full fiscal year.

To **calculate environmental management indicators** such as the "share of relevant revenues covered by an environmental certification, an environmental crisis management plan, etc.," the relevant revenues is estimated for each legal entity. To obtain the relevant revenues, operations regarded as "not relevant in terms of environmental impact" (e.g. trading, finance and engineering) are stripped out of the consolidated revenues figure for each legal entity.

Procedures and guidelines are rolled out Group-wide via a network of environmental contacts and coordinators. These procedures and guidelines at Group and regional or country level describe in detail the environmental data collection, control, consolidation, validation and transmission phases at the different levels of the organization, as well as the rules for defining the scope of consolidation. They include technical documents that provide methodological guidelines for the calculation of some specific indicators. Depending on its activities, each entity is assigned a profile that determines the indicators to answer. The list of the entities included in the scope of environmental reporting is approved by each region or country.

The **definitions of the indicators** used to measure the environmental performance of Group businesses have been revised based on comments made by the Statutory Auditors. They also take into account the comments by line managers represented in dedicated work groups. All the documentation is available from the Group upon request (CSR Department).

Until 2016, ENGIE would provide a "**coverage rate**" for each indicator published, corresponding to the response rate obtained from all the entities surveyed. Since 2017, with the implementation of the EARTH reporting tool, the coverage rate has been 100% for all indicators.

A certain number of methodological choices have been made to carry out the environmental reporting. These are described in the following paragraphs.

Reliability of the scope of environmental reporting, environmental impact of subcontractors and ENGIE's commitment to water conservation

- The **reliability of the scope** of environmental reporting is a priority for ENGIE, which is evolving in an international context of business disposals and acquisitions. Before every reporting campaign, the financial scope for consolidation is compared against the information fed back by each regional hub's environmental managers in order to check which industrial entities contributing to EARTH report to which financial entities. Moreover, reconciliations site by site are carried out using the Perform tool, ENGIE's database which is dedicated to the operating performance of energy production facilities, to carry out an additional verification of the comprehensive nature of the scope. Reporting is also requested from correspondents to verify and report the number of sites belonging to each contributing entity.

- Significant **environmental impacts** resulting from subcontractors during services performed at one of the Group's facilities must be included in the Group's impacts except when a specific contractual clause provides that a subcontractor is liable for impacts generated at the site while providing the service. Data provided by subcontractors is not subject to systematic internal verification before being included in Group data and is the responsibility of the subcontractors alone. Regulations and legal obligations related to the environment may differ from one country to another, and certain data may thus be sometimes more difficult to gather.
- Since 2007, ENGIE has been a signatory to the CEO Water Mandate, thus demonstrating its commitment to the **preservation of water resources**. The water indicators are consistent with the GRI indicators and fall into four categories: withdrawal, discharge, consumption, reuse / recycling. Since 2015, the materiality of the water indicators published has been reviewed and the Statutory Auditors verify the inputs, outputs and consumption of fresh and non-fresh water as well as total consumption.

3.5.3.2 Indicators

Non-GHG indicators

- NOx, SOx and fine particulate matters emissions are calculated locally on the basis of measurements. If discontinuous measurements are taken on a site, an average of the measurements over the last five years is taken where possible to avoid inconsistencies related to one-off measurements. For facilities burning natural gas that do not have automated measurement systems, a calculation method is provided for NOx emissions and a default emission factor for SOx (0.281 g / GJ LHV) and an other for fine particle emissions (0.9 g / GJ LHV) have been set up, both factors are recommended by the European Monitoring and Evaluation Programme – EMEP.
- As it is concerned about what becomes of the waste generated by its activities, the Group has indicators on the production and recovery of the waste generated by its activities. These are based on definitions of waste and recovery established by local regulations. To avoid erroneous data about stock, only the tonnages taken away and weighed on site are reported as disposed of. The tonnages that must be reported are wet or dry, depending on the way they are disposed of: if the waste disposed of was wet, the reported tonnages are wet and the converse for dry waste. As an exception, if the waste is permanently stored on site, the associated dry tonnages must also be reported as disposed of. In the latter case, the waste is never recovered. Waste generated by the construction or dismantling of facilities, by the repowering or upgrading of facilities, and by soil rehabilitation, are not covered by the indicators for waste generated by activities.
- ENGIE operates hydraulic installations, some of which have water tanks. Given the difficulties in modeling the evaporation of each site, the evaporated water is not yet included in environmental reporting.
- Since 2022, pumping storage stations have been recognized in the same way as batteries, as recommended by the European taxonomy. In this regard, electricity consumption corresponds to the difference between electricity supplied by the network and that returned to the network. The latter, as a result, is no longer accounted for under ENGIE's electricity production. This modification was applied with retroactive effect as from 2015 for the sake of consistency.
- For the sake of consistency, the factor for converting thermal power produced (GWhth) into electric power (GWhe) is set at 0.25 for incinerators and at 0.61 for all of the Group's procurement and energy production activities. This last factor was updated with retroactive effect as of 2015 on the basis of European Commission Delegated Regulation 2015/2402.
- The energy efficiency indicator covers fossil fuel and biofuel power plants. It also includes heat supplied by third parties as well as steel gases (see the note on heat and that on steel gases below). For sites supplied with heat, both the input and output are taken into account when calculating efficiency.
- For open-loop energy production sites without a cooling tower, cooling water outflows are considered equal to cooling water inflows, corresponding to zero cooling water consumption due to the proximity of the river source or sea. For closed-loop energy production sites (heat networks), water make-up is considered a form of water consumption, thus maximizing the measurement of their water consumption.

GHG indicators: direct emissions (Scope 1)

- CO_2 emissions from the combustion of fossil fuels were calculated based on the most recent emission factors published by the IPCC (IPCC Guidelines for National GHG Inventories, Vol. 2 Energy – 2006). However, the emission factors for coal can vary greatly depending on the provenance. For this reason, each reporting entity consuming coal provides a locally calculated emissions factor. This also holds for alternative fuels for which it is not possible to use standard emission factors.
- The biomass and biogas consumed by ENGIE in its facilities generates energy that is counted as ENGIE production and, in accordance with conventions in this area, ENGIE counts CH_4 and N_2O emissions associated with their combustion when these fuels are used to produce energy but does not count CO_2 emissions.
- The Global Warming Potential (GWP) compares the warming capacity of the various greenhouse gases to CO_2. The GWP used to convert the Group's greenhouse gas (GHG) emissions to CO_2 equivalent are the latest GWP published by the IPCC (sixth IPCC Assessment Report – 2022), considered on a 100-year scale.
- ENGIE carries out residual gas recovery services for its steel producing customer ArcelorMittal. This service allows ArcelorMittal to meet the majority of its electricity needs and thus reduce its GHG emissions by avoiding a high level of energy use by the network. When analyzing the GHG emissions relating to these services, ENGIE has noted that 100% of the emissions relate to the steel manufacturing process. At the end of this process, regulations require that steel producers burn residual gases, generally through flaring. ENGIE only intervenes in this process to extract energy that would otherwise have been lost to flaring, by taking over for ArcelorMittal in the burning of the residual gases, but without generating additional GHG emissions. This is why ArcelorMittal's reporting methodology includes direct emissions from the external plants to which the residual gases are delivered for recovery. This state of affairs is confirmed by Law No.2019-1147 of November 8, 2019 on climate and energy and the related decrees which set the greenhouse gas emissions ceiling for fossil-fueled power plants. Decree No. 2019-1467 of December 26, 2019 states that "Emissions from waste gases used in electricity production facilities are not recognized." Consequently, ENGIE now excludes these GHG emissions from its Scope 1 and the DK6 power plants in France and the Knippegroen and Rodenhuize power plants in Belgium no longer report emissions associated with steel gases. As these are residual gases and not fuel with a supply chain, ENGIE does not include emissions from an upstream fuel chain in its Scope 3. with the exception of GHG emissions related to the

combustion of steel gases, all environmental indicators for these entities are included in the consolidated data, as well as their energy production which is included in the calculation of the Group's specific emissions.

GHG indicators: indirect emissions (Scopes 2 and 3)

- The nature of heating purchases accounted for under scope 2 changed since 2022. Heating from Energy Recovery Units (ERU) or non-ERU is no longer included in the calculation of Scope 2 emissions. ENGIE is therefore in line with French practices in this area, as set out in the methodology of the Syndicat National du Chauffage Urbain (the French national district heating syndicate – SNCU) in response to the annual survey on Heating and Cooling Networks. This survey serves as national statistics for the Ministry of Energy Transition and the basis of calculation for CO_2 content and the EnRR rate of each network published in the energy performance diagnosis decree. Heating purchases taken into account only relate to heating produced excluding ERU. Based on MWh purchased, an average loss rate of 16.5% supplied by the SNCU is used to recognize MWh of heat lost during transmission and calculate scope 2. In 2022, heating purchased generated excluding ERU represented 8.11% of all heating acquired. In the absence of historical data to distinguish between ERU heating and non-ERU heating, the same percentage has been applied retrospectively since 2015 for the sake of consistency.
- Two methodological changes have occurred since 2022 on Scope 2, with retroactive effect from 2015. These include the exclusion of recovered heat from ERU and the transition of pumped storage stations from the status of electricity production facilities to that of batteries.
- In 2023, two methodological changes were made to Scope 2. The first was the taking into account of losses on electricity transmission networks. The second was the addition of market-based Scope 2 in the reporting (in addition to the information related to location-based electricity networks). For market-based, a green emission factor is applied to electricity consumption for which the Group has certificates or guarantees of renewable origin. The country-specific electricity network emission factors for the calculation of "location-based" emissions and "green" emission factors are taken from the ENERDATA database and data from the European Network of Transmission System Operators for Electricity (ENTSO-E). Residual emission factors were calculated by our marketer, GEMS (Global Energy Management & Sales), based on AIB (*Association of Issuing Bodies*) data. The data used are the composition of the residual mix and its percentage in relation to the network mix, as well as Group internal data on the annual volumes of electricity consumed by country. For other countries, residual values which are often unavailable are taken from network factors. These elements have been added in the 2023 reporting but the total GHG emissions (Scopes 1 + 2 + 3) are still presented under location-based.
- In the "Use of sold products (fuels sold to end-consumers, off market)" indirect emissions category, the term "end-consumer" refers to customers who use the natural gas purchased themselves. Volumes sold to trading platforms, resellers, Local Distribution Companies or other intermediaries not owned by ENGIE are, therefore, excluded.
- For Scope 3, the category "indirect GHG emissions associated with energy" includes GHG emissions from the upstream fuel chain, the upstream chain of electricity and heat consumed and, since 2022, those from the upstream electricity chain purchased for resale. To calculate the latter emissions, emissions of the TWh sold are determined by first calculating the emissions from ENGIE's production. The emission factors used for this include the complete LCA, including the construction of the installations, except for combustion installations for which the factors are applied to their actual fuel consumption. This method is more precise than the calculation based on the LCA for this type of installation. These production emissions are then deducted from ENGIE's total sales in the countries concerned, calculated on the basis of European average factors including the complete LCA.
- Emissions in the "Investment" category correspond to direct emissions from energy production and those from other activities such as gas networks. In 2023, following the extension of the environmental data collection to the entities consolidated by the equity method of the GBU Energy Solutions and the GBU Networks, the "investments" category includes indirect emissions due to the purchase and consumption of electricity and heat. The emissions reported in this category of Scope 3 are the emissions of entities at the Group's ownership rate.
- For the category "uses of sold products," in addition to non-renewable fuels, sales of biomass and biomethane to end-users are now collected by calculating biogenic emissions. This last addition also makes it possible to supplement the emissions from the upstream chain of the two fuels biomass and biomethane.
- Although less significant CO2 emissions calculated on the basis of Ways of Working are now integrated into Scopes 1, 2 and 3. Some categories are available over the three years presented in this chapter, others only for 2023.

3.5.4 GROUP ACTIONS

3.5.4.1 Climate change

Direct emissions

Information presented in this Section and in Section 2.2.2 "Climate change" reflects the financial risks associated with the effects of climate change and the measures taken by the company to mitigate them by implementing a low carbon strategy in all areas of its business as required by Article L.225-37 of the French Commercial Code.

By developing a low carbon [(1)] energy mix and through its energy efficiency activities, the Group has put energy transition and the fight against climate change at the heart of its strategic focus. Thus the carbon intensity of energy production in 2023 was 131.4 $gCO_2eq.$ / kWh, down 13.4% from 2022 and 70.3% from 2012. The Group's absolute direct $CO_2eq.$ emissions, known as "Scope 1 emissions," fell by more than 5.5 million tons in one year, from 30 tons to 24.5 million tons, a 18.2% reduction.

(1) The share of energy production from non-fossil sources has increased by 121% in nine years, from 28.6% in 2015 to 63.2% in 2023.

These results reflect the Group's desire to follow an emissions trajectory compatible with the Paris Agreement: total disengagement from coal and growth in green energy (renewable electricity and biogas).

In addition, the Group supports TCFD's (Task Force on Climate-related Financial Disclosures) recommendations for greater transparency on the risks and opportunities related to the impacts of climate change and produces a TCFD report when it publishes its Climate Notebook. The Group publishes its Scope 1, 2 and 3 (main items) emissions and answers the CDP's Climate Change questionnaire each year.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Total direct GHG emissions – Scope 1 □□	t CO_2 eq.	24,496,514	29,943,790	36,703,290
of which emissions from energy production	t CO_2 eq.	22,243,521	27,918,015	34,376,035
of which emissions from Networks	t CO_2 eq.	1,962,875	1,712,245	1,954,553
- Proportion due to CH4 in Gas distribution	t CO_2 eq.	1,068,498	947,586	1,197,204
- Proportion due to CH4 in Gas transmission	t CO_2 eq.	176,880	192,740	247,550
- Proportion due to CH4 in Gas storage	t CO_2 eq.	72,918	78,928	92,691
- Proportion due to CH4 in LNG terminals	t CO_2 eq.	135,151	44,354	86,637
- Proportion due to other sources (other combustion, vehicles, fluorinated gases, etc.)	t CO_2 eq.	509,428	448,637	330,471
of which emissions from other activities (vehicles, fluorinated gases, working methods, etc.)		290,118	313,530	372,702
GHG emissions per unit of activity – energy production	kg CO_2 eq. / MWheq.	131.4	151.7	180.1

□□ *Verified by the Statutory Auditors with "reasonable" assurance for 2023 (see Section 3.12).*

Indirect emissions

The Group's approach to GHG emissions accounting and reporting is based on the GHG Protocol Corporate Standards (for companies) and the ISO 14064 standard (supplemented by ISO 14069). These standards constitute an internationally recognized reference framework.

ENGIE has analyzed the various categories of emissions in order to identify and quantify the most pertinent categories. The following categories have been identified and quantified to date.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Scope 2 – Indirect emissions related to energy consumption				
Scope 2 "Location Based" – Indirect emissions associated with energy	t CO_2 eq.	654,073	850,154	552,962
of which indirect emissions related to power consumption	t CO_2 eq.	584,526	749,362	543,973
of which indirect emissions related to the consumption of steam, heating or cooling	t CO_2 eq.	6,428	8,486	8,989
of which indirect emissions linked to losses on electricity transmission networks	t CO_2 eq	63,119	92,307	
Scope 2 "Market Based" – indirect emissions associated with energy	t CO_2 eq.	847,043	-	-
of which indirect emissions related to power consumption	t CO_2 eq.	777,496	-	-
of which indirect emissions related to the consumption of steam, heating or cooling	t CO_2 eq.	6,428	-	-
of which indirect emissions linked to losses on electricity transmission networks	t CO_2 eq.	63,119		
Scope 3: Other indirect GHG emissions				
Scope 3 – Total	t CO_2 eq.	133,337,361	144,543,263	122,622,236
Cat. 3.1 – Purchased products and services	t CO_2 eq.	5,936,639	5,465,933	5,486,727
Cat. 3.2 – Capital equipment	t CO_2 eq.	3,051,298	2,820,304	2,206,878
Cat. 3.3 – Upstream commodity chain (Energy-related emissions not included in the "direct GHG emissions" and "indirect energy-related GHG emissions" categories)	t CO_2 eq.	41,451,946	42,168,536	17,796,478
of which emissions for electricity purchased for resale	t CO_2 eq.	28,533,202	26,250,871	-
Cat. 3.5 – Waste generated by activities (services paid for)	t CO_2 eq.	2,265	0	0
Cat. 3.6 – Business travel	t CO_2 eq.	43,177	26,762	13,636
Cat. 3.7 – Employee commuting	t CO_2 eq.	56,591	66,222	91,396
Cat. 3.11 – Use of sold products (fuels sold to third parties, off market)	t CO_2 eq.	52,536,380	61,288,580	65,561,304
of which sales of natural gas and LNG	t CO_2 eq.	52,526,771	61,279,489	65,560,855
of which sales of biomass and biomethane	t CO_2 eq.	9,609	9,091	449
Cat. 3.15 – Investments (GHG emissions from power plants consolidated under the equity method)	t CO_2 eq.	30,259,065	32,706,929	31,465,816
of which emissions from energy production	t CO_2 eq.	29,969,276	32,184,853	31,465,816
of which emissions from other activities	t CO_2 eq.	289,789	522,076	-

□□ *Verified by the Statutory Auditors with "reasonable" assurance for 2023 (see Section 3.12).*

Climate change adaptation

Adaptation through anticipation of the negative impacts of climate change is key to making ENGIE's networks and activities more resistant to natural hazards (more extreme events such as floods and droughts, etc. and other more progressive phenomena such as rising sea levels, rising temperatures, etc.). The risks generated by climate change are varied and include physical risks, risks of disruption to value chains, reputational risks and regulatory risks.

ENGIE is implementing practical measures to guard against this set of risks, including, for example, the construction of a perimeter wall to tackle the risk of exceptionally heavy flooding at the Tihange site in Belgium, a vegetation project to prevent soil erosion in the event of storms in Mexico (Mina Solar solar park), the digging of ditches and a reservoir to deal with the risk of flooding at the Capel Grange solar park (United Kingdom).

The Group has also established methods to help its various sites to draw up adaptation action plans. The use of tools, such as Aqueduct software for managing and analyzing water risks and areas of water stress, helps the Group to identify local-scale risks and enables it to identify adaptation strategies tailored to the problems and features of each site.

Adapting to climate brings multiple beneficial effects for ENGIE: anticipating risks enables it to manage its assets better, cut costs and expand its market to new products and services.

3.5.4.2 Renewable energy

The strengthening of the Group's capacity in renewable energy has continued, for both electricity and heat production and, in the case of biogas, for transportation. In 2023, the renewable energy capacities of facilities controlled by ENGIE, excluding equity-accounted companies and unconsolidated operations, represented 25.9 GW equivalent of installed energy (GWeeq).

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Renewable – Net installed power (electric and thermal) ◻◻	MWeeq.	25,874	22,291	20,450
Renewable – Electricity and Heat produced ◻◻	GWheeq.	78,529	70,383	63,765
Energy produced – share of large hydropower	Percentage	56.8%	59.6%	60.4%
Energy produced – share of small hydropower	Percentage	1.0%	1.2%	1.3%
Energy produced – share of wind	Percentage	26.8%	23.1%	22.6%
Energy produced – share of geothermal	Percentage	0.4%	0.4%	0.4%
Energy produced – share of solar	Percentage	8.8%	7.1%	4.8%
Energy produced – share of biomass and biogas	Percentage	6.2%	8.6%	10.6%
Renewable and Non-Renewable – Electricity and Heat produced	GWheeq.	169,345	183,986	190,864
Renewable share of total electricity and heat produced	Percentage	46.4%	38.3%	33.4%

◻◻ *Verified by the Statutory Auditors with "reasonable" assurance for 2023 (see Section 3.12).*

3.5.4.3 Energy efficiency

For electricity and heating production facilities, energy performance is directly connected to the site's efficiency which influences its profitability. Measures taken to improve the generation fleet, and which are compliant with environmental regulations and the constraints of the electricity market, have helped optimize its energy efficiency and, hence, consumption of raw materials. For example, the replacement of older turbines or boilers with recent models has an immediate positive impact on a facility's energy efficiency.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Energy production of controlled facilities (Scope 1)	GWheeq.	169,345	183,986	190,864
Energy production of equity-accounted facilities (Scope 3)	GWheeq.	92,222	88,544	93,230
Primary energy consumption – total (excluding own consumption) ◻◻	GWh LHV	217,479	278,430	318,311
Share of coal / lignite	Percentage	2.03%	4.79%	10.04%
Share of natural gas	Percentage	46.32%	41.35%	36.56%
Share of fuel oil (heavy and light)	Percentage	1.38%	0.83%	0.76%
Share of uranium	Percentage	42.38%	44.68%	44.72%
Share of biomass and biogas	Percentage	4.36%	4.77%	4.34%
Share of other fuels	Percentage	3.35%	3.43%	3.25%
Share of fuel in transport	Percentage	0.18%	0.14%	0.33%
Electricity and thermal power consumption (excluding own consumption) ◻◻	GWheeq.	6,323	6,692	7,499
Energy efficiency of fossil fuel plants (including biomass / biogas) ◻◻	Percentage	50.4%	49.6%	47.6%

◻◻ *Verified by the Statutory Auditors with "reasonable" assurance for 2023 (see Section 3.12).*

3.5.4.4 Nuclear energy

Maintaining a very high level of safety at the nuclear reactors operated by Electrabel is a key priority for the Group. Electrabel also attaches great importance to limiting the environmental impact of these facilities (e.g. emissions, waste). Each plant publishes an annual environmental on the Electrabel website.

Waste from nuclear power plants, particularly radioactive waste, is monitored by Electrabel, but also by the national body for radioactive waste and enriched fissile materials (ONDRAF) and its subsidiary Belgoprocess, which is responsible for the management of radioactive waste from nuclear power plants. The detailed information to be published about volumes of fuel or of high-level radioactive waste is specified by the Belgian Royal Decree of October 17, 2011 titled "Royal Decree regarding the physical protection of nuclear materials and nuclear installations."

Provisions for the downstream portion of the nuclear fuel cycle (operations relating to fuel after its use in a nuclear reactor) and for the costs of decommissioning nuclear power plants after they are shut down, are shown in Section 1.6.5.2.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Radioactive gas emissions				
Rare gases	TBq	37.01	32.19	36.12
Iodines	GBq	0.03	0.03	0.03
Aerosols	GBq	0.04	0.28	0.27
Radioactive nuclear waste (low and medium level)	m^3	123	182	186
Radioactive liquid wastes				
Beta and Gamma emitters	GBq	10.20	14.95	11.46
Tritium	GBq	56.30	101.80	83.49

The risk factors relating to nuclear power are presented in Section 2.2.7 "Risks related to nuclear activities."

3.5.4.5 Water

As a committed player in water management, ENGIE is taking part in the current debate over the management of priority basins and water stewardship, alongside organizations such as the CEO Water Mandate of the UN Global Compact and the OECD. The Group has set itself the target of reducing water consumption for energy produced by 2030 and is continuing to implement action plans for sites facing high or extreme water stress. In 2023, ENGIE was awarded an A- rating by the CDP Water Disclosure program.

Each year, as part of the optimization of its energy production, ENGIE assesses the risk of water stress for the Group's industrial sites using the Baseline Water Stress Index and the Aqueduct tool (World Resource Institute) which maps different water-related risks. In 2023, 53 sites were located in areas with extremely high water stress, i.e. 7% of sites (excluding solar and wind), for which action plans have been finalized and are being implemented. The impact of water stress is relative, however, as it depends on the site's activity and fresh water needs. Only five out of the 53 sites have substantial freshwater requirements (more than 100,000 m^3 / year). For the others, the challenge is rather how to indirectly help to preserve water resources, for example by proposing the reuse of the water by other entities in the drainage basin. All of the Group's initiatives have resulted in a 36.5% reduction since 2017 in freshwater withdrawals (salt free water) and 50% in total water consumption (fresh and salt water combined).

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Fresh water				
Total withdrawal	Mm^3	1,773	1,658	2,406
Total discharge	Mm^3	1,726	1,603	2,340
Non-fresh water				
Total withdrawal	Mm^3	4,292	5,215	5,249
Total discharge	Mm^3	4,276	5,191	5,218
Total consumption (Withdrawals – Discharges)	Mm^3	62	80	96

3.5.4.6 Waste

ENGIE took the recommendations of an internal audit on waste management and incorporated them into its environmental policy released in 2017. Its chief aim was to reduce the quantities of waste it produces and to increase its rate of waste recovery. The Group has set operational production reduction objectives for hazardous waste (-95% vs 2017) and non-hazardous waste (-80% vs 2017) by 2030.

These reduction efforts are supplemented by the monitoring of recovery rates of 83% for non-hazardous waste and of 24.4% for hazardous waste in 2023. The Group's industrial sites actively seek local waste recovery solutions, even though some of these channels remain dependent on market opportunities governed by the laws of supply and demand.

Food waste and associated waste only relate to group catering for employees. In this area, ENGIE selects subcontractors that include missing space measures against food waste in their specifications.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
Total quantity of non-hazardous waste and by-products discharged (including sludge)	t	753,711	1,459,706	2,875,114
• Fly ash, refioms (residues from the purification of incineration fumes from household waste)	t	84,857	660,169	1,669,050
• Ash, bottom ash	t	220,895	513,615	702,669
• Desulfurization by-products	t	13,992	53,170	69,841
• Sludge	t	39,013	13,484	21,269
• Driftwood	t	5,097	10,783	11,508
Total quantity of non-hazardous waste and by-products recovered (including sludge)	t	625,771	1,164,816	2,419,194
Total quantity of hazardous waste and by products discharged (including sludge and excluding radioactive waste) ☐☐	t	26,797	23,506	33,601
Total quantity of hazardous waste and by products recovered (including sludge and excluding radioactive waste) ☐☐	t	6,537	4,926	5,180

☐☐ *Verified by the Statutory Auditors with "reasonable" assurance for 2023 (see Section 3.12).*

3.5.4.7 Atmospheric pollutants

ENGIE uses a wide range of techniques to further reduce its emissions: reduction at the source using a tailored energy mix, optimization of combustion and treatment of fumes, filters or water injection to reduce all particles (of all sizes), installation of low-NOx burners or use of urea injection (secondary treatment) to control nitrogen oxides, and choosing fuels with very low sulfur content to reduce sulfur dioxide emissions.

The Group has set operational objectives to reduce NO_x (-75% vs 2017), SO_x (-98% vs 2017) and total particle emissions (-60% vs 2017) by 2030.

Indicator title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021
NOx emissions	t	27,037	34,197	49,819
Incl. energy production	t	26,676	33,896	49,574
SOx emissions	t	3,396	7,418	106,028
Incl. energy production	t	3,379	7,400	106,007
Fine particle emissions	t	2,832	3,398	5,820
Incl. energy production	t	2,823	3,391	5,815
Mercury emissions	kg	104	139	347
Incl. energy production	kg	38	49	198

3.5.4.8 Management of biodiversity

Biodiversity is a natural heritage that is essential to human health and well-being, but also to economic activities. ENGIE, through its industrial activities, has a direct potential impact on biodiversity (ecological continuity, avifauna, piscifauna, etc.), and an indirect impact via the supply chain. The Group is also dependent on biodiversity, notably through its use of biomass resources and water and climate regulation provided by ecosystem services.

According to international experts at IPBES [1], biodiversity is threatened by five major pressures: changes in land use, the overexploitation of resources, climate change, pollution and invasive exotic species. Fragmentation and disturbance of habitats caused by the territorial of our sites and soil sealing are the main impact of the main impact of ENGIE's activities on biodiversity.

(1) *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.*

Since 2010, the Group has integrated biodiversity into its strategy and activities. It now has a dedicated policy and key commitments through the "act4nature international" initiative and "Entreprises Engagées pour la Nature." The act4nature international commitments were renewed in October 2023 and a two-year review of the "Companies committed to nature" commitments was sent to the French Biodiversity Office. Full details of these commitments and their progress are available on ENGIE's website at the following address: www.engie.com/en/group/social-responsibility/csr-goals/biodiversity

Examples of objectives and actions carried out by the Group include the restoration of natural habitat (hedges, grassy strips, wetlands), the reduction of the impact of wind turbines on wildlife, the installation of fish ladders at dams, ensuring that gas-grid easements contribute to ecological continuity, and applying differentiated landscaping to green spaces.

The Group develops its projects in line with the "Avoid, reduce and offset" approach. The risk assessment takes the form of a CSR matrix required for all major projects.

All of the Group's sites are analyzed each year with regard their proximity to various protected areas (IUCN categories I to VI, Ramsar, UNESCO natural and mixed, KBA, MAB). Each site located less than 15 km from a protected areas works on implementing action plans developed in consultation with the relevant stakeholders.

The Group has also made a strong commitment to manages the sites in a manner that respects nature, by discontinuing the use of chemical phytosanitary products and contributing to the restoration of ecological continuity.

In 2023, the Group measured its biodiversity footprint using the Global Biodiversity Score tool. A summary of the results will be presented on the website in the first half of 2024.

Objective title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021	2030 target
Development of action plans for industrial sites located in or near a biodiversity hotspot, within a 15 km radius.	%	62	60	41	100
Introduction of ecological management of the Group's industrial sites, including nature-friendly maintenance of green spaces and zero phytosanitary products	%	58	34	28	100

In pursuit of its commitment to biodiversity, the Group relies on the skills and expertise of its two historic partners: the French committee of the IUCN (International Union for Conservation of Nature) and France Nature Environnement (FNE). Since 2009, the French IUCN committee has been providing ENGIE with its expertise to further integrate biodiversity into its strategy, and since 2008, FNE has been helping to establish contacts with local experts and to raise awareness of issues such as the application of the "avoid, reduce and offset" approach in France. These partnerships are developed on a three-year basis. Since 2022, these partnerships have seen the addition of a partnership with the Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) under the Proteus program.

3.5.4.9 Managing risk and environmental complaints

The management of environmental risks has two components: risk prevention and crisis management.

Indicator title	ENGIE 2023	ENGIE 2022	ENGIE 2021
% of relevant revenues covered by an environmental risk prevention plan	93.7%	96.0%	82.8%
% of relevant revenues covered by an environmental crisis management plan	90.9%	95.3%	88.6%

The Group handles any environmental complaints. A summary is given below:

Indicator title	ENGIE 2023	ENGIE 2022	ENGIE 2021
Environment-related complaints	4	20	13
Environment-related convictions	0	1	2
Amount of compensation (*€ thousands*)	0	9	697
Environmental expenditure (*€ thousands*)	924,914	902,683	632,298

Complaints received by ENGIE subsidiaries were as follows:

- in Belgium, wind farm managers received one complaint for noise pollution and one relating to disturbances associated with the strobe effect of the turbines.
- in the Netherlands, the manager of the Levanto wind farm received a complaint that icy concretions fell on a vehicle;
- in Romania, a complaint was received for noise pollution related to a measuring station in the gas distribution network.

Assessments have been, or are being, carried out for all these complaints and talks with stakeholders are underway.

A fine was also paid by the Energia Mayakan site in Brazil following a check on the diameter of a water evacuation pipe which did not correspond to the one authorized by the operating permit. Work was carried out to bring the water discharge into compliance.

In 2023, environmental expenses (investments and current operating expenses related to environmental preservation) amounted to around €925 million.

3.5.4.10 Noise pollution

Any industrial activity is a source of noise pollution. In order to reduce these impacts, Group entities conduct regular soundproofing work (acoustic cladding, noise barriers, containment, etc.). For more recent projects, reducing this potential form of noise pollution is directly integrated into the design.

For its renewable energy projects, particularly onshore wind and solar power, ENGIE conducts impact studies and offers support measures to prevent, reduce or offset any noise or visual impact. Examples of such actions include defining and implementing turbine restrictions (stoppage or reduced power at key times and / or under certain wind conditions), conducting specific actions with builders to reduce the sound power of machines, seeking better harmonization with the landscape during the design and, after construction, initiating planting and vegetation schemes on sites or for neighbors if there is an obvious visual impact.

3.5.4.11 Land use

Protection of soil and groundwater is an integral part of the Group's environmental policy. The environmental consequences of soil pollution can be significant, as can the costs of subsequent remedial measures. It is therefore important to prevent this risk and to hedge it with financial provisions. These amounted to €1.388 billion in 2023 and concerned site rehabilitation, decommissioning of non-nuclear facilities and scheduled product elimination. In this area, ENGIE complies with the regulations in each of the countries in which the Group operates.

For example, a soil pollution survey was carried out at several power plant sites in Belgium. Risks were assessed in conjunction with the appropriate environmental authorities and a remediation program was implemented.

ENGIE owns a number of former gasworks. These sites may be affected by oil, heavy metals and other volatile substances that can adversely affect health. As a result, they must be repaired before reuse. In 1996, a 10-year plan was agreed via a memorandum between Gaz de France and the French government to rehabilitate these sites, which have been compatible with their use from a health perspective since 2007. When disposing of these former sites, ENGIE is committed to ensuring that the buyer's project is compatible with the environmental and industrial liabilities of the site and that the risk to the environment and residents is effectively managed. At all its sites, the Group monitors the soil and groundwater, in accordance with its operating permits, in order to prevent pollution.

Moreover, in order to more firmly anchor its presence in the regions, ENGIE has established a structured system of dialog with its stakeholders, pursuant to the main international standards (AA1000, ISO 26000, the Global Compact principles, and OECD guidelines). This system is based on regular meetings with NGOs and non-profit associations, and on the development of long-term partnerships in connection with ENGIE's activities. The dialog is defined at Group level and then rolled out to each regional hub according to specific local requirements in terms of issues, activities and regulations. As part of these new 2030 CSR objectives, ENGIE aims to cover 100% of its industrial activities in 2020 with a structured stakeholder dialog and consultation mechanism.

Gas pipelines account for one form of land use by ENGIE. As the gas lines are buried, they do not break up natural habitats on the surface as they do not prevent species from moving around as they should. Nevertheless, they can have a negative impact on underground habitats. Gas pipelines can also generate land-use conflicts and GRTgaz has therefore established amicable easement agreements in France with all the owners of the land crossed, following consultation periods (the signing rate for amicable agreements is regularly >90% for projects). These agreements define land usage restrictions for the owners (prohibition on building in pipeline locations and planting vegetation higher than 2.70 m) in exchange for compensation. More specific work is carried out with the agricultural industry to preserve land use for farmers as part of their professional activity.

3.6 SOCIETAL INFORMATION

The responsible growth model devised by ENGIE is based on structured dialog tailored to all the stakeholders in the Group's business activities.

3.6.1 DIALOG WITH STAKEHOLDERS AND PARTNERSHIPS

ENGIE maintains an ongoing and proactive dialog with all stakeholders around its industrial activities. Based on existing approaches, the Group supports its operating entities in deepening and structuring their practices, from the implementation of dialog strategies to their operational deployment in the project teams.

The goal is to optimize performance and increase value creation by giving precedence to the expectations and needs of the territories and deepening the ownership of the Group's activities by its beneficiaries.

This assistance allows industrial activities to map stakeholders and align with the objective of creating plans for discussion in all the Group's business activities by 2030.

The support is based on a Group methodology which is adapted to the strategic, technical and geographical specificities of the operational activities. It is based on international standards such as ISO 26000, AA1000, IFC (International Finance Corporation, World Bank) and the Equator Principles.

On the one hand, it consists of raising awareness and training employees in the structuring of dialog with stakeholders in connection with the Group's training entity, ENGIE University. On the other hand, the methodology consists of technical support for the implementation of dialog action plans adapted to the challenges and expectations of the territories.

In 2022, structuring dialog with stakeholders was integrated in ENGIE University's training programs through e-learning which is open to all Group employees. In 2023, 842 employees completed the module and 113 employees took part in awareness-raising sessions through the Sustainability Academy.

At the Group level, dialog with stakeholders is based around two main bodies: the Stakeholder Committee and the Dialog and Transition Forum. In 2023, within the framework of this forum, the three dialog sessions were based on the various issues encountered by operational staff in the regions. The meeting with the Group's stakeholders committee was postponed to the first half of 2024.

At the operational level, dialog with stakeholders is measured through the implementation of societal action plans. In 2023, 49% of sites, activities and projects were covered by these action plans.

Objective title	Unit	ENGIE 2023	ENGIE 2022	ENGIE 2021	2030 target
Implementation of societal action plans for sites, activities and projects (dialog with stakeholders)	%	49	46	36	100

This culture of listening and dialog is extended through societal and environmental partnerships with, in particular, France Nature Environnement, the French committee of the IUCN and the ONE (Ocean Nature and Environment) Foundation.

At the international level, ENGIE is a member of the United Nations Global Compact in the Global Compact COP22 Advanced level category.

3.6.2 COMBATING POVERTY AND THE CORPORATE FOUNDATION

3.6.2.1 Fuel poverty of individual customers

ENGIE has a portfolio of approximately 20 million contracts in the countries where it operates, of which approximately 1 million customers are considered vulnerable or in difficulty under national legislation that differs from country to country. ENGIE is committed to helping its customers cope with fuel poverty by implementing not only the measures taken by the public authorities but also its own actions.

In France, ENGIE has contributed to the French solidarity housing fund (Fonds Solidarité Logement – FSL) since 2007 and in the amount of €6 million per year since 2010 (€12 million in 2022). In 2023, ENGIE was therefore a signatory of 110 active agreements with the FSL, of which 16 with metropolises. In 2023, around 41 439 families received support as a result of this fund which is managed by departments and / or metropolitan areas. The average amount of aid granted is 309 euros, up on 2022.

ENGIE relies on its Solidarity and External Relations Correspondents, who are committed to promoting ENGIE's Solidarity policy to local elected officials, social workers, social mediation partners and consumer associations. This proximity is fundamental and necessary for the implementation of personalized support for the most vulnerable customers. ENGIE has created a network of mediation partners with over 120 customer assistance centers throughout the country as of the end of 2023. In 2022, 37 social mediation partners contacted 17,992 customers to find a solution to their unpaid bills. These actions make it possible to resume contact with customers in difficulty and were renewed in 2023 with nearly 18,500 customers contacted.

In addition, ENGIE has developed tools dedicated to social players for the latter to be able to respond appropriately and immediately to the needs of vulnerable customers. The ENGIE Solidarity portal (available on the website servicessociaux.engie.fr), created in April 2018 and specifically designed for social workers to independently and securely support our vulnerable customers, therefore saw an increase in its use for the fifth year in a row and continues to be popular among users: in 2023, there were 185,720 interactions between departmental and communal social services and the ENGIE Solidarity teams with more than 23,000 users. A dedicated phone line for social workers is also open Monday to Friday from 9:00 a.m. until 5:00 p.m. to provide them with answers as quickly as possible. In 2023, 38,800 calls were received and handled by ENGIE Solidarity advisors with an accessibility rate of 95%.

Moreover, to simplify the process for our vulnerable customers and help them to learn about available assistance and free advice and services, in December 2023 ENGIE created a Solidarity page on the ENGIE public website: https://particuliers.engie.fr/aide-contact/espace-solidarite.html public

ENGIE also participates in the "Aide Budget" (Budget Support) experiment led by the General Directorate of the Treasury. This scheme offers additional aid to support vulnerable customers. Thus, on the proposal of ENGIE and subject to customer consent, the "Point Conseil Budget" contacts vulnerable customers and offers them solutions for global budget support.

Finally, ENGIE established partnerships with Compagnons Bâtisseurs and Réseau Eco Habitat in 2023 to support vulnerable families who are homeowners in the energy renovation of their property by financing the outstanding amounts.

In 2023, the Group continued its initiatives to raise awareness of domestic gas appliance safety and saving energy. In France, true to its purpose, GRDF therefore affirms its solidarity with its customers. By activating synergies with local players, the Company helps to inform, guide and support people in situations of fuel poverty. For several years, the Company has been carrying out specific actions with low-income families in order to raise awareness about the safety of their domestic gas appliances and saving energy. Among these actions, the eighth edition of CIVIGAZ, a civic service mission created and operated with the Fondation Agir contre l'Exclusion (Act Against Inclusion Foundation), was held in 2022 and 2023. Since 2015, the program has raised the awareness of more than 71,000 people. Visits carried out by civic service volunteers also led to more than 5,200 interventions to make gas installations compliant.

Following an impact study, work carried out in collaboration with the Fondation Agir contre l'Exclusion has led to development of the program to strengthen its impact. For the 2023 / 2024 season, the main changes include the enrichment of content, with a focus on energy sobriety and access to consumption data, and the incorporation of collective events focused on the control of energy in public spaces (on the ground floor of buildings, in schools, in markets, etc.). In addition, the duration of the program has been extended from seven to 12 months, and human resources have been increased within local structures.

These developments have led to increased interest from local authorities in this scheme. CIVIGAZ will therefore be rolled out in 15 territories across eight regions of mainland France for the 2023/2024 season.

GRDF also maintained its partnerships with the Observatoire national de la précarité énergétique (ONPE), the Fédération nationale Soliha, the Association nationale des compagnons bâtisseurs, the association Stop exclusion énergétique, Croix Rouge Insertion and the CLER (behind the SLIME program) to capitalize on the CIVIGAZ experience which unites coalitions of territorial players around the issues of security and poverty.

Finally, and at the same time, GRDF continued its daily actions directly with its customers and partner authorities: raising awareness among technicians and customer services advisors regarding fuel poverty, greater sensitivity surrounding disconnection for unpaid bills, and launch of several local trials in partnership with social and energy players were all actions taken in 2023 to support its customers.

In Australia, the “Bill assist program” has been set up for vulnerable customers to offer them flexibility and individualized payment solutions based on reciprocal commitments. It is complemented by the “Here to help” program with two initiatives that target customers with late payment of 30 or 120 days.

In Belgium, there is a social tariff for vulnerable customers who have access to a dedicated line. ENGIE has also partnered with public social action centers (Centres Publics d’Action Sociale – CPAS) and offers longer payment spread plans for vulnerable customers.

In the Netherlands, partnerships have been established with associations such as “Geldfit,” which helps customers with financial difficulties reach the right contacts for help and trains ENGIE employees in getting to know these customers better, or “Noodfonds Energie” which is an emergency fund for obtaining financial assistance for the payment of energy bills. Vulnerable customers receive specific treatment and a plan for spreading payments as well as actions to raise awareness about saving energy.

In Romania, there are financial and non-financial protection measures driven by local regulations such as support for heating, consumption, the purchase of efficient equipment or products and services aimed at increasing energy efficiency. A dedicated ENGIE team manages the processes related to the support granted by the local authorities and departmental social assistance agencies, the payment spreading plans and the tools for managing consumption and raising awareness about saving energy.

3.6.2.2 The environmental and social fund “ENGIE Rassembleurs d’Énergies”

The Group supports social enterprise and disadvantaged populations through the social and environmental fund, ENGIE Rassembleurs d’Énergies. ENGIE invests in social enterprises promoting shared and sustainable growth for all based on clean, affordable energy and on innovative, sustainable business models.

The fund is utilized for six different themes targeting financial performance and social and environmental impact: sustainable decentralized energy solutions; clean, secure cooking solutions, biogas; energy efficiency and energy saving; the circular economy; and sustainable and inclusive mobility.

At the beginning of 2023, the portfolio companies had provided access to clean, sustainable energy to 7.8 million beneficiaries worldwide. The companies also generated more than 33,000 direct and indirect jobs, more than 60% of which were held by women. In total, more than 20,000 Group employees invested part of their savings in the ENGIE Rassembleurs d’Énergies solidarity mutual fund (FCPE), thus giving meaning to their savings with a direct connection to their occupation.

The 22 active companies in the portfolio operate on four continents (Europe, Africa, Asia and Latin America) and in around 20 countries. These companies cover 11 Sustainable Development Goals through a wide range of technologies that respond to the issue of inclusive growth, in particular through access to sustainable energy and the reduction of fuel poverty. Through them, Engie Rassembleurs d’Énergies provides solutions for at-risk populations.

In 2023, the fund continued its rollout in inclusive mobility in France with an investment in the start-up Omni. This young French company aims to change the lives of more than 25 million people with reduced mobility in Europe, thanks to a simple and affordable wheelchair electrification solution.

At year end 2023 ENGIE Rassembleurs d’Énergies had committed a total of €38.5 million.

ENGIE Rassembleurs d’Énergies has been ESUS approved since 2011, certified B Corp™ since 2019, in recognition of its positive contribution to society and the environment, the transparency of its action and its pursuit of continuous improvement. Its B Corp™ certification was renewed in 2023. ENGIE Rassembleurs d’Énergies has also had Entreprise à Mission status since 2021.

3.6.2.3 The ENGIE Foundation

Created in 1992, the purpose of the ENGIE Foundation is to give a chance to those who do not have one (isolated or vulnerable populations) to demonstrate ENGIE’s societal commitment in the field of mutual aid, to bring the Group’s value and purpose to life.

Its efforts cover two main priorities:

- **Planet** with access for all to energy thanks to the efforts of ENGIE employees – the protection of biodiversity – the fight against climate change;
- **For People** with its Education program to promote access to science and culture for young people and its “fight against poverty and employment” program.

The ENGIE Foundation also wishes to respond to emergencies following natural disasters.

ENGIE Foundation’s initiatives are part of its 2020-2025 mandate, with an annual endowment of €7.8 million.

To respond to major challenges, the ENGIE Foundation relies on the commitment of its employees, and in particular ENGIE’s internal NGOs (Energy assistance), with three priorities:

- impact (acting with impact);
- proximity (being at the heart of the regions);
- responsibility (contributing to societal challenges, giving “l’énergie des possibles” (energy of all possibilities), to help projects happen in areas such as children and young people, community and the environment).

Taking care of life and of our planet has been ENGIE Foundation's mantra for almost 30 years. With 48% of projects in 2023 dedicated to access to renewable and sustainable energy and biodiversity, ENGIE Foundation is committed to the environment on an ongoing basis. Its aim is to take part in projects that are ambitious and an impact, and contribute to the collective effort of the 2030 Agenda via the achievement of Sustainable Development Goals (SDGs).

In terms of biodiversity and the climate, the ENGIE Foundation supports, in particular, major projects alongside the French Biodiversity Office with the Communal Biodiversity Atlases Trophies and projects for the protection of oceans with the exploration of the Gulf of Lion with the National Museum of Natural History, the protection of posidonia.

In 2023, the ENGIE Foundation supported more than 130 projects worldwide with more than 4000 beneficiaries. Details regarding the ENGIE Foundation are presented on the website: fondation-engie.com.

3.6.3 JUST TRANSITION

The plan to transition toward Net Zero Carbon by 2045 presented by ENGIE in 2021 is based on a SBTi-certified "well-below 2°C" trajectory. In line with the Paris Agreement, the plan was designed for its customers, its stakeholders and for the Group to lay the foundations for long-term sustainable growth. The Group's objectives for an affordable, reliable and sustainable energy transition resonate with the challenges facing society, climatic and nature challenges, energy market challenges and those of its stakeholders.

Since the Russian-Ukrainian conflict and energy price volatility on the European continent, underpinned by the climate emergency, the relevance of ENGIE's strategy to offer a balanced, resilient and affordable energy mix has increased. This plan therefore mainly aims to:

- ensure that customers, and low-income customers, have access to affordable and sustainable energy thanks to innovative offers;
- commit to local projects with the communities;
- guarantee quality social dialog at all levels, offer social protection to all employees worldwide, guarantee their employability though training and retraining and through providing support during restructuring;
- establishing stringent standards in terms of labor law, human rights and sustainability throughout the supply chain, promoting inclusive procurement and engaging with suppliers in their decommissioning processes.

This plan therefore implements the principles of fair transition for the benefit of consumers, communities, workers and suppliers.

As to consumers, efforts consist of steps to promote affordable energy.

ENGIE offers free, or nearly free, ways for consumers to track their energy usage, to receive personalized advice, and to manage their usage and their comfort on a target budget or by remote readings.

ENGIE also encourages its individual customers by rewarding them for saving energy. In France, "My Program to Act" compensates them for green actions in the form of "kilo-acts," which can then be reinvested by customers in CSR initiatives. In Australia, the Reduce & Reward program allows customers who reduce their consumption to receive a reward in the form of a reduction in their bill. For companies, ENGIE continues to develop Power Purchase Agreements (PPA) and energy performance contracts.

As to communities, these principles relate to creating local, sustainable value, developing new industrial divisions with a positive impact on the territories and adding to their resilience, to a robust process of consulting with stakeholders and entering partnerships. The rollout of the SET (Sustainable Energy Transition) label continues in various countries (France, Italy, Spain, Belgium, Chile, United States and Canada). Audited by independent experts from Bureau Veritas, this SET label certifies the method used by ENGIE to carry out onshore wind and solar projects integrated into their region, respectful of nature and increasingly useful for reducing greenhouse gas emissions. A strict framework is applied and it includes nine commitments, divided into three main themes: regions, nature and climate guaranteeing in particular the involvement of stakeholders in projects, the preservation of nature in the vicinity of facilities and the optimization of the projects' contribution to the fight against climate change.

ENGIE has also launched a global socio-economic footprint study that will be made public in 2024 to present its impacts in terms of jobs (direct and indirect) and contribution to the wealth of the countries where it operates.

For employees, the Group continues to roll out protection measures, with the global "ENGIE Care" program of social coverage, covering four key areas worldwide. This program, created with international trade unions, aims to provide every employee, anywhere in the world, with social protection in four key areas: hospitalization, death benefits, disability (permanent and total) and parental leave (for mothers and fathers).

ENGIE is also participating in the negotiations of an agreement at European level between the Federation of Gas employers (Eurogas) and the trade union federations ESPU (public service) and IndustriALL (industry) on the fair transition in the gas sector around the following issues: anticipating changes in employment and skills needs, transition from one job to another, training as a key to employability (right to training, strong social dialog, and diversity in the workplace). This agreement is expected to be concluded in the first half of 2024.

In terms of training, ENGIE University offers the Sustainability Academy. One of the purposes of this academy is to highlight the expertise and commitment of the Group's employees in taking sustainability into account in their business occupations. Another purpose is to share this expertise with the entire company and its ecosystem. The Sustainability Academy offers several levels of training, from acculturation to expertise, and is based on a variety of formats.

The apprenticeship training center dedicated to energy transition and climate-related occupations provides training to many young people through work-study programs. This provides access to the Group's future occupations and accelerates its strategy toward Net Zero Carbon.

Finally, ENGIE encourages its "preferred" suppliers to commit to a trajectory of decarbonization aligned with or certified by SBTi. ENGIE's key suppliers are also assessed by EcoVadis on the following four topics: environment, human rights, workers' rights, ethics and sustainable procurement.

To ensure the success of this just transition plan, ENGIE relied on its approach of transparency and co-construction with civil society. In 2022, the plan was submitted for opinion to a Committee of stakeholders (associations, responsible investors, economists, institutions and activists) and in early 2024 the Group is presenting its first key indicators aligned with its ambitions in the integrated report.

3.7 PROCUREMENT, SUBCONTRACTING AND SUPPLIERS

With expenditure of €18 billion per year excluding energy purchases, the Procurement function has a leading role in the Group's value chain and aims:

- to contribute to the Group's operational performance by putting forward a panel of competitive and differentiated suppliers to the operational teams;
- to uphold the Group's commitments to its suppliers;
- to contribute to its CSR approach and to the achievement of its decarbonization objectives;
- to develop key talent and expertise within the Procurement Division.

The sustainability of purchases, and more generally of the Group's entire supply chain, has become a key issue that is based on three pillars:

- the impact of procurement on carbon emissions and climate. Procurement has a key role in achieving the Group's decarbonization commitments (Net Zero Carbon 2045 objective, well-below 2°C by 2030 trajectory, etc.).
- the impact of procurement on nature (water, biodiversity, pollutants, waste, etc.) is a subject of increasing and significant importance;
- the human impact of procurement (inclusive procurement, impact on communities, human rights of the supply chain, worker health, etc.).

In order to achieve this ambition, the Procurement function relies on a management system structured around:

- a Procurement Charter which defines ENGIE's commitment and expectations with regard to its suppliers particularly in terms of human rights, health & safety, ethics and sustainability (carbon, environment, circularity). These principles apply to the entire supply chain;
- a Procurement Governance which sets out the 14 rules defining the principles for the management of external expenditure and the operating rules for Procurement. In particular, it aims to reinforce the separation of tasks between buyers and purchasing advisers, while encouraging their cooperation when selecting the best offerings. Since 2022, the requirement for a third-party assessment and the completion of due diligence is mandatory for the Group's key suppliers (Strategic, Preferred and Major).

The requirements of these two documents, as well as the Group's more general requirements, are set out in the operational processes. These processes cover the management of procurement categories and supplier panels as well as the stages of purchasing and procurement. They include the requirements of the Ethical Code of Conduct (which has replaced the Ethics Charter since 2023), the Corporate Social Responsibility Policy Global Care, the Code of Conduct for Relations with Suppliers, and the Due Diligence Policy for Direct Suppliers and Subcontractors. In 2022, the Group decided to develop and manage purchasing in the adapted work sector, which led to the signing of an Inclusive Procurement France Policy.

In 2020, the Group Procurement Department set two CSR goals, which were rolled out throughout its management system.

Objective title	Criterion	2023 Results	2025 objective	2030 objective
1. Decarbonization of the main suppliers	250 Top Preferred Suppliers aligned with or certified SBT	24%	25%	100%
2. Developing responsible procurement	CSR assessment of suppliers measured by the percentage of preferred suppliers and major suppliers with an ECOVADIS rating higher than "managed CSR risk"	43%	70%	100%
	Promotion of inclusive Procurement measured by the share of inclusive procurement aligned with the GT3 recommendations. A working group made up of French companies (Bnp Paribas, Accor, Crédit Agricole, Danone, etc.)	80%	60%	100%

ENGIE has developed a proactive strategy to strengthen supply chain resilience in a changing geopolitical and regulatory environment. Against the backdrop of international geopolitical tensions, the Group faces logistical delays, price pressures, embargoed countries, human rights regulations (e.g. the Uyghur Forced Labor Prevention Act) and trade barriers (e.g. the US Inflation Reduction Act). In addition, climate risk and the Net Zero Carbon ambition put additional pressure on energy suppliers. The development of traceability and diversity in supply chains is therefore a priority to mitigate CSR and geopolitical risk, while building more sustainable supply chains (see Section 3.9.1.6 "Prevent and manage risks related to non-energy purchases")

The management of these risks gives rise to action plans specific to the procurement categories most at risk and of strategic importance for the Group. These are identified from a risk matrix developed with the assistance of the Category Managers network and the CSR partner: EcoVadis. This matrix combines the CSR risk of each category, the country risk and market knowledge.

The actions of the Procurement Department focus primarily on the Group's key suppliers – its Strategic, Preferred and Major suppliers – which represents a substantial part of total expenditure (approximately 37%).

In addition, the correct implementation of procurement processes is verified through internal control (see Section 2.3 "Internal control procedures") and internal audit processes.

Finally, the achievement of these ambitious goals is supported by a progressive program of ongoing training within the Procurement function and at the heart of the Group's entities. In 2023, the Procurement Department set up a cross-functional training program (Procurement Academy) providing a set of mandatory training courses in the following areas: Ethics, Sustainability (energy transition and climate change), Health & Safety, Management, Diversity and Inclusion, working conditions and IT security.

3.8 ETHICS AND COMPLIANCE

The Group's senior executives drive and oversee the Group's ethics and compliance policy and ensure that it is properly applied. A message of Zero Tolerance with respect to all ethical shortcomings and, more specifically, to any form of fraud and corruption is regularly communicated by the Chief Executive Officer. All managers at all levels of the Group convey the same message.

ENGIE's principles of action are based on international standards. All the Group's measures to prevent and combat corruption comply with these. The same is true for the Group's strategy on human rights and its personal data protection program.

The Group has made voluntary anti-corruption commitments. ENGIE adheres to the United Nations Global Compact, the tenth principle of which relates to combating corruption. ENGIE also adheres to the French chapter of the Transparency International NGO.

3.8.1 ETHICS AND COMPLIANCE GOVERNANCE

Ethics and compliance within the Group are overseen by the Board of Directors via its Ethics, Environment and Sustainable Development Committee (EESDC – see Section 4.1.2.4.4).

The Compliance Committee assesses the handling of ethical incidents and monitors the process for updating the Group's ethics and compliance framework. At Group level, it brings together the Corporate Secretariat, the Director of Human Resources and the directors of the following Corporate Departments: Legal, Ethics, Compliance & Privacy, Internal Audit and Internal Control.

The Ethics, Compliance & Privacy Department(ECPD) is attached to the Legal, Ethics and Compliance Department, itself under the authority of the Group Corporate Secretariat. The ECPD oversees the incorporation of ethics into the Group's strategy, management and practices. It proposes ethics and compliance policies and procedures for the Group. It supports their implementation at all levels of the Group. It coordinates the implementation of the Group's vigilance plan (see Section 3.9) and deals with whistleblower reports arising under the Group procedure which it manages. The ECPD coordinates the network of Ethics & Compliance Officers and ethics correspondents (in 2023: more than 240 people) and Data Privacy Managers (in 2023: more than 130 people) across the entire Group. The majority combined this role with other functions (legal, HR, internal control, etc.).

The Ethics & Compliance Officers and Data Privacy Managers mainly ensure that the Group's Ethics & Compliance and Data Privacy framework are implemented at the level of their entities. Their activities are within the scope of responsibility of the Chief Executive Officer or manager of the entities for which they act.

Since 2018, the ECPD has been the competent department for all matters requiring the establishment of a compliance procedure, and most importantly, a procedure to prevent and combat fraud and corruption. It is also charged with personal data protection, with embargoes and with interest representation.

3.8.2 RISK ASSESSMENT

The assessment of ethical risks is included in the Group's risk analysis process (Enterprise Risk Management – ERM) (see Section 2.1.1). Five ethical risks have been identified: corruption; human rights violation; non-compliance with embargo or export control rules; non-compliance with competition law rules; and fraud. The Group's risk analysis approach also includes data privacy risk. It covers in particular the risk of personal data breaches and the risk of non-compliance with the General Data Protection Regulation (GDPR).

The process for assessing corruption risks, human rights violation risks and data privacy risks uses a common analysis approach for all the Group GBU. In 2023, the Group implemented a new methodology for mapping the risks of corruption and influence peddling in line with the recommendations of the French Anti-Corruption Agency. The risk of human rights violations is analyzed using a Group self-diagnostic scorecard. The Group has also issued guidelines on the assessment of the risk of personal data breaches.

3.8.3 REFERENCE TEXTS

ENGIE's ethics and compliance policy aims to develop an ethics culture and practice based on various reference texts.

3.8.3.1 ENGIE's Ethics Code of Conduct

In 2023, the Group adopted a new Ethics Code of Conduct. This document replaces ENGIE's Ethics Charter and Practical Guide to Ethics and has developed them into an Ethics Code of Conduct that responds to the Group's current ethical and compliance issues and its activities as well as the expectations of its stakeholders.

The Ethics Code of Conduct establishes the framework for the professional conduct of every employee. In particular, on page 8, it specifies ENGIE's ethical commitments. It also presents the concrete actions through which these principles are implemented. It also describes the Group's ethics and compliance system and organization.

In addition, it includes the Group's decision to refrain from any financing of political activities.

This Ethics Code of Conduct applies to all Group employees. It also applies to relations with all third parties of the Group.

The new Ethics Code of Conduct has been published in 10 languages on ENGIE's website at: https://www.engie.com/en/group/ethics-and-compliance

3.8.3.2 The Integrity reference system

The "Integrity" reference system is a collection of policies and procedures for preventing fraud, corruption and influence peddling. All of the ethical assessment procedures were reviewed in 2018 and 2019 and extended in 2021 to cover recruitment activities. Thus, the stakeholders of investment projects, beneficiaries of corporate sponsorship and patronage, suppliers, business consultants and new people recruited in positions that are the most exposed to the risk of corruption are the subject of enhanced preventive action.

In 2020, the Group overhauled its gifts and invitations policy. It also rolled out a new register of business consultants. Lastly, the Group has created a new gifts and invitations register that was rolled out in 2021. These registers are fully digitized, shared by all the Group's entities and designed as management and monitoring tools.

3.8.3.3 The Human Rights reference system and policy

The "Human Rights" reference system and policy comprise ENGIE's commitments to respect internationally recognized human rights. The system specifies the operational processes for analyzing and managing risks. It thus enables the Group to be vigilant about the impact of its activities on the human rights of all individuals. The reference system and policy are the cornerstones of the human rights component of the Group's vigilance plan (see also Section 3.9).

3.8.3.4 The Ethics Compliance reference system

The "Ethics Compliance" reference system sets out how the Group implements its ethics and compliance system and measures compliance. It also includes the Group's procedures for complying with rules on embargoes, export controls, and competition law.

Since 2017, the Group has had a specific compliance system in place to monitor interest representation actions. In accordance with the law of December 9, 2016, this system enables Group entities to comply with their obligation to report to the French High Authority for the Transparency of Public Life (Haute Autorité pour la Transparence de la Vie Publique or HATVP). Its scope of application was extended in 2022 to cover local public decision makers.

Since 2017, furthermore, the Group's reference system has also aimed to ensure compliance in terms of personal data protection, in accordance with the requirements of European Regulation 2016/679 on personal data protection. Against this backdrop, in 2019 the Group introduced a specific policy and procedures.

These were updated in 2022 to improve governance. The new policy was published on ENGIE's website at the following address: https://www.engie.com/en/group/ethic-and-compliance/data-protection-and-privacy/group-data-privacy-policy

Guidelines for identifying early warning signs in ethical matters were rolled out in the Group in 2019.

Finally, in 2023, the Group developed a Guide relating to the internal enquiry which was made available to members of the Ethics & Compliance line. This Guide defines a set of internal enquiry guidelines common to all Group entities.

3.8.3.5 Professional codes of conduct

Professional codes of conduct are used to apply ENGIE's ethics commitments to business practices and operations. These codes of conduct include the "Code of conduct in supplier relations," and the "Code of conduct on lobbying." These documents are available on ENGIE's website at the following address: https://www.engie.com/en/group/ethics-and-compliance/principles-and-commitments.

3.8.4 WHISTLEBLOWING AND REPORTING OF ETHICS INCIDENTS

The Group policy covering whistleblowers, including the legal requirements of the Sapin 2 law and those of the law on the duty of vigilance, was defined in 2017. This policy complies with Law No. 2022-401 dated March 21, 2022 ("Waserman" law) which transposes into French law European Directive No. 2019/1937 on the protection of whistleblowers. The procedure for collecting alerts via the email address ethics@engie.com and a dedicated telephone number, was set up at the Group level in July 2018. Both channels are outsourced to an external service provider, which is responsible for receiving the alerts. Since January 2019, these channels are available to all of the Group's staff worldwide. Alerts may be received in several languages and the service is available 24/7. Email alerts are systematically and immediately acknowledged by a confirmation of receipt which is sent to the whistleblower. Telephone alerts are answered directly when they are received during office hours (Paris time). When they are received at another time, the external service provider calls the caller back within 24 hours provided they leave their number.

The system is described on the Group's website at the following address: https://www.engie.com/en/ethics-and-compliance/whistleblowing-system. It is an addition to the Group's other reporting routes, which can be accessed by any employee and any person outside the Group.

Alerts and managerial reports of ethical failures are monitored via the My Ethics Incident digital tool for collecting ethical incidents, which has been rolled out to all the Group's entities. These alerts and reports cover seven areas: accounting and financial integrity, conflicts of interest, social responsibility and human rights, business ethics, confidential information, the protection of intangible assets, and personal data (for the reporting and processing of data breaches). In 2023, 274 alerts were input as part of the Group's whistleblowing procedure (254 in 2022, 187 in 2021, 201 in 2020, 183 in 2019) and 222 managerial reports of ethical incidents were made to the ECPD (346 in 2022, 277 in 2021, 283 in 2020, 282 in 2019 and 218 in 2018). The Group provides more detailed information on the relevant areas of ethics and the sanctions applied on ENGIE's website at the following address: www.engie.com/en/group/ethics-and-compliance/policies-and-procedures/ethical-compliance-referential.

3.8.5 TRAINING

The Group has implemented a mandatory ethics and compliance training plan for all of its employees. The training plan is tailored to the roles and activities of the employees concerned. It is supported by a guide for mapping the populations most exposed to corruption risk. Since 2020, the Group has also rolled out a new digital tool to monitor the progress at all levels of the digital training provided to Group employees (videos and e-learning). All e-learning courses of the Group's ethics and compliance training plan are accompanied by a test which must be passed to complete the course and which is then included in the statistics of e-learning courses carried out.

All Group employees are required to complete a training path comprising training videos on subjects involving significant ethical issues: gifts, invitations, corruption, whistleblowing and conflicts of interest. The employees who are most exposed to corruption risk, are required to complete a training path specifically for them. This training path is based on the Group's e-learning modules which provide in-depth knowledge of the Group's ethical issues, particularly in relation to fraud, corruption and competition law (at the end of 2023, 43,180 e-learning modules – with test completion – were undertaken). Finally, the managers ("Global Leaders") and members of Executive Committee / Management Committees of entities must also participate in the seminar on the prevention of fraud and corruption (at the end of 2023, 100% of Global Leaders and 100% of Executive Committee / Management Committee members had taken part in this course). Members of the Ethics & Compliance line are also required to take the same training.

Face-to-face training courses on competition law increased significantly in 2023, particularly for GBU Energy Solutions entities. Training aimed at preventing the risk of fraud and corruption among persons in charge of institutional relations in France and training on personal data protection also continued in 2023 (for example, new training on the French High Authority for the Transparency of Public Life (HATVP) guidelines for advocacy activities of interest, applicable from October 1, 2023, and data privacy training for IT and HR stakeholders). The same was true for training on human rights (see Section 3.9.1.1). Given their particular exposure to the risk of corruption, buyers must follow additional courses including in-person training run jointly by the Procurement Department and the ECPD: "Ethics and supplier relations" and "Due diligence for procurement" (see Section 3.7). Lastly, due diligence training in the recruitment process to prevent the risk of corruption has been rolled out to the Group's HR Division since 2022 and continued in 2023.

3.8.6 CONTROLS AND CERTIFICATIONS

The monitoring of the implementation of the ethics and compliance policy is based on an annual compliance procedure. In this context, the Ethics & Compliance Officers produce an ethics compliance report on the work and progress accomplished by their entity in this area. This report is submitted to the relevant supervising entity. It is accompanied by a compliance letter from the manager certifying their commitment to the application of the ethics and compliance program within the organization for which they are responsible. At the start of the year, a bilateral assessment of the activities and risks of each organizational entity attached to a GBU is carried out by the Ethics Compliance & Privacy Director. The consolidated annual report resulting from this process is submitted to the Executive Committee and to the EESDC.

This compliance procedure is part of a broader control procedure. This is based in particular on the annual internal control campaigns which assess the level of implementation of ethics, embargo and personal data policies. It is also based on policy controls that are built into the internal audit campaigns.

The Group is also engaged in external audits of its ethics and compliance framework. It obtained anti-corruption certification from Mazars and ADIT in 2015. In 2018, ENGIE obtained ISO 37001 (anti-corruption management systems) certification from ETHIC'Intelligence (now "Speeki Europe"), an accredited certification body. This certification was renewed in 2019 and 2020 following supervisory audits. In 2021, ENGIE launched its second ISO 37001 certification audit campaign with the support of EuroCompliance, an accredited certification body. The Group obtained its second ISO 37001 in 2021 which was also renewed in 2022 and 2023. All of these audits were carried out at Group level and in several operating entities that are representative of the Group's activities.

3.9 VIGILANCE PLAN

In accordance with Law no. 2017-399 of March 27, 2017, this section summarizes the Group's vigilance plan. A developed version of the vigilance plan, its progress report, as well as details of the policies and actions are available on the Group's website:

Drawn up in association with ENGIE's international trade union federations in the framework of the new Global Agreement signed in 2022 (see Sections 3.4 "Social information" and 3.9.5.2 "Stakeholder relations"), this plan covers all the measures established by ENGIE S.A. to prevent risks related to its activities and those of its controlled companies. It covers serious violations relating to human rights and fundamental freedoms, the health & safety of individuals and the environment. The Group's adherence to international standards is the minimum basis for commitments that the Group intends to apply wherever it operates.

These measures and the common whistleblowing system have already been in use for several years. Completely integrated to the ethics organization, the vigilance plan benefits from steering, governance and dedicated monitoring (see Section 3.9.5).

All Group entities located in Germany subject to Germany's Supply Chain Due Diligence Act (abbreviated in German: LkSG), which came into force in January 2023, comply with the legal requirements.

4 VIGILANCE APPROACHES

Risk identification and management (activities, projects, etc.)

MANAGEMENT ENTRUSTED TO THE ETHICS, *COMPLIANCE & PRIVACY* DEPARTMENT

HUMAN RIGHTS APPROACH	ENVIRONMENTAL AND SOCIETAL APPROACH	HEALTH AND SAFETY – SECURITY APPROACHES	VIGILANCE MONITORING COMMITTEE
Human rights policy — Ethics, Compliance *& Privacy Department*	CSR policy — CSR Department	Health and Safety – Security policies — Health and Safety – Security Departments	ASSOCIATION OF STAKEHOLDERS — Global Agreement, European Works Council, stakeholder committees, etc.
PURCHASING APPROACH	Procurement Charter	Procurement Department	

ASSESSMENT OF SUBSIDIARIES, SUPPLIERS, SUBCONTRACTORS
Questionnaires to entities, Responsible procurement, Due Diligenge policies

—

WHISTLEBLOWING AND COLLECTION OF ALERTS
ENGIE whistleblowing system, ad hoc systems

—

MONITORING OF EFFECTIVE ROLL-OUT OF VIGILANCE PLAN WITHIN THE ENTITIES
Internal control, Ethics compliance report, consultation mechanisms

3.9.1 IDENTIFICATION AND MANAGEMENT OF THE RISKS OF SERIOUS HARM TO INDIVIDUALS AND THE ENVIRONMENT

The Group exercises vigilance through policies that cover all issues and procedures relating to the identification and assessment of risks. Goals and follow-up and assessment processes are put in place on the basis of these procedures.

3.9.1.1 Prevent and manage the risks related to human rights

Governance

ENGIE SA's Ethics, Compliance & Privacy Department, attached to the Legal, Ethics and Compliance Department, itself under the authority of the Corporate Secretariat, is directly responsible for the legal rights component of the vigilance plan. It relies on its network of Ethics and Compliance Officers and ethics correspondents located across the world and on other departments concerned by human rights aspects (see Section 3.8.1).

Risk mapping

The major risks of negative impacts on the human rights of any individual due to the Group's activities are related to the fundamental rights of workers. More generally, challenges relating to human rights for the Group are as follows:

EMPLOYEES' FUNDAMENTAL RIGHTS	RIGHTS OF LOCAL COMMUNITIES	SUBCONTRACTORS / SUPPLIERS / PARTNERS
• Health and safety conditions • Freedom of association • Non-discrimination • Fight against forced labor • Working hours • Housing conditions of workers • Private life	• Health of surrounding populations • Living conditions of surrounding populations (food, water, housing, culture, access to resources, etc.) and the right to a healthy environment • Rehousing of populations • Fight against the suppression of the projects' opponents	• Work and health and safety conditions of subcontractors • Energy supply • Traceability and supply of materials used for the Group's products and services • Best practices of commercial partners in projects

SAFETY CONDITIONS FOR EMPLOYEES AND SITES

- Best practices of private or public security forces in the performance of their security mission, and notably practices relating to the use of force
- Security conditions of employees in at-risk countries

Details regarding risks are available on the ENGIE Group's website at the following address: www.engie.com/en/group/ethics-and-compliance/policies-and-procedures/human-rights-referential

Human rights policy

The Group's human rights policy, adopted in 2014 and constantly evolving, specifies the Group's commitments and provides for regular processes to identify and manage risks. In particular, every year, the entities must assess their activities with regard to their impact on human rights, via a dedicated self-diagnostic scorecard (see Section 3.8.2). They must also assess any new business activity via a dedicated scorecard designed to identify the risk factors specific to the planned activity.

Risks are assessed by country, the presence of subcontracting, business, characteristics relating to workers, the presence of populations where risk is heightened if they are vulnerable, the products / services used, use of armed security forces, and the type of sales relations. The assessment of third parties (suppliers, subcontractors, partners, contractors, etc.) explicitly including human rights (see Section 3.9.3) as well as the whistleblowing system (see Section 3.9.4), is also used to identify risks.

The Group's human rights policy and other detailed information are available on the Group's website at the address mentioned above.

Risk management measures

The entities in two major regions, South America (SOUTHAM) and Asia - Middle East - Africa (AMEA), along with Global Energy Management & Sales (GEMS) and Tractebel, saw a change in risk levels relating to human rights, either because of their country of activity or the sector in which they do business (gross risk). For each identified risk, entities define and implement specific action plans to manage those risks at the operational level. These action plans are described and updated regularly on the Group's website at the address mentioned above.

In addition to these risk management measures defined and implemented locally by the Group's entities are more global actions. The application of the Group's human rights policy ensures this risk management for all the Group's human rights issues. Examples of these risk management measures illustrating the main categories of human rights issues identified for the Group are presented below.

The Global Agreement on fundamental social rights and social responsibility signed in 2022 by ENGIE and the Group's social partners (see Sections 3.4 "Social information" and 3.9.5.2 "Stakeholder relations") also contributes to the management of risks related, for example, to the fundamental rights of workers, health & safety at work and to suppliers and subcontractors.

Fundamental rights of workers

Prevent the risk of harassment and discrimination

The prevention and combating of harassment and all forms of discrimination is applied both within the Group and for the benefit of the subcontractors' employees. For example, in 2021 and 2022, the Group rolled out guides to reaffirm the principle of zero tolerance in all parts of the world:

- a guide against all forms of discrimination against LGBTQ+ people;
- a guide on combating sexual harassment and sexist action.

Prevent the risks related to modern slavery

The Group shares the objectives of the British Modern Slavery Act and takes various steps to ensure that no modern slavery practices (including slavery, forced labor and human trafficking) are used in its operations and those of its supply chain. ENGIE's declaration on modern slavery is available at the address mentioned above.

Other risk management measures related to the fundamental rights of workers are elaborated on in the ENGIE Global Agreement and Sections 3.9.1.2 "Prevent and manage risks related to health & safety in the workplace" and 3.9.1.3 "Prevent and manage risks related to personal security."

Rights of local communities

Prevent the risks of violation of the rights of local communities

The Group is particularly attentive to the impact of its activities on local communities. It specifically takes into account the situations of vulnerable people (such as indigenous communities). To do this, the Group assesses the potential impact of its activity on communities and ensures that their expectations are taken into account through dialog and consultation (see Section 3.9.5.2).

Employee and site security conditions

Prevent the risk of disproportionate use of force

In order to prevent the risk of disproportionate use of force, the Group's requirements include raising awareness among security managers and mandatory training of the staff of security service providers.

Other health, safety and security risk management measures are elaborated on in the ENGIE Global Agreement and Sections 3.9.1.2 "Prevent and manage risks related to health & safety in the workplace" and 3.9.1.3 "Prevent and manage risks related to personal security."

Subcontracting, suppliers, partners

Prevent the risk of forced labor practices in the Group's supply chains located in China

The Group does not wish to procure supplies from Chinese manufacturers that are unable to provide proof that they have not used forced labor. In 2020, the Group introduced a specific heightened vigilance action plan to identify and manage these risks. The Group has agreed to ensure compliance with international laws and actively monitors the situation to ensure that no forced labor is used anywhere along its supply chain. In 2023, the Group continued its enhanced vigilance activities (see also Section 2.2.5.1).

The main measures implemented include:

- in-depth due diligence on suppliers carried out by independent experts;
- supply chain evidence requested from suppliers;
- written commitment from suppliers not to use forced labor;
- sending out questionnaires in which suppliers have to provide evidence that they ban forced labor;
- enhanced contractual clauses (general audit clause, breach of contract in case of failure by suppliers to meet their obligations, supplier's guarantee to comply with local and international regulations governing forced labor, from the procurement of commodities through to the delivery of a product);
- participation in several sector initiatives in solar and wind to share and help improve risk management practices.

Prevent the risk of violation of the fundamental rights of workers in ENGIE's customer relations centers located abroad

The Group began to roll out an action plan in one of its entities in 2022. This plan targets the Group's customer relation centers located abroad and is aimed at assessing the actual working conditions of workers in consultation with them. In 2023, for example, controls to ensure the implementation of the requirements were conducted directly on site in certain customer relations centers.

Other risk management measures related to business relations are elaborated on in the ENGIE Global Agreement and Sections 3.9.1.2 “Prevent and manage risks related to health & safety in the workplace,” 3.9.1.5 “Prevent and manage risks related to energy supply,” 3.9.1.6 “Prevent and manage risks related to personal security” and 3.9.3 “Third-party assessment.”

More detailed information on risk management measures is also available on the Group’s website: https://www.engie.com/en/ethics-and-compliance/vigilance-plan.

Awareness-raising tools

A face-to-face training course on the Group’s human rights approach was developed in 2019. Open to all, it particularly targets operational staff and managers directly concerned by this topic. Since 2022, individuals in positions particularly exposed to human rights risks have been identified and a specifically dedicated training plan was launched. An e-learning module on human rights for all employees has been also in use for several years now.

Performance monitoring and measurement

The monitoring of the application of these processes is incorporated into the ethics compliance report (quantitative and qualitative indicators) and into the internal control system (see Section 3.8.6).

2023 Results	2,228 employees trained in person on human rights, around 57% of whom were from operational functions, and around half of these from at-risk entities, and 16,520 employees trained by e-learning.
Internal control (see Section 2.3)	83.9% of the Group’s entities assessed the roll-out of the vigilance plan at their level as effective [1]. 97.5% of the entities that assessed the roll-out of the human rights policy considered it to be effective [1].
Ethics compliance report	95%: Coverage of the annual human rights risk sheet. 100%: Number of due diligence procedures (with human rights risk) on partners in the context of the Group’s investment committees

(1) Maximum level 4 according to the internal control standards.

In 2022, the Group signed a new Global Agreement relating to fundamental social rights and social responsibility. The Agreement also includes a monitoring of commitments:

Group commitments	Monitoring (2023 figures)
Health & safety (see Section 3.4.6)	1.8 (representing an improvement compared with 2022: 2.0): lost time work-related injury frequency rate for employees and subcontractors working on sites with controlled access 0.019 (0.014 in 2022): fatality rate (target of zero each year)
ENGIE Care program (minimum level of social protection for all employees worldwide, see Section 3.4.4.1.2)	73.5% (66.5% in 2022) of entities (representing 90.7% of employees): fully paid maternity leave (14 weeks) 40% (27.7% in 2022) of entities (representing 62.3% of employees): fully paid paternity leave (four weeks) 97.2% (94.6% in 2022) of employees: 12 months’ gross salary paid in the event of death 98.6% (97.2% in 2022) of employees: reimbursement of 75% of costs in the event of hospitalization 87% (79.2% in 2022) of employees: 12 months’ gross salary paid in the event of permanent disability
Gender diversity: 50% of female managers (see Section 3.4.2.2.2)	31.2% (29.9% in 2022): percentage of female managers
Gender pay equity (see Section 3.4.2.3.2)	1.92% (1.73% in 2022): pay difference between men and women

3.9.1.2 Prevent and manage risks related to health & safety in the workplace

Health & safety management system

Protecting the health & safety of the people working for the Group is an absolute priority. In order to achieve its objectives in this area, the Group has put in place the following provisions:

- a health & safety policy that identifies the issues, sets ambitions and defines the levers for action;
- a dedicated governance system, incorporating the presentation of health & safety results to the Executive Committee, the EESDC and the Board of Directors;
- Group Rules and thematic standards that define the requirements to be respected by entities and operators, including employees, subcontractors or temporary workers;
- action plans designed to control risks including training of employees and raising awareness among operators;
- quantitative reporting in the form of indicators and qualitative reporting enabling the escalation and analysis of incidents and accidents, as well as events organized by the entities;

3

- actions to verify implementation in the field of the Group's expectations in the form of safety visits, audits and inspections.

The main provisions implemented in 2023 are described below, and in Section 3.4.6 "Health & safety policy."

Governance

Occupational health & safety is led by the Group Health & Safety Department in accordance with its health & safety policy.

A Group Health & Safety Management Committee chaired by the Group's Health & Safety Vice President, including the health & safety managers of the four GBU and of Nuclear, meets every fortnight. The role of this committee is to define the indicators to be monitored and the objectives, to decide on actions to be implemented and to ensure the operational roll-out of the Group's health & safety transformation plan, ENGIE One Safety.

Risk mapping

The mapping of risks relating to health & safety includes both risks of harm to the health & safety of people working for the Group (employees, temporary workers, subcontractors, etc.) and risks relating to the process safety of the Group's industrial facilities or those for which the Group provides maintenance and / or operates on behalf of customers.

MAPPING OF HEALTH AND SAFETY AND PROCESS SAFETY RISKS

RISKS TO PERSONAL HEALTH AND SAFETY		
OCCUPATIONAL ACCIDENTS	**HARM TO HEALTH**	**INDUSTRIAL ACCIDENTS**
Risks related to safety:	Risks related to the context of execution of activities:	Risks related to industrial processes Examples of activities:
• examples of risks: falls from height, road accidents, working with vehicles or moving equipment, electric shocks, electrocution, explosion, exposure to high pressures, collapsing trenches, fire, acute poisoning, suffocation, lack of oxygen, injuries relating to the use of tools or machinery, the lifting of equipment, falling objects, tools or equipment.	• examples of risks to health: musculoskeletal disorders, psychosocial risks, exposure to carcinogenic, mutagenic or reprotoxic products.	• operation of LNG terminals, of gas underground storage sites, of gas transmission and distribution networks, of boiler rooms and plants, of hydro dams, of heating networks of wind farms; • services at a customer's industrial facility; • construction of infrastructures.

Health & safety at work policy

The Group's health & safety policy sets out the key principles for the management of health & safety. More information on the policy is available on the Group's website at https://www.engie.com/en/engagements/global-care.

Due to the number of fatal accidents in recent years, the Group decided to improve its health & safety at work rules and practices by entrusting an expert consultant with assessing its health & safety management system two years ago and analyzing deviations from best practices implemented by the most efficient industrial players in this field.

The assessment carried out by the consultant identified the Group's strong points and resulted in the issue of a certain number of recommendations aimed at permanently eradicating serious and fatal accidents.

Based on these recommendations, the analysis carried out internally and feedback from operating entities, the Group defined a major health & safety transformation plan called ENGIE One Safety, which will be gradually rolled out until the end of 2024.

Risk management measures

The main risk management measures implemented in 2023 as part of the ENGIE One Safety transformation plan are:

- further strengthening of the Group Rules on health & safety, drawing on best practices from an external benchmark;
- reinforcement of the managerial safety rituals: the Managerial Safety Visit (MSV), the Life Saving Check (LSC), the Joint Safety Tour (JST), the health & safety toolbox talks, the safety performance review (see Section 3.4.6.3.4);
- the design of a new method of training-coaching for managers so that managerial safety rituals have the expected outcome on the safety behavior of the teams on the ground, including that of subcontractors; the design of this training incorporates the feedback collected following the test carried out in 2022 on seven pilots representative of the Group's activities and its geographic areas;
- development of a new standard for implementing the Live Saving Rules, describing the technical requirements to be met for each Live Saving Rule;
- development of a new standard dedicated to the management of health & safety risks in industrial projects.

The other measures intended to ensure the health & safety of individuals working for the Group are presented in Section 3.4.6 "Health & safety policy."

Awareness-raising tools

In 2023, the Group developed and disseminated several awareness-raising tools to improve health & safety at work:

- circulation of the "Safety Essentials" key behaviors that everyone must adopt to prevent serious and fatal accidents (Live Saving Rules, Stop the Work, the Last Minute Risk Assessment, escalation of incidents, shared vigilance); these Safety Essentials were circulated on World Safety Day in April;

- provision of the "ENGIE One Safety Induction" e-learning course, for all operators, which aims to embed the Safety Essentials into daily practices;
- revision of the Prevention News newsletter dedicated to accident prevention in order to improve its relevance and content;
- publication of a new No Mind at Risk newsletter aimed at improving well-being at work and preventing psychosocial risks.

Performance monitoring and measurement

Several systems have been implemented to assess and monitor the Group's performance in terms of health & safety at work, in addition to the measures put in place by the entities.

The Group has been implementing health & safety reporting for several years to monitor its performance in this field through quantitative indicators. In 2023, the Group published a new version of its health & safety reporting framework in order to incorporate new proactive indicators (known as "leading KPIs") defined as part of the ENGIE One Safety transformation plan.

In addition, in 2023, the Group revised its internal control framework dedicated to health & safety at work (INCOME / COR8a) by identifying nine major themes which appear to require control to achieve the goal of zero serious and fatal accidents (e.g. health & safety of subcontractors, compliance with Life Saving Rules, Fair Culture in health & safety at work).

Monitoring of the Group's health & safety performance is carried out by the Group's various governing bodies:

- the Group Health & Safety Management Committee chaired by the Group's Health & safety Vice-President;
- the Executive Committee;
- the Ethics, Environment and Sustainable Development Committee (EESDC);
- the Board of Directors.

Finally, the Group has defined and implemented a new internal audit process to verify the control of major risks in the entities, with a view to avoiding serious and fatal accidents. It involves the identification of good practices and improvement actions for implementation.

3.9.1.3 Prevent and manage risks related to personal security

The Group's Security and Economic Intelligence Department is notably responsible for ensuring that people are protected. It brings together and leads a network of security managers who define and coordinate the implementation of the ENGIE's Group Security policy.

The "protection of individuals against malicious acts" section of ENGIE's Group Security policy is governed by Law No.2017-399 of March 27, 2017, on the duty of vigilance of parent companies and contractors. This duty of protection applies to all employees, regardless of their status, and notably those who are internationally mobile.

Malicious threats and acts targeting individuals form an integral part of the security risks included in the company's risk catalog (ERM / Enterprise Risk Management). Security incidents are recorded in a Group incident reporting tool (MySecurityIncident), brought to the attention of the security team and are systematically dealt with.

The security network pays particular attention to the respect for human rights in security activities and implements measures aimed at preventing any risk of disproportionate use of force. For this reason, contracts with care-taking and private security firms always include the Group's ethics and sustainable development clause which appears in the general procurement conditions. Moreover, these firms are always subject to checks (due diligence) before they are used.

Security managers are advised by the Security department, which regularly reminds them of their obligations in this area. Finally, security players, working closely with the data privacy teams, ensure that General Data Protection Regulation (GDPR) rules and local laws relating to recordings and the conservation of video protection data are also strictly adhered to.

3.9.1.4 Prevent and manage environmental and societal risks

Governance

The CSR Department, reporting to the Executive Vice President in charge of Finance, Procurement and CSR, addresses Climate, Nature and Societal challenges at Group level. It leads and coordinates a network of CSR and environmental correspondents responsible for the proper implementation of policies, compliance with objectives and performance measurement.

Risk mapping

From an environmental perspective, the major risk for the Group is climate risk, followed by biodiversity, water and pollution risks. Climate risk is analyzed through the double dimension of mitigation (annually and quarterly) and adaptation (annually). Other environmental risks are analyzed annually. These environmental risks are addressed both globally and locally in order to identify projects and sites at risk, and to establish action plans.

From a societal point of view, the risks analyzed consist of the impact of activities on local communities and their social consequences. The risk analysis is based on a mapping of stakeholders.

Special attention is paid to project development with an analysis of environmental and societal risks as far upstream as possible of development in order to avoid impacts as much as possible. The result of the risk analysis is presented in the form of a matrix, containing 10 criteria, analyzed during the validation of projects in the Investment Committee. In 2023, this process applies to all projects submitted for validation by the GBU, the Group Executive Committee or the Board of Directors. The aim is to cover all projects, regardless of their size, by the end of 2025. The themes covered by the CSR matrix are: climate change mitigation, climate change adaptation, biodiversity, water and oceans, air pollution, the circular economy, stakeholders, workers' social rights, responsible procurement and controversies. The criteria are detailed on ENGIE's website at https://www.engie.com/en/analysts/governance/duty-of-vigilance-environmental-societal-risks.

ENVIRONMENTAL RISKS	SOCIETAL RISKS
• Climate change mitigation (GHG) • Adaptation to climate change • Biodiversity and the rehabilitation of ecosystems • Freshwater and oceans • Pollution • Land use	• Relations with local and indigenous communities • Training, employee retraining • Right to operate in a territory • Affordable business offers

CSR policy

The Group's CSR Policy guides the vigilance process with regard to environmental and social matters (see Section 3.1.1). Environmental and societal risks are analyzed periodically at every level of the company. This policy is deployed in each Global Business Unit (GBU), subsidiary, and site. The implementation of the policy is monitored through Group objectives related to the identified risks (see Section 3.3). The progress of these objectives is measured annually and the results are presented and commented on by the Executive Committee and EESDC. For climate change risk mitigation, in addition to the measurement of annual performance, quarterly reviews are carried out to ensure that the results are in line with the defined trajectories. The data are reviewed annually by the Statutory Auditors through audits and audit work on consolidation levels. Other environmental and societal risks are analyzed through compliance with objectives and the proper implementation of action plans. The implementation of the policy, objectives and action plans is also subject to an annual internal control process. The results are presented to the Audit Committee.

Risk management measures

Climate

ENGIE fully recognizes the threat posed by climate change and the control of its CO_2 emissions is a major issue for the Group. ENGIE has thus set emission reduction objectives compatible with a GHG emission trajectory aligned with the Paris Agreement; ENGIE committed, in May 2021, to the Net Zero Carbon by 2045 objective for all of its direct and indirect emissions; it has also set a new objective for four countries (including Brazil) to be Net Zero Carbon by 2030. This objective should be achieved by following a "well-below 2°C" trajectory certified by SBTi, with intermediate milestones, notably by 2030, and new objectives related to the intensity of sales and electricity production. Other actions have been implemented such as the study of climate risk on six indicators (heatwave, flood, drought, extreme wind, forest fire and landslide) with adaptation plans where the risk is material, the implementation of a Quarterly Business Review to monitor CO_2 budgets, the extension of the scope of the medium-term CO_2 plan to monitor climate trajectories and work toward a carbon storage trajectory by 2030 and then 2045.

To date, the Group has taken visible measures:

- the rollout of the coal exit plan by 2027 at the latest, with the following order of merit: closure, conversion, then, if this is not possible, sale, ensuring continuous dialog with stakeholders (ENGIE's fair transition policy, see Section 3.6.3). The exit plan is progressing rapidly; centralized coal-fired power capacity dropped from 7.2 GW in 2017 to 2.1 GW in 2023, and emissions from coal use in energy generation (scope 1 and 3.15) decreased from 41,3 Mt in 2017 to 1.5 Mt in 2023);
- reducing the carbon intensity of electricity production;
- reducing emissions related to the use of products sold drastically by 2045;
- the alignment of future investments with the Group's carbon ambition;
- the allocation of carbon budgets to each GBU; and
- the assessment of management teams related to the achievement of the Net Zero Carbon objectives.

ENGIE's climate trajectory is set out in the 2024 Climate Notebook included in the integrated report (https://www.engie.com/en/group/social-responsibility/csr-publications). ENGIE's decarbonization strategy within its value chain is based on three pillars "Reduce-Avoid-Store," consistent with the Net Zero Initiative methodological framework. Firstly, the Group aims to reduce direct and indirect emissions from its activities by at least 90% compared to 2017, based on three main drivers: coal exit by 2027, development of renewable electricity production activities and development of the production and sale of green gases, particularly biomethane and hydrogen. This emission reduction trajectory is closely controlled by indicators associated with public targets that cover 99% of ENGIE's carbon footprint (scopes 1, 2 and 3).

In order to achieve its CO_2 emission reduction targets, the Group has developed tools on both long-term strategic projections and investment decisions, as well as on infra-annual operational management. ENGIE management has thus defined limits not to be exceeded on the main GHG emissions items of its activities (energy, gas and electricity generation) according to a well-below 2°C SBTi trajectory. They are set as milestones throughout the Group's Net Zero Carbon trajectory (2025, 2030, 2045) and allocated to each GBU. The monitoring of these CO_2 limits is then ensured each year as part of the Medium Term Plan, through which the GBUs develop their decarbonization business strategy so as not to exceed the limits set (budget N+1, 2025, 2030 and 2045 limits). Since 2023, infra-annual monitoring of emissions has been carried out via a quarterly survey of GHG indicators. It is integrated into the managerial dialog on operational and financial performance as part of the Quarterly Business Reviews. In addition, any new investment decisions must be made in accordance with the carbon budgets allocated to the GBUs. In parallel with these climate change mitigation efforts, the Group is also adapting to the impacts this will have on its activities, in line with climate science projections. This includes integrating climate change adaptation into the risk management process.

Every year, the Group communicates on the progress of its transition plan through the Climate Notebook and reports to its shareholders through a specific item on the agenda of the Shareholders' Meeting since 2023.

Nature

The environmental policy also aims to institute action plans at various levels to avoid, reduce, and if necessary, offset the environmental impacts of the Group's activities. These action plans are audited annually and are subject to a 100% rollout target for projects, sites and activities by 2030.

The nature-related objectives cover: the preservation of biodiversity, the consumption of fresh water, the reduction of atmospheric pollutant emissions and the reduction of waste generation.

Societal

The societal policy is focused on stakeholder engagement. Its implementation includes a toolbox, including a tool for mapping stakeholders and supporting the development of associated action plans, training programs and a center of expertise. This policy also covers transition issues through its four areas: employees, customers, regions and suppliers.

Awareness-raising tools

E-learning modules covering the climate, biodiversity, stakeholder engagement and the CSR matrix in investment decisions have been developed since 2021 with the Sustainability Academy and target, more specifically, operational employees and managers who are directly concerned by this subject.

Results from e-learning participation:

e-learning courses proposed	Number of participants since the launch
Net Zero Carbon ambition (2021)	6628
Business change maker (2021)	1,302
CO_2 killer (2021)	1,642
People of the world (2021)	1,252
Introduction to biodiversity (November 2021)	3,797
Stakeholder engagement (March 2022)	1,144
CSR matrix (April 2022)	391
Digital Responsibility (June 2022)	3,575
TOTAL	**19,731**

Performance monitoring and measurement

The performance of climate change mitigation, characterized by compliance with the 2030 emission reduction trajectory, is monitored quarterly as part of the Quarterly Business Reviews and annually as part of the non-financial performance statement.

Environmental and societal performance is also measured annually and presented to the Executive Committee and EESDC. An internal control system, as well as audits by the Statutory Auditors of non-financial performance, make it possible to control the implementation of the process.

The Group updated its act4nature commitments in 2023, identified good practices in nature-based solutions and continued the rollout of biodiversity frescoes. It has also set a new objective on water.

Through the fair transition, the Group has worked on its key indicators following the 2022 Stakeholders' Committee and is actively involved in the negotiation at European sectoral level of an agreement on the fair transition in the gas sector between the sectoral trade union unions EPSU and IndustriAll and the association of gas professionals Eurogas, under the aegis of the European Commission.

In view of regulatory developments, particularly European ones with the entry into force of the Corporate Sustainability Reporting Directive (CSRD), ENGIE will gradually strengthen its risk analysis system, as well as the control tools, in 2024 and 2025.

3.9.1.5 Prevent and manage risks related to energy supply

The main challenges for the Group relating to energy supply (biomass, gas, LNG, etc.) are as follows:

CHALLENGES IN THE ENERGY SUPPLY CHAIN (PRODUCTION, TRANSMISSION, ETC.)

HUMAN RIGHTS

- Forced labor, child labor (e.g.: equipment production, mining)
- Rights of local communities and indigenous populations (e.g. land rights, right to free and informed consent, right to resources, right to health)
- Health and safety of workers and local communities (e.g. the impact of production operations, protective equipment, chemical products used, risk of explosion, emissions)

ENVIRONMENTAL

- Climate change (e.g. CO_2 / methane emissions, carbon footprint, deforestation, use of fossil fuels)
- Water scarcity and quality (e.g. the use of drinking water, water requirements, the overuse of water, use of chemical products)
- Air, water and soil pollution (e.g. chemical products, heavy metals, residues, waste management)
- Biodiversity (e.g. risk to ecosystems, risk to flora and fauna, to ecological corridors, deforestation, the use of agricultural land)

The Group has identified risks relating to the energy supply chain as a specific issue of vigilance for the Group. The entities responsible for these purchases manage these risks directly, in accordance with the Group's reporting rules and governance, and identify the risks specific to each of their activities by energy source, at the country and energy supplier level.

The Group's governance structure ensures that the duty of vigilance is included in decision-making processes. The Group has also systematized the supply chain risk assessment approach, based on the 3P (People, Planet and Profit) approach.

More generally, entities implement the following prevention and risk management measures:

- entities adopt, where necessary, mitigation measures and contractual clauses adapted to the identified risks (e.g. specific performance clauses for the carbon footprint and methane emissions) in their contracts with suppliers;
- they include an ethics and CSR clause in their contracts, which also allows them to terminate a contract in the event of a breach of these obligations by the third party;
- they apply the human rights policy, ethical due diligence policies, environmental and societal policies, as well as the Group's other policies;
- they ensure the ESG certification of certain suppliers and energy sources (e.g. biomass) as well as the presence of guarantees of origin;
- they carry out onsite audits at certain suppliers;
- they take part in bilateral and sector ESG working groups;
- they enter into gas procurement agreements that are compatible with the Group's carbon trajectory;
- in relation to shale gas, the Group carries out extensive social and environmental due diligence and chooses, among producers, those who are able to offer the best guarantees in terms of traceability of emissions and monitoring of the social and environmental performance of their activity;
- The Group continues its strategy to withdraw from the coal business (in Europe by 2025 and worldwide by 2027).

3.9.1.6 Prevent and manage risks related to non-energy purchases

Non-energy purchases cover all equipment supply contracts and the provision of services and works. In this regard, the Group's procurement reference system uses the term Supplier to refer to subcontractors and equipment suppliers.

Governance

The Group Procurement Department, reporting to the Executive Vice President in charge of Finance, Procurement and CSR, is responsible for the Group's performance, sustainability and competitiveness, thanks to the selection of high-performance, innovative suppliers who have a positive impact on sustainable development. The Procurement Department is organized through three levels:

- the Procurement Department in charge of the management category defines the governance, tools and performance objectives of the division;
- the regional hubs, led by a Regional Procurement Director, are responsible for organizing synergies and ensuring the standardization of processes across countries with the support of shared service centers;
- countries headed up by local procurement managers responsible for operational procurement.

Risk mapping

The sustainability of procurement is based on three pillars:

- the impact of procurement on carbon emissions and climate. Procurement has a key role in achieving the Group's decarbonization commitments (Net Zero Carbon in 2045, well below 2°C in 2030 trajectory, etc.).
- the impact of procurement on nature;
- the human impact of procurement (inclusive procurement, impact on communities, human rights, health, etc.).

Six procurement categories are currently considered high risk in terms of human rights, health & safety and / or their environmental impact. These procurement categories are listed below:

PROCUREMENT CATEGORIES	SEVERE RISKS IDENTIFIED	ACTION PLANS
· Solar panels · Batteries	Human / environmental rights Environmental / human rights	Contractual provisions reinforced, new suppliers located in lower risk countries, ethical audits, sector initiatives, etc. *(see Sections 3.9.1.1 and 2.2.5.1)*
· Wind power	Human / environmental rights	Contractual provisions reinforced, ethical audits, sector initiatives, etc. *(see Sections 3.9.1.1 and 2.2.5.1)*
· Electrical equipment	Human Rights	Social audits and sourcing of new suppliers
· Workwear	Human Rights	Social audits and diversification (Brazil for example)
· IT equipment (PCs, printers, etc.)	Human Rights	Diversification of the panel of suppliers thanks to relocation to the United States and Europe
· Turnkey EPC contracts	Health and safety / human rights	Reinforcement of health and safety rules and exclusion of suppliers who do not respect these rules Ethical audits on construction sites

Since 2020, particular attention has been paid to purchases that may be linked to forced labor in China. The principal measures taken to identify and manage these risks are presented in Section 3.9.1.1.

Procurement Charter and risk management measures

The identification and management of risks are ensured by the implementation of ENGIE's Procurement vigilance process through:

- risk mapping developed on the basis of data provided by the CSR partner EcoVadis (risks by Industry and country risks) and analysis of the procurement categories carried out by the Category Managers network [1];
- a Supplier selection process that relies in particular on a CSR assessment (EcoVadis), the implementation of the due diligence policy (see Section 3.9.3), the implementation of associated management plans taking into account Supplier eligibility criteria, and the measurement of performance delivered by suppliers and associated improvement plans. These plans may include, for example, audits, specific contractual provisions to limit risk, an ethical clause, etc. A risk reduction plan is systematically put in place for Suppliers with an EcoVadis rating of less than 45/100;
- a Procurement management system structured around:
  - a Procurement Charter which defines ENGIE's commitments and requirements with regard to its Suppliers in terms of human rights, health, safety, ethics and sustainability (carbon, environment, circularity);
  - a Procurement Governance which includes due diligence obligations for key Suppliers for the Group and entities, the implementation of the Code of Conduct for Supplier Relations, and an analysis of ethical risks that must be carried out within each entity.

These principles and rules are set out in the operational procurement processes that include the requirements of the Ethical Code of Conduct (which replaced the Ethics Charter in 2023), the Corporate Social Responsibility Policy, the health & safety policy, the Code of Conduct for Relations with Suppliers, the Due Diligence Policy for Direct Suppliers and Subcontractors. (see Section 3.7 "Procurement, subcontracting and suppliers") and the Subcontracting Policy. These requirements apply to the entire supply chain and are incorporated into the mandatory ethics and CSR clause in all ENGIE contracts.

- a whistleblowing and reporting system which is also open to persons outside the Group (see Section 3.9.4).

The implementation of the procurement component of the vigilance plan is part of the Procurement Department's strategy to strengthen supply chain resilience. The development of regulations on human rights and concomitant trade barriers leads to the development of traceability and diversity of the Group's supply chains (see Section 3.7). In 2023, ethical audits on the rights and working conditions of employees were conducted in parallel with quality audits carried out at the facilities of certain Suppliers. This audit program was initially rolled out on the solar panel and wind turbine categories and will be gradually extended to all the severe risk procurement categories identified above.

Awareness-raising tools

A Procurement Academy which provides a set of mandatory training courses for the Procurement Division. Face-to-face and videoconferencing sessions are supplemented by the delivery of online modules via Ulearn, the Group's training Intranet. The topics covered are sustainable development, ethics, hygiene, health & safety, human rights, management, diversity and IT security. As a population particularly exposed to ethical risks, all members of the Procurement Division must follow an enhanced ethical training plan. In particular, this includes classroom-based training courses on "Ethics and Supplier Relations in Practice" and three digital training modules: Fraud and Corruption, Zero Tolerance; Our Group, Our Ethics; and Competition Law. In 2023, 84% of buyers had completed mandatory training courses.

Performance monitoring and measurement

The proper implementation of these processes is verified via the INCOME internal control program (see Section 2.3). With 30 different controls, the INCOME PRO reference system covers all procurement processes. Moreover, the Group Procurement Department works in partnership with the Internal Audit Department to ensure the monitoring of corrective action plans recommended by the latter. In 2023, 88.2% of the INCOME controls carried out by the Group's entities assessed the rollout of the procurement processes at their level as effective.

More information is provided on ENGIE's website at https://www.engie.com/en/group/suppliers/sustainable-purchasing-policy.

3.9.2 SITUATION RELATED TO RUSSIA AND UKRAINE

The Group has no industrial activity in Russia and no investment projects are underway on Russian territory. The Group closed its representative office in Moscow in 2022. One employee was based in Ukraine and left the country at the beginning of the Russian invasion, in February 2022. Moreover, the Group has no activities in Crimea, the Donbass or the Louhansk Oblast.

3.9.3 THIRD-PARTY ASSESSMENT

Due diligence is carried out on third parties (suppliers, subcontractors, partners, contractors, etc.) in line with due diligence policies, as described on ENGIE's website: https://www.engie.com/en/ethics-and-compliance/vigilance-plan/third-parties. In particular, a first level of due diligence is carried out internally, using public databases or specialized tools. In the event that this analysis reveals risks, ENGIE performs a level 2 due diligence either via the Due Diligence Bureau of the Group's Ethics, Compliance & Privacy Department or via external service providers.

In 2023, 100% of the partners in the Group's investment projects were subject to due diligence, including a systematic study of "vigilance" topics by the Ethics Line.

Directly or indirectly, 100% of the Ethics & Compliance Officers have access to a specialist due diligence tool. In 2023, the Group's Ethics & Compliance Officers and ethics correspondents declared more than 20,000 level one due diligence searches performed using the due diligence tools.

(1) *Category Managers are responsible for managing one or more Group procurement categories. As such, they manage ENGIE's key Suppliers and implement applicable contracts across all ENGIE entities.*

In addition, the Group's new preferred and major strategic Suppliers are automatically assessed by the Procurement Line via due diligence carried out by the Category Managers and Chief Procurement Officers before contracting takes place. The Group has set up a dedicated team in charge of carrying out the due diligence of key Suppliers and has equipped itself with a new digital tool providing an ethical risk score covering five dimensions: country risk, activities at risk, politically exposed persons, sanctions and controversies. ENGIE also uses EcoVadis for environmental aspects, human rights and ethics. In 2023, approximately 1,100 recurring key Suppliers (Strategic, Preferred and Major) and at least 1,180 other suppliers of Group entities exposed to high ethical risks were subject to due diligence.

3.9.4 WHISTLEBLOWING AND COLLECTION OF ALERTS

The whistleblowing system has been open to all employees, permanent or temporary, and to all external stakeholders, since January 2019. An external service provider forwards the anonymous report to the Group for processing (see Section 3.8.4). In 2023, 274 alerts were received via the system, 82 of which concern risk categories related to the duty of vigilance. They can be summarized as follows:

Allegations of harassment*	Allegations relating to health & safety	Allegations relating to working practices	Allegations of discrimination	Questions related to the environment and the rights of communities
68	13	11	18	7

* *There were 56 allegations of harassment and four allegations of sexual harassment. Eight allegations of sexual harassment were also identified within the management system.*

As for all of the alerts, alerts relating to allegations of discrimination and harassment are processed systematically and immediately. When allegations are proven to be true, disciplinary measures are systematically taken and action plans deployed.

3.9.5 STEERING, GOVERNANCE AND FOLLOW-UP OF THE DEPLOYMENT OF THE PLAN

3.9.5.1 Steering and follow-up at the highest corporate level

The Group has set up monitoring and global coordination at the highest level to meet the law's objectives in an effective way. The plan was approved by the Executive Committee, which entrusted its management to the Ethics, Compliance & Privacy Department (ECPD), under the responsibility of the Legal, Ethics and Compliance Department, itself attached to the Corporate Secretariat. A report on the effective implementation of the plan is presented annually to the EESDC of the Board of Directors.

A specific committee is responsible for the operational implementation of the plan. Its aim is to ensure that the plan is distributed and that information can be fed back. The members are:

Departments							
ECPD	CSR	Procurement Department	Health & Safety Department	Security Department	HR Department	Internal control	Risk
Regions / operational members							
SOUTH AMERICA	NORTH AMERICA	FRANCE	EUROPE	AMEA (ASIA, MIDDLE EAST AND AFRICA)	GEMS	TRACTEBEL	

In addition, each entity must ensure that the vigilance plan has been effectively rolled out within its scope. The monitoring of these actions by the entities is included in the annual compliance report (see Section 3.8.6).

3.9.5.2 Stakeholders relations

The plan and the progress made in its implementation are presented and regularly discussed with the employee representative bodies. It has been implemented via the existing committees at the Group level, as well as at the European Works Council. The plan is also presented to the EESDC which reports to the Board of Directors. The entities were also asked to present the vigilance plan to their employee representative organizations. This approach was implemented when the first vigilance plan was adopted in 2018.

Since 2020, an internal control process, notably aimed at ensuring that all stakeholders are aware of the requirements set out in the law and the vigilance plan, has been in place.

The new Global Agreement is a resource to facilitate the deployment of the vigilance approach. It was negotiated and signed in 2022 with all of the Group's social partners. Under this Agreement, ENGIE's duty of vigilance is the subject of a strengthened social dialog: working groups were organized in 2022 with international trade union federations. These discussions resulted in the adoption of the mechanism described on the website (https://www.engie.com/en/ethics-and-compliance/vigilance-plan/stakeholders). A body to monitor this agreement (the "World Forum") meets once a year. These exchanges also make it possible to monitor the vigilance approach in consultation with social partners.

In order to prevent and manage the human rights, environmental and societal impact of its activities as best as possible, ENGIE has adopted a specific "commitment to stakeholders" policy, as part of the Group's CSR policy. This policy is available on the Group's website: https://www.engie.com/en/group/social-responsibility/csr-goals#1.

Finally, the Group is committed to building a meaningful dialog which each of its stakeholders. In 2021, the Group set up a Dialog Committee with its stakeholders as well as a discussion forum (the Dialog and Transition forum) to support sensitive projects. This Committee met on October 21, 2022 to discuss the subject of a fair transition (see Section 3.6.3). The next meeting of this committee is planned in 2024. The next meeting of this committee is planned for 2024, with a theme yet to be defined.

3.9.6 DUTY OF VIGILANCE CORRELATION TABLE

Risk categories covered by the vigilance plan	Location in the URD	Page
Risks related to human rights	Section 3.8.1 "Ethics and compliance governance"	121
Risks related to the health & safety of individuals	Section 3.4.6 "Health & safety policy"	103
Risks related to the security of individuals	Section 3.9.1.3. "Prevent and manage risks related to personal security"	129
Environmental and societal risks	Section 3.1.1 "CSR policy and governance"	64
Risks related to non-energy procurement	Section 3.7 "Procurement, outsourcing and suppliers"	120
The five risks above	Section 2.2 "Risk factors"	43

Details of the categories above are provided on the Group's website: https://www.engie.com/en/group/ethics-and-compliance/policies-and-procedures.

3.10 APPENDIX – TAXONOMY TABLES

The three tables in the double pages below present the standard templates used for the publication of information related to 2023 data on the Revenue, CAPEX and OPEX indicators according to the Commission Delegated Regulation (EU) No. 2021/2178 dated July 6, 2021

Proportion of revenues from products or services associated with taxonomy-aligned economic activities – disclosure covering year 2023

				Substantial contribution criteria					
		Turnover (3)	Proportion of turnover (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Pollution (8)	Circular economy (9)	Biodiversity and ecosystems (10)
Economic activities (1)	**Codes (2)**	*€ millions*	*%*	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**
A. TAXONOMY-ELIGIBLE ACTIVITIES									
A.1- Environmentally sustainable activities (Taxonomy-aligned)									
Electricity generation using solar photovoltaic technology	CCM 4.1	511	0.6%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation using concentrated solar power technology	CCM 4.2	28	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	826	1.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM / CCA 4.5	3,709	4.5%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Electricity generation from geothermal energy	CCM 4.6	0	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM / CCA 4.8	16	0.0%	Y; N	Y	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of electricity	CCM / CCA 4.9	197	0.2%	Y; N	N	N/EL	N/EL	N/EL	N/EL
Storage of electricity	CCM 4.10	601	0.7%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Storage of hydrogen	CCM 4.12	0	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution networks for renewable and low-carbon gases	CCM / CCA 4.14	206	0.3%	Y	Y	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM / CCA 4.15	1,621	2.0%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and power from bioenergy	CCM 4.20	101	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from geothermal energy	CCM 4.22	0	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from bioenergy	CCM 4.24	130	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool using waste heat	CCM 4.25	9	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from nuclear energy in existing installations	CCM 4.28	815	1.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	104	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	62	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM / CCA 5.7	6	0.0%	Y; N	Y	N/EL	N/EL	N/EL	N/EL
Urban and suburban transport, road passenger transport	CCM 6.3	45	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	23	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM / CCA 7.3	2,082	2.5%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces attached to buildings)	CCM / CCA 7.4	77	0.1%	Y	Y	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	8	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	300	0.4%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Data-driven solutions for GHG emissions reductions	CCM 8.2	30	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Close to market research, development and innovation	CCM 9.1	12	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Professional services related to energy performance of buildings	CCM / CCA 9.3	2,999	3.6%	Y	Y	N/EL	N/EL	N/EL	N/EL
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)	**TOTAL**	**14,517**	**18%**	**97.5%**	**2.53%**	**0%**	**0%**	**0%**	**0%**
Of which enabling		**6,328**	**8%**	**8%**	**0%**	**0%**	**0%**	**0%**	**0%**
Of which transitional		**166**	**0%**	**0%**					
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)									
Electricity generation using solar photovoltaic technology	CCM 4.1	6	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	15	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM / CCA 4.5	340	0.4%	EL	EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM / CCA 4.8	107	0.1%	EL	EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of power	CCM / CCA 4.9	135	0.2%	EL	EL	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM / CCA 4.15	467	0.6%	EL	EL	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and power from bioenergy	CCM 4.20	2	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from geothermal energy	CCM 4.22	3	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from gaseous fossil fuels	CCM 4.29	3,221	3.9%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	619	0.8%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	9	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM / CCA 5.7	46	0.1%	EL	EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	139	0.2%	EL	EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	3	0.0%	EL	EL	N/EL	N/EL	N/EL	N/EL
Close to market research, development and innovation	CCM 9.1	7	0.0%	EL	EL	N/EL	N/EL	N/EL	N/EL
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**5,118**	**6.2%**						
TOTAL (A.1 + A.2)		**19,635**	**23.8%**						
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES									
Turnover of Taxonomy-non-eligible activities (B)		**62,931**	**76.2%**						
TOTAL (A + B)		**82,565**	**100.00%**						

Codes (2)	DNSH criteria (Do No Significant Harm) Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Pollution (14)	Circular economy (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Taxonomy-aligned proportion of revenues, year 2022 (18)	Category "enabling activity" (20)	Category "transitional activity" (21)
	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	%	E	T
CCM 4.1		YES	YES	YES	YES	YES	YES	0.5%		
CCM 4.2	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.3		YES	YES	YES	YES	YES	YES	0.9%		
CCM / CCA 4.5			YES	YES	YES	YES	YES	4.8%		
CCM 4.6	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM / CCA 4.8			YES	YES	YES		YES	0.2%		
CCM / CCA 4.9		YES	YES	YES	YES	YES	YES	0.4%	E	
CCM 4.10	YES	YES	YES	YES	YES	YES	YES	0.8%	E	
CCM 4.12	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM / CCA 4.14	YES	YES	YES	YES	YES	YES	YES	0.2%		
CCM / CCA 4.15			YES	YES	YES	YES	YES	1.8%		
CCM 4.20		YES	YES	YES	YES	YES	YES	0.1%		
CCM 4.22		YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.24	YES	YES	YES	YES	YES	YES	YES	0.1%		
CCM 4.25	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.28	YES	YES	YES	YES	YES	YES	YES	0.4%		
CCM 4.30			YES	YES	YES	YES	YES	0.1%		T
CCM 4.31		YES	YES	YES	YES	YES	YES	0.0%		T
CCM / CCA 5.7		YES	YES	YES	YES	YES	YES	0.0%		
CCM 6.3	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 6.15	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM / CCA 7.3			YES	YES	YES	YES	YES	1.4%	E	
CCM / CCA 7.4	YES	YES	YES	YES	YES	YES	YES	0.1%	E	
CCM 7.5		YES	YES	YES	YES	YES	YES	0.0%	E	
CCM 7.6	YES	YES	YES	YES	YES	YES	YES	0.4%	E	
CCM 8.2		YES	YES	YES	YES	YES	YES	0.1%	E	
CCM 9.1		YES	YES		YES	YES	YES	0.0%	E	
CCM / CCA 9.3	YES	YES	YES	YES	YES	YES	YES	2.7%	E	
TOTAL								**15%**		
CCM 4.1								0.1%		
CCM 4.3								0.2%		
CCM / CCA 4.5								0.4%		
CCM / CCA 4.8								0.0%		
CCM / CCA 4.9								0.1%		
CCM / CCA 4.15								0.4		
CCM 4.20								-		
CCM 4.22								0.0%		
CCM 4.29								7.2%		
CCM 4.30								0.9%		
CCM 4.31								0.0%		
CCM / CCA 5.7								-		
CCM 7.3								0.2%		
CCM 7.5								0.0%		
CCM 9.1								0.0%		
								10%		

Proportion of CAPEX from products or services associated with taxonomy-aligned economic activities – disclosure covering year 2023

CAPEX				Substantial contribution criteria					
		Absolute CAPEX (3)	Proportion of CAPEX (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Pollution (8)	Circular economy (9)	Biodiversity and ecosystems (10)
Economic activities (1)	Codes (2)	*€ millions*	*%*	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL
A. TAXONOMY-ELIGIBLE ACTIVITIES									
A.1- Environmentally sustainable activities (Taxonomy-aligned)									
Manufacture of hydrogen	CCM 3.10	9	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation using solar photovoltaic technology	CCM 4.1	2,232	20.2%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation using concentrated solar power technology	CCM 4.2	27	0.3%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	2,032	18.4%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM / CCA 4.5	249	2.3%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM 4.8	3	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of power	CCM / CCA 4.9	1	0.0%	Y; N	N	N/EL	N/EL	N/EL	N/EL
Storage of electricity	CCM 4.10	1,710	15.5%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Storage of hydrogen	CCM 4.12	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution networks for renewable and low-carbon gases	CCM / CCA 4.14	230	2.1%	Y	Y	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM / CCA 4.15	325	2.9%	Y; N	N	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and power from bioenergy	CCM 4.20	0	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from bioenergy	CCM 4.24	39	0.4%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from nuclear energy in existing installations	CCM 4.28	45	0.4%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from gaseous fossil fuels	CCM 4.29	37	0.3%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	9	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	4	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM 5.7	46	0.4%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	6	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	35	0.3%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces attached to buildings)	CCM / CCA 7.4	70	0.6%	Y	Y	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	17	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of renewable energy technologies	CCM / CCA 7.6	63	0.6%	Y; N	Y	N/EL	N/EL	N/EL	N/EL
Close to market research, development and innovation	CCM 9.1	14	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Professional services related to energy performance of buildings	CCM / CCA 9.3	53	0.5%	Y	Y	N/EL	N/EL	N/EL	N/EL
Capex of Environmentally sustainable activities (Taxonomy-aligned) (A.1)	**TOTAL**	**7,258**	**66%**	**99.5%**	**0.5%**	**0%**	**0%**	**0%**	**0%**
Of which enabling activities		**1,969**	**17.8%**	**17.7%**	**0.1%**	**0%**	**0%**	**0%**	**0%**
Of which transitional activities		**14**	**0.1%**	**0.1%**					
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)									
Electricity generation using solar photovoltaic technology	CCM 4.1	5	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	11	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM 4.5	4	0.0%	EL	EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM 4.8	3	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of power	CCM 4.9	93	0.8%	EL	EL	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM 4.15	58	0.5%	EL	EL	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and power from bioenergy	CCM 4.20	22	0.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from gaseous fossil fuels	CCM 4.29	494	4.5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	22	0.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	0	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM 5.7	20	0.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	1	0.0%	EL	EL	N/EL	N/EL	N/EL	N/EL
Close to market research, development and innovation	CCM 9.1	0	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Capex of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**734**	**6.6%**						
TOTAL A1+A2		**7,992**	**72%**						
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES									
Capex of Taxonomy-non-eligible activities (B)		**3,063**	**28%**						
TOTAL A+B		**11,055**	**100.00%**						

	DNSH criteria (Do No Significant Harm)									
	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Pollution (14)	Circular economy (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Taxonomy-aligned proportion of CAPEX, year 2022 (18)	Category "enabling activity" (20)	Category "transitional activity" (21)
Codes (2)	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	%	E	T
CCM 3.10	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.1		YES	YES	YES	YES	YES	YES	16.4%		
CCM 4.2		YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.3			YES	YES	YES	YES	YES	18.8%		
CCM / CCA 4.5			YES	YES	YES	YES	YES	10.8%		
CCM 4.8		YES		YES	YES	YES	YES	0.0%		
CCM / CCA 4.9			YES	YES	YES	YES	YES	0.1%	E	
CCM 4.10	YES	YES	YES	YES	YES	YES	YES	0.7%	E	
CCM 4.12	YES	YES	YES	YES	YES	YES	YES	0.1%	E	
CCM / CCA 4.14	YES	YES	YES	YES	YES	YES	YES	2.4%		
CCM / CCA 4.15			YES	YES	YES	YES	YES	3.1%		
CCM 4.20	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.24	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.28	YES	YES	YES	YES	YES	YES	YES	1.2%		
CCM 4.29			YES		YES	YES	YES	0.0%		
CCM 4.30			YES	YES	YES	YES	YES	0.0%		T
CCM 4.31		YES	YES	YES	YES	YES	YES	0.0%		T
CCM 5.7		YES	YES	YES	YES	YES	YES	1.4%		
CCM 6.15	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM 7.3		YES	YES	YES	YES	YES	YES	0.3%	E	
CCM / CCA 7.4	YES	YES	YES	YES	YES	YES	YES	0.3%	E	
CCM 7.5	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM / CCA 7.6			YES	YES	YES	YES	YES	2.0%	E	
CCM 9.1		YES	YES	YES	YES	YES	YES	0.0%	E	
CCM / CCA 9.3	YES	YES	YES	YES	YES	YES	YES	0.9%	E	
TOTAL								**58.4%**		
CCM 4.1								0.9%		
CCM 4.3								1.0%		
CCM 4.5								0.1%		
CCM 4.8								-		
CCM 4.9								0.0%		
CCM 4.15								0.5%		
CCM 4.20								-		
CCM 4.29								3.0%		
CCM 4.30								0.4%		
CCM 4.31								0.0%		
CCM 5.7								-		
CCM 7.3								0.1%		
CCM 7.6								0.0%		
CCM 9.1								-		
								6%		

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Proportion of OPEX from products or services associated with taxonomy-aligned economic activities – disclosure covering year 2023

OPEX				Substantial contribution criteria					
		Absolute OPEX (3)	Proportion of OPEX (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Pollution (8)	Circular economy (9)	Biodiversity and ecosystems (10)
Economic activities (1)	**Codes (2)**	*€ millions*	*%*	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**	**Y; N; N/EL**
A1- Environmentally sustainable activities (Taxonomy-aligned)									
Electricity generation using solar photovoltaic technology	CCM 4.1	66	2.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation using concentrated solar power technology	CCM 4.2	4	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	219	6.9%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM / CC A 4.5	208	6.5%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM 4.8	2	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of power	CCM / CC A 4.9	5	0.2%	Y; N	N	N/EL	N/EL	N/EL	N/EL
Storage of electricity	CCM 4.10	26	0.8%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Storage of hydrogen	CCM 4.12	5	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution networks for renewable and low-carbon gases	CCM / CC A 4.14	44	1.4%	Y	Y	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM / CC A 4.15	164	5.2%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and power from bioenergy	CCM 4.20	3	0.1%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from bioenergy	CCM 4.24	7	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from using waste heat	CCM 4.25	2	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from nuclear energy in existing installations	CCM 4.28	35	1.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from gaseous fossil fuels	CCM 4.29	0	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	1	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	1	0.0%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM 5.7	8	0.2%	Y; N	N/EL	N/EL	N/EL	N/EL	N/EL
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	6	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM / CC A 7.3	95	3.0%	Y; N	Y; N	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces attached to buildings)	CCM 7.4	0	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	14	0.5%	Y	N/EL	N/EL	N/EL	N/EL	N/EL
Professional services related to energy performance of buildings	CCM / CC A 9.3	212	6.7%	Y	Y	N/EL	N/EL	N/EL	N/EL
OPEX of Environmentally sustainable activities (Taxonomy-aligned) (A.1)	**TOTAL**	**1,126**	**35%**	**97.9%**	**2.1%**	**0%**	**0%**	**0%**	**0%**
Of which enabling activities		**362**	**11%**	**10.9%**	**0.1%**	**0%**	**0%**	**0%**	**0%**
Of which transitional activities		**2**	**0%**	**0%**					
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)									
Electricity generation using solar photovoltaic technology	CCM 4.1	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from wind power	CCM 4.3	1	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from hydropower	CCM / CC A 4.5	6	0.2%	EL	EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from bioenergy	CCM 4.8	5	0.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Transmission and distribution of power	CCM / CC A 4.9	43	1.4%	EL	EL	N/EL	N/EL	N/EL	N/EL
District heating / cooling distribution	CCM / CC A 4.15	92	2.9%	EL	EL	N/EL	N/EL	N/EL	N/EL
Cogeneration of heat / cold and generation from bioenergy	CCM 4.20	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from geothermal energy	CCM 4.22	2	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Electricity generation from gaseous fossil fuels	CCM 4.29	192	6.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
High-efficiency co-generation of heat / cool and power from fossil gaseous fuels	CCM 4.30	44	1.4%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Production of heat / cool from fossil gaseous fuels in an efficient district heating and cooling system	CCM 4.31	2	-0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
Anaerobic digestion of bio-waste	CCM / CC A 5.7	26	0.8%	EL	EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of energy efficiency equipment	CCM / CC A 7.3	94	3.0%	EL	EL	N/EL	N/EL	N/EL	N/EL
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5	2	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL
OPEX of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**507**	**16%**						
TOTAL A1+A2		**1,633**	**51%**						
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES									
OPEX of Taxonomy-non-eligible activities (B)		**1,539**	**49%**						
TOTAL A+B		**3,172**	**100%**						

Codes (2)	DNSH criteria (Do No Significant Harm) Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Pollution (14)	Circular economy (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Taxonomy-aligned proportion of OPEX, year 2022 (18)	Category "enabling activity" (20)	Category "transitional activity" (21)
	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO		%	E	T
CCM 4.1		YES	YES	YES	YES	YES	YES	1.3%		
CCM 4.2	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.3		YES	YES	YES	YES	YES	YES	10.4%		
CCM / CCA 4.5			YES	YES	YES	YES	YES	7.7%		
CCM 4.8		YES		YES	YES	YES	YES	0.3%		
CCM / CCA 4.9		YES	YES	YES	YES	YES	YES	0.4%	E	
CCM 4.10	YES	YES	YES	YES	YES	YES	YES	0.6%	E	
CCM 4.12	YES	YES	YES	YES	YES	YES	YES	0.1%	E	
CCM / CCA 4.14	YES	YES	YES	YES	YES	YES	YES	1.2%		
CCM / CCA 4.15			YES	YES	YES	YES	YES	7.7%		
CCM 4.20		YES	YES	YES	YES	YES	YES	0.1%		
CCM 4.24	YES	YES	YES	YES	YES	YES	YES	1.0%		
CCM 4.25	YES	YES	YES	YES	YES	YES	YES	0.0%		
CCM 4.28	YES	YES	YES	YES	YES	YES	YES	1.1%		
CCM 4.29			YES		YES	YES	YES	0.0%		
CCM 4.30			YES	YES	YES	YES	YES	0.0%		T
CCM 4.31		YES	YES	YES	YES	YES	YES	0.0%		T
CCM 5.7		YES	YES	YES	YES	YES	YES	0.2%		
CCM 6.15	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM / CCA 7.3			YES	YES	YES	YES	YES	0.7%	E	
CCM 7.4	YES	YES	YES	YES	YES	YES	YES	0.0%	E	
CCM 7.6	YES	YES	YES	YES	YES	YES	YES	0.9%	E	
CCM / CCA 9.3	YES	YES	YES	YES	YES	YES	YES	4.9%	E	
TOTAL								**39%**		
CCM 4.1								0.0%		
CCM 4.3								0.3%		
CCM / CCA 4.5								0.4%		
CCM 4.8								-		
CCM / CCA 4.9								1%		
CCM / CCA 4.15								1.7%		
CCM 4.20								-		
CCM 4.22								0.0%		
CCM 4.29								5.6%		
CCM 4.30								1.5%		
CCM 4.31								0.0%		
CCM / CCA 5.7								-		
CCM / CCA 7.3								0.3%		
CCM 7.5								-		
								11%		

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Degree of eligibility and alignment by environmental objective

	Proportion of revenues / Total revenues	
	Aligned with taxonomy by objective	Eligible for taxonomy by objective
CCM – Climate Change Mitigation	98%	97%
CCA – Climate Change Adaptation	2%	3%
WTR – Water and Marine Resources		
CE – Circular Economy		
PPC – Pollution Prevention and Control		
BIO – Biodiversity and ecosystems		

	Proportion of CAPEX / Total CAPEX	
	Aligned with taxonomy by objective	Eligible for taxonomy by objective
CCM – Climate Change Mitigation	99%	99%
CCA – Climate Change Adaptation	1%	1%
WTR – Water and Marine Resources		
CE – Circular Economy		
PPC – Pollution Prevention and Control		
BIO – Biodiversity and ecosystems		

	Proportion of OPEX / Total OPEX	
	Aligned with taxonomy by objective	Eligible for taxonomy by objective
CCM – Climate Change Mitigation	98%	98%
CCA – Climate Change Adaptation	2%	2%
WTR – Water and Marine Resources		
CE – Circular Economy		
PPC – Pollution Prevention and Control		
BIO – Biodiversity and ecosystems		

For eligible activities, the process covered all six objectives of the taxonomy. However, after analyzing the economic activities covered by all the objectives, the Group is mainly concerned with the mitigation objective in line with its decarbonization strategy.

The following tables present the standard templates used for the publication of information relating to nuclear and gas activities according to Commission Delegated Regulation (EU) 2022/1214 dated March 9, 2022.

Template 1 – Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to activities related to research, development, demonstration and deployment of innovative electricity production facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or for industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity production facilities that produce electricity using gaseous fossil fuels.	YES
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat / cool and power generation facilities using fossil gaseous fuels.	YES
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat / cool using fossil gaseous fuel.	YES

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Template 2 – Nuclear and Gas – Taxonomy-aligned economic activities (denominator)

		Amount in millions of euros and proportion as % – Revenues					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	**Economic activities**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	815	1%	815	1%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	104	0%	104	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	62	0%	62	0%	0	0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the Revenue KPI**	**13,536**	**16%**	**13,169**	**16%**	**367**	**0%**
8.	**TOTAL APPLICABLE KPI – REVENUES**	**82,565**	**100%**	**82,565**	**100%**	**82,565**	**0%**

		Amount in millions of euros and proportion as % – CAPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	**Economic activities**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	45	0%	45	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	37	0%	37	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	9	0%	9	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	4	0%	4	0%	0	0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the CAPEX KPI**	**7,162**	**65%**	**7,123**	**64%**	**39**	**0%**
8.	**TOTAL APPLICABLE KPI – CAPEX**	**11,055**	**100%**	**11,055**	**100%**	**11,055**	**0%**

		Amount in millions of euros and proportion as % – OPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	**Economic activities**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	35	1%	35	1%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	1	0%	1	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	1	0%	1	0%	0	0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the OPEX KPI**	**1,089**	**34%**	**1,065**	**34%**	**24**	**1%**
8.	**TOTAL APPLICABLE KPI – OPEX**	**3,170**	**100%**	**3,170**	**100%**	**3,170**	**100%**

Template 3 – Taxonomy-aligned economic activities (numerator)

Row	Economic activities	Amount in millions of euros and proportion as % – Revenues					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	815	1%	815	1%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	104	0%	104	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the numerator of the Revenue KPI	62	0%	62	0%	0	0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in numerator of the Revenue KPI**	**13,536**	**16%**	**13,169**	**16%**	**367**	**0%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE NUMERATOR OF THE REVENUE KPI**	**14,517**	**18%**	**14,150**	**17%**	**367**	**0%**

Row	Economic activities	Amount in millions of euros and proportion as % – CAPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	45	0%	45	0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	37	0%	37	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	9	0%	9	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the CAPEX KPI	4	0%	4	0%	0	0%

		Amount in millions of euros and proportion as % – CAPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the CAPEX KPI**	**7,162**	**65%**	**7,123**	**64%**	**39**	**0%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ALIGNED ACTIVITIES IN THE NUMERATOR OF THE CAPEX KPI**	**7,258**	**66%**	**7,220**	**65%**	**39**	**0%**

		Amount in millions of euros and proportion as % – OPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	35	1%	35	3%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	0	0%	0	0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	1	0%	-1	0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in numerator of the OPEX KPI	1	0%	0	0%	0	0%
7.	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the OPEX KPI**	**1,089**	**34%**	**1,065**	**34%**	**24**	**1%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE NUMERATOR OF THE OPEX KPI**	**1,126**	**36%**	**1,102**	**35%**	**24**	**1%**

Template 4 – Taxonomy-eligible but not taxonomy aligned economic activities

		Amount in millions of euros and proportion as % – Revenues					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	**Economic activities**	**Amount**	%	**Amount**	%	**Amount**	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	3,221	4%	3,207	4%	3	0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	619	1%	485	1%	135	0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	9	0%	9	0%	0	0%
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the KPI Revenue	**1,269**	**2%**	**1,126**	**2%**	**135**	**0%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ELIGIBLE BUT NOT TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE DENOMINATOR OF THE REVENUE KPI**	**5,118**	**6%**	**4,827**	**6%**	**272**	**0%**

		Amount in millions of euros and proportion as % – CAPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	**Economic activities**	**Amount**	%	**Amount**	%	**Amount**	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	494	4%	418	4%	67	1%

Row	Economic activities	Amount in millions of euros and proportion as % – CAPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	22	0%	26	0%	6	0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%	0	0%	0	0%
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the CAPEX KPI	**217**	**2%**	**203**	**2%**	**14**	**0%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ELIGIBLE BUT NOT TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE DENOMINATOR OF THE CAPEX KPI**	**734**	**7%**	**636**	**6%**	**88**	**1%**

Row	Economic activities	Amount in millions of euros and proportion as % – OPEX					
		CCM+CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
		Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%	0	0%	0	0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	192	6%	116	4%	73	0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	44	1%	37	1%	7	0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	-2	0%	-2	0%	0	0%
7.	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the OPEX KPI**	**272**	**9%**	**268**	**8%**	**4**	**0%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-ELIGIBLE BUT NOT TAXONOMY-ALIGNED ECONOMIC ACTIVITIES IN THE DENOMINATOR OF THE OPEX KPI**	**507**	**16%**	**420**	**13%**	**84**	**0%**

Model 5 – Taxonomy-non-eligible economic activities

Row	Economic activities	Amount in millions of euros and proportion as % – Revenues	
		CCM+CCA	
		Amount	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-noneligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	2,524	3%
4.	Amount and proportion of economic activity referred to row line 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the Revenue KPI	0	0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in denominator of the Revenue KPI	0	0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the Revenue KPI**	**60,406**	**73%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-NON-ELIGIBLE ECONOMIC ACTIVITIES IN THE DENOMINATOR OF THE REVENUE KPI**	**62,931**	**76%**

Row	Economic activities	Amount in millions of euros and proportion as % – CAPEX	
		CCM+CCA	
		Amount	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	124	1%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-noneligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in denominator of the CAPEX KPI	0	0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the CAPEX KPI	0	0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the CAPEX KPI**	**2,939**	**27%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-NON-ELIGIBLE ECONOMIC ACTIVITIES IN DENOMINATOR OF THE CAPEX KPI**	**3,063**	**28%**

Row	Economic activities	Amount in millions of euros and proportion as % – OPEX	
		CCM+CCA	
		Amount	%
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	163	5%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the OPEX KPI	0	0%
7.	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the OPEX KPI**	**1,374**	**43%**
8.	**TOTAL AMOUNT AND TOTAL PROPORTION OF TAXONOMY-NON-ELIGIBLE ECONOMIC ACTIVITIES IN THE DENOMINATOR OF THE OPEX KPI**	**1,537**	**48%**

3.11 INDEPENDENT THIRD PARTY'S REPORT ON CONSOLIDATED NON-FINANCIAL STATEMENT

Year ended the December 31, 2023

This is a translation into English of the original report issued in the French language and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Annual General Meeting,

In our capacity as an independent third party, accredited by COFRAC (Accreditation COFRAC Inspection, no. 3-1681, scope of accreditation available at www.cofrac.fr), and as a member of the network of one of the statutory auditors of your entity (hereinafter the "Entity"), we conducted our work in order to provide a conclusion expressing limited assurance on the compliance of the consolidated non-financial statement for the year ended December 31, 2023 (hereinafter the "Statement") with the provisions of Article R. 225-105 of the French Commercial Code (*Code de commerce*) and on the fairness of the historical information (whether observed or extrapolated) provided pursuant to Article R. 225-105 of, sections I and II, paragraph 3 the French Commercial Code (hereinafter the "Information") prepared in accordance with the Entity's procedures (hereinafter the "Guidelines"), included in the management report pursuant to the requirements of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*Code de commerce*).

Conclusion

Based on the procedures we have performed as described under the "Nature and scope of procedures" section hereof and the evidence we have obtained, nothing has come to our attention that cause us to believe that the consolidated non-financial statement is not prepared in accordance with the applicable regulatory provisions and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.

Preparation of the non-financial performance statement

The absence of a commonly-used generally-accepted reporting framework or a significant body of established practice on which to draw to evaluate and measure the Information allows for different, but acceptable, measurement techniques that can affect comparability between entities and over time.

Consequently, the Information needs to be read and understood by referring to the Guidelines, the significant information of which is set out in the Statement.

Limitations inherent in the preparation of the Information

The Information may be subject to uncertainty inherent in the state of scientific or economic knowledge and the quality of the external data used. Some information is sensitive to the choice of methodology and the assumptions and/or estimates used for its preparation, and presented in the Statement.

Responsibility of the Entity

It is the responsibility of the Management to:

- select or draw up appropriate criteria for the preparation of the Information;
- prepare a Statement pursuant to legal and regulatory provisions, including a presentation of the business model, a description of the main non-financial risks, a presentation of the policies implemented considering those risks as well as the outcomes of said policies, including key performance indicators and, the information set-out in Article 8 of Regulation (EU) 2020/852 (green taxonomy);
- prepare the Statement by applying the Entity's Guidelines as referred above;
- implement the internal control procedures it deems necessary to ensure that the Information is free from material misstatement, whether due to fraud or error.

The Statement has been endorsed by the Board of Directors.

Responsibility of the independent third party

Based on our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the requirements of Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided pursuant to Article R. 225-105, section I and II, paragraph 3 of the French Commercial Code, i.e. the outcomes of policies, including key performance indicators, and measures relating to the main risks.

As we are engaged to form an independent conclusion on the Information as prepared by Management, we are not permitted to be involved in the preparation of the Information as doing so may compromise our independence.

It is not our responsibility to report on:

- the Entity's compliance with other applicable legal and regulatory requirements, in particular the information set-out in Article 8 of Regulation (EU) 2020/852 (green taxonomy), the French duty of care law and anti-corruption and tax avoidance legislation;
- the fairness of the information set-out in Article 8 of Regulation (EU) 2020/852 (green taxonomy);
- the compliance of products and services with the applicable regulations.

Applicable regulatory provisions and professional guidance

We performed the work described below in accordance with Articles A. 225-1 *et seq.* of the French Commercial Code, the professional guidance issued by the French Institute of Statutory Auditors (*Compagnie nationale des commissaires aux comptes*) applicable to such engagement, in particular the professional guidance issued by the French Institute of Statutory Auditors, *Intervention du commissaire aux comptes – Intervention de l'OTI – Déclaration de performance extra-financière*, and with the international standard ISAE 3000 (revised) [1].

Independence and quality control

Our independence is defined by the provisions of Article L. 823-10 of the French Commercial Code and French Code of Ethics for Statutory Auditors (*Code de déontologie*) of our profession. In addition, we have implemented a system of quality control including documented policies and procedures aimed at ensuring compliance with applicable legal and regulatory requirements, ethical requirements and the professional guidance.

Means and resources

Our verification work mobilized the skills of seventeen people and took place between October 2023 and March 2024 on a total duration of intervention of fifteen weeks.

We were assisted in our work by our specialists in sustainable development and corporate social responsibility. We conducted some interviews with the people responsible for preparing the Statement representing in particular human resources, health and safety, and environmental departments.

Nature and scope of procedures

We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the Information is likely to arise.

The procedures we performed were based on our professional judgment. In carrying out our limited assurance engagement on the Information:

- we obtained an understanding of all the consolidated entities' activities and the description of the main risks associated;
- we assessed the suitability of the criteria of the Guidelines with respect to their relevance, completeness, reliability, neutrality and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information set out in Article L. 225-102 1 III of the French Commercial Code as well as information regarding compliance with human rights and anti-corruption and tax avoidance legislation;
- we verified that the Statement provides the information required under Article R.225-105, section II of the French Commercial Code where relevant with respect to the main risks and includes, where applicable, an explanation of the reasons for the absence of the information required under Article L. 225-102-1, section III, paragraph 2 of the French Commercial Code;
- we verified that the Statement presents the business model and a description of the main risks associated with all the consolidated entities' activities, including where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators associated to the main risks;
- we referred to documentary sources and conducted interviews to:
  - assess the process used to identify and confirm the main risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the main risks and the policies presented,
  - corroborate the qualitative information (measures and outcomes) that we considered to be the most important presented below. Concerning certain risks (example: social, environmental), our work was carried out on the consolidating entity, for the others risks, our work was carried out on the consolidating entity and on a selection of entities:
    - Social information: Cofely Services Etablissement; ENGIE Cofely Energy Services LLC; ENGIE Deutschland GmbH; ENGIE ES SA Cofely Réseaux Etablissement; ENGIE Home Services,
    - Health and safety information: GBU ES; GBU Retail; Cozie; ENGIE Home Services,
    - Environmental information: Central Termoelectrica Andina SA; Central Termica Red Dragon; Inversiones Hornitos S.A.; Tocopilla CCGT; Tocopilla Conventional; Climaespaco; CN'Air – Global; CNR; BIL – Nord Est – ENGIE ES; GIM – Nord – PDE Nord-Est; Groupe CPCU; Polynésie française;

(1) *ISAE 3000 (revised) - Assurance engagements other than audits or reviews of historical financial information.*

- we verified that the Statement covers the scope of consolidation, i.e. all the consolidated entities in accordance with Article L. 233-16 of the French Commercial Code within the limitations set out in the Statement;
- we obtained an understanding of internal control and risk management procedures the Entity has implemented and assessed the data collection process aimed at ensuring the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important[(1)], we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
  - tests of details, using sampling techniques, in order to verify the proper application of the definitions and procedures, and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities and covers between 24% and 100% of the consolidated data relating to the key performance indicators and outcomes selected for these tests;
- we assessed the overall consistency of the Statement in relation to our knowledge of all the consolidated entities.

The procedures performed as part of our limited assurance engagement are less extensive than for a reasonable assurance engagement in accordance with the professional guidelines of the French National Institute of Statutory Auditors (*Compagnie nationale des commissaires aux comptes*); a higher level of assurance would have required us to carry out more extensive procedures.

Paris-La Défense, March 5, 2024

The Independent Third Party

French original signed by:

EY & Associés

Alexis Gazzo

Partner, Sustainable Development

(1) **Social and health and safety information :** *Proportion of apprentices in the workforce on permanent and fixed-term contracts in France excluding regulated entities GRDF and GRTgaz ; Gender pay gap; Percentage of declared disabled employees in France; Number of permanent Hires; Number of fixed-term hires; Number of resignations; Number of retirements; Number of dismissals; Number of contractual terminations; Number of departures for miscellaneous reasons; Percentage of trained employee (with e-learning); Number of hours of training (with e-learning); Employees turnover rate; Voluntary turnover rate; Number of fatalities (employees); Severity rate according to French standards: number of days lost in 2023 as a result of occupational lost time accidents occurring during or before the year in question ; Severity rate according to International Labour Organisation standards: number of days lost in 2023 as a result of occupational lost time accidents occurring during the year in question; Lost-time injury frequency rate (Group employees and subcontractors on closed sites).*

Environmental information: *Percentage of relevant revenues covered by an EMAS certification; Percentage of relevant revenues covered by an ISO 14001 (non EMAS) certification; Total quantity of non-hazardous waste & by products discharged (including sludge); Total quantity of non-hazardous waste & by products recovered (including sludge); NOx emissions; SOx emissions; Particle emissions; Fresh water – Total withdrawal; Fresh water – Total discharge; Non-fresh water – Total withdrawal; Non-fresh water – Total discharge; Water - Total consumption (Withdrawal – Discharges); Part of top 250 preferred suppliers (excluding energy) certified by or aligned with the SBT initiative; Fresh water consumption per energy produced; GHG emissions relating to working practices; GHG emissions relating to the use of sold products.*

3.12 STATUTORY AUDITORS' REASONABLE ASSURANCE REPORT ON A SELECTION OF THE GROUP'S SOCIAL AND ENVIRONMENTAL INFORMATION FOR THE YEAR ENDED 31 DECEMBER 2023

This is a translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English-speaking users. This statutory auditors' report includes information required by European regulations and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to the shareholders. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the CEO,

In our capacity as statutory auditors of ENGIE (hereinafter the «Company») and in response to your request, we have carried out a reasonable assurance engagement on a selection of environmental and social information relating to the financial year ended December 31, 2023 (hereinafter the «Information[1]»), prepared in accordance with the procedures of the Company, a summary of which is included in the «Methodology elements» and «Note on the calculation method for social indicators» sections of the universal registration document (hereinafter the «Reporting Criteria») presented in the universal registration document for the year ended December 31, 2023.

Our engagement does not cover the other information included in the universal registration document and, therefore, we do not express an opinion thereon.

Opinion in the form of reasonable assurance

In our opinion, the Information has been prepared, in all material respects, in accordance with the Reporting Criteria.

Preparation of the Information

The absence of a generally-accepted and commonly-used framework of reference or established practices on which to evaluate and measure information allows the use of different, but acceptable, measurement techniques that may affect comparability between entities and over time.

Accordingly, the information must be read and interpreted with reference to the Reporting criteria, the significant information of which is available upon request, made to the Group Environmental and Social Responsibility Department, the Group Health and Safety Department and the Group Human Resources Department.

Limitations inherent in the preparation of the Information

As stated in the management report, the Information may be subject to uncertainty inherent in the state of scientific or economic knowledge and the quality of the external data used. Some information is sensitive to the methodological choices, assumptions and/or estimates chosen for their preparation.

Responsibility of the Company

The Company's Management is responsible for:

- selecting or drawing up appropriate criteria to prepare the Information;
- preparing the Information according to the Reporting Criteria;
- designing, implementing and maintaining the internal control that it considers necessary to prepare the Information that does not contain material misstatements, whether due to fraud or errors.

Responsibility of the Statutory Auditors

It is our responsibility to:

- plan and carry out the engagement in a manner that provides reasonable assurance that we have not found any material misstatements whether due to fraud or errors;
- express an independent opinion on the basis of the evidence we have obtained;
- submit our conclusion to the CEO of ENGIE.

As it is our responsibility to issue an independent conclusion on the Information prepared by Management, we are not authorized to participate in the preparation of the Information, as this could compromise our independence.

Professional standards applied

The work described below was performed in accordance with ISAE 3000 (revised) - *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* published by the International Auditing and Assurance Standards Board (IAASB).

Independence and quality control

Our independence is defined by the provisions of Article L. 821-28 of the French Commercial Code (*Code de commerce*), the French Code of Ethics for Statutory Auditors (*Code de déontologie*) and the IESBA Code of Ethics (*International Code of Ethics for Professional Accountants (including Independence Standards)*).

In addition, we apply *International Standard on Quality Management 1*, which involves defining and implementing a quality control system that includes documented policies and procedures to ensure compliance with applicable ethical rules, professional standards and legal and regulatory texts.

Means and resources

Our work mobilized the skills of twelve people from DELOITTE & ASSOCIES and nineteen people from ERNST & YOUNG et Autres respectively, and took place between September 2023 and March 2024.

(1) **Social Information and Health Safety**: *End-of-period employees, Total managers, Total OET, Total TSM, Number of women in the workforce, Number of women among managers, Permanent contracts, Fixed-term contracts, Total hours worked (HR), Number of work-related accidents resulting in at least one day off (employees), Percentage of women in group management.*

Environmental Information: *Total primary energy consumption (excluding own consumption), Electricity and thermal power consumption (excluding own consumption), Energy efficiency of fossil fuel plants (including biomass/biogas), Renewable - net installed power (electric and thermal), Renewable - Electricity and heat produced, Total direct greenhouse gas emissions - Scope 1, Indirect emissions related to energy (Scope 2), Carbon intensity of energy production (Scope 1), Total quantity of hazardous waste & by-products discharged (including sludges and excluding radioactive waste), Total quantity of hazardous waste & by-products recovered (including sludges and excluding radioactive waste), Rate of hazardous waste recovery, Greenhouse gas emissions (Scope 1 and 3) related to energy production, Share of renewable capacities in electricity production.*

Nature and scope of procedures

Reasonable assurance involves the performance of procedures intended to obtain an understanding of the bases for the Information. The nature, timing and extent of the procedures selected depend on our professional judgment, in particular our assessment of the risks of the Information containing material misstatements, whether due to fraud or error. In assessing these risks, we have also taken into account the internal controls relevant to the Company preparing the Information. We have also:

- assessed the appropriateness of the Reporting Criteria with respect to its relevance, completeness, reliability, neutrality and clarity, by taking into consideration, when relevant, the sector's best practices;
- verified the set-up of a process to collect, compile, process and check the completeness and consistency of the Information;
- consulted the documentary sources and interviewed the relevant staff at the Company headquarters in order to analyze the deployment and application of the Reporting Criteria;
- undertook analytical review procedures on the Information and verified the calculations and the consolidation of the Information by means of sampling;
- tested the Information, for a representative sample of entities we selected, based on their activity, their contribution to the consolidation Information, their location and a risk analysis;
- conducted interviews to verify the proper application of the procedures, and conducted substantive tests, using sampling techniques, to verify the calculations performed and reconcile data with supporting evidence.

We consider that the probing elements we have received are sufficient and appropriate to express a reasonable assurance opinion.

Paris-La Défense, March 5, 2024

Statutory Auditors

French original signed by

DELOITTE & ASSOCIÉS		**ERNST & YOUNG et Autres**	
Nadia Ladouli	Patrick E. Suissa	Charles-Emmanuel Chosson	Guillaume Rouger

4

CORPORATE GOVERNANCE

The information presented in this chapter forms the report of the Board of Directors on corporate governance, prepared in accordance with the provisions of the final paragraph of Article L.225-37 and Articles L.22-10-8 et seq. of the French Commercial Code. The sections of the report relevant to the activities of the respective Board of Directors committees were presented to them and approved by the Board of Directors at its meeting of February 21, 2024.

This report includes the composition of the Board of Directors, the conditions under which it prepared and structured its work, and any limits imposed by the Board of Directors on the powers of the Chief Executive Officer. It also covers the policy on diversity within the Board. The changes to the composition of the Board of Directors proposed at the Shareholders' Meeting of April 30, 2024, are set out in Section 4.1.1.9. This report sets out, in Section 4.2 "Compensation and benefits of corporate officers and members of the Executive Committee," the applicable provisions, principles and rules established to determine the compensation and benefits of any kind awarded to corporate officers.

ENGIE maintains its commitment to implementing corporate governance guidelines and for this purpose refers to the Afep-Medef Corporate Governance Code for listed companies published by Afep (French Association of Private Enterprises) and MEDEF (Movement of the Enterprises of France) (hereinafter the "Afep-Medef Code"), updated in December 2022 and available on the AFEP (https://afep.com/publications/code-de-gouvernement-dentreprise-des-societes-cotees/) and MEDEF (https://www.medef.com/en) websites.

4.1 ORGANIZATION AND FUNCTIONING OF GOVERNANCE

SEPARATION OF THE ROLE OF CHAIRMAN AND CHIEF EXECUTIVE OFFICER

In 2016, the Board of Directors, in line with the recommendations of the Appointments, Compensation and Governance Committee, opted for a separate governance structure. In 2018, the Board of Directors confirmed its choice to separate the roles of Chairman of the Board of Directors and Chief Executive Officer, to allow the Group to best meet the challenges facing it. The Chief Executive Officer's mission was to continue to drive the transformation plan in a rapidly changing sector, a challenge which was not deemed compatible with a term of office as Chairman of the Board of Directors, which requires a high level of availability to ensure an efficient, collaborative and independent functioning of the Board of Directors. This choice has since been confirmed. The Chairman is responsible for organizing and leading the work of the Board of Directors and manages relations and dialog with shareholders. The Chief Executive Officer is dedicated to the Group's operational management, its financial and non-financial performance, and to the pursuit of the strategic and transformation road map drawn up in May 2021.

4.1.1 COMPOSITION OF THE BOARD OF DIRECTORS

Pursuant to the provisions of Article L.225-17 of the French Commercial Code, ENGIE's Board of Directors must be composed of at least three Directors. Article 13 of the Company's by-laws (https://www.engie.com/en/by-laws-ENGIE) sets the maximum number of Directors and provides that three Directors representing employees (pursuant to Articles L.22-10-5 and L.22-10-6 of the French Commercial Code) and one Director representing employee shareholders be appointed.

The Directors serve a four-year term. The terms of office of Directors expire at the close of the Shareholders' Meeting convened in the year during which the term expires and called to approve the financial statements for the previous fiscal year.

The terms of office of Françoise Malrieu and Mari-Noëlle Jégo-Laveissière expired at the Shareholders' Meeting on April 26, 2023 and have not been renewed. At the same Shareholders' Meeting, Lucie Muniesa was appointed as a Director on the recommendation of the French State, and the terms of office of Marie-José Nadeau and Patrice Durand were renewed.

In addition, following the change of position of Stéphanie Besnier, the French State appointed Céline Fornaro as Director representing the State as of March 14, 2023.

On the date of this report, the Company is administered by a Board of Directors composed of 14 members, including:

- seven Directors appointed by the Shareholders' Meeting pursuant to the provisions of the French Commercial Code relating to public limited companies;
- one Director representing the French State, appointed by decree under Article 4 of Ordinance 2014-948 of August 20, 2014;
- two Directors appointed by the Shareholders' Meeting on the recommendation of the French State pursuant to Article 6 of Ordinance No. 2014-948 of August 20, 2014, in view of the French State's interest in ENGIE's share capital;
- three Directors elected representing employees (pursuant to Articles L.22-10-6 et seq. of the French Commercial Code and Article 13.3 of the Company's bylaws);
- one Director representing employee shareholders (pursuant to Article L.22-10-5 of the French Commercial Code and Article 13.3 of the Company's bylaws) appointed by the Shareholders' Meeting.

The Board of Directors has six independent Directors, including the Chairman of the Board of Directors (see Sections 4.1.1.2 "Profiles, experience and expertise of Directors in office," and 4.1.1.6 "Independence of Directors in office"). This means that the percentage of Independent Directors is 60%, it being specified that, pursuant to the Afep-Medef Code, Directors representing employees and employee shareholders are not counted to establish the percentage of Independent Directors.

When one or more Directors' seats become vacant, and after ascertaining the size of the Board of Directors, the Appointments, Compensation and Governance Committee (hereinafter, the ACGC) defines, with the support of the Chairman of the Board of Directors, the profile sought in light notably of the adequate nature of the Board's composition for the Group's activities, challenges and strategic plans as reflected in the diversity policy for members of the Board of Directors (see Section 4.1.1.8).

Photograph taken during the Board of Directors meeting held on February 21, 2024.

In the foreground, from left to right: Magali Viot, Lord Peter Ricketts of Shortlands, Patrice Durand et Céline Fornaro.

In the background, from left to right: : Gildas Gouvazé (SEC representative), Jacinthe Delage, Fabrice Brégier, Marie-Claire Daveu, Ross McInnes, Catherine MacGregor (Chief Executive Officer), Jean-Pierre Clamadieu (Chairman), Marie-José Nadeau, Yoan Kosnar, Sophie Mourlon (Government Commissioner), Christophe Agogué et Lucie Muniesa.

As of the date of this report, the key features of the Board of Directors composition are the following:

(1) *Pursuant to the applicable rules of the French Commercial Code and the Afep-Medef Code, in assessing the ratio of women to men and the percentage of independent Directors on the Board of Directors, the law stipulates that Directors representing employees or employee shareholders are not counted.*

Changes to the composition of the Board of Directors and the committees during the 2023 fiscal year

	Departure	Appointment	Renewal
Board of Directors	Stéphanie Besnier (03/14/2023) Françoise Malrieu (04/26/2023) Mari-Noëlle Jégo-Laveissière (04/26/2023)	Céline Fornaro (03/14/2023) Lucie Muniesa (04/26/2023)	Marie-José Nadeau (04/26/2023) Patrice Durand (04/26/2023)
Audit Committee	Stéphanie Besnier (03/14/2023) Françoise Malrieu (04/26/2023)	Céline Fornaro (03/14/2023)	Marie-José Nadeau (04/26/2023)
SITC [(1)]	Stéphanie Besnier (03/14/2023)	Céline Fornaro (03/14/2023)	Marie-José Nadeau (04/26/2023) Patrice Durand (04/26/2023)
ACGC [(2)]	Stéphanie Besnier (03/14/2023) Françoise Malrieu (04/26/2023)	Céline Fornaro (03/14/2023)	Marie-José Nadeau (04/26/2023)
EESDC [(3)]	Françoise Malrieu (04/26/2023)	Lucie Muniesa (07/05/2023)	-

(1) Strategy, Investment and Technology Committee.
(2) Appointments, Compensation and Governance Committee.
(3) Ethics, Environment and Sustainable Development Committee.

4.1.1.1 Process for the recruitment of a Director

The procedure for the selection and appointment of Directors representing employees, of the Director representing employee shareholders and of Directors appointed by or on the recommendation of the French State is subject to a specific regulatory and / or statutory framework which is set out in Section 4.1.1.

With regard to the selection of independent Directors, the ACGC Chair, with the support of the Chair of the Board of Directors, supervises the process of finding and selecting new Directors, where necessary with the assistance of one or more recruitment firms.

Candidates are long listed and then short listed.

Interviews of candidates are held at the end of the process with a view to submitting a recommendation to the Board of Directors. During these interviews, the ACGC ensures in particular the independence, availability and motivation of the prospective candidate and his / her adherence to the Group's values.

The replacement of Directors appointed by the Shareholders' Meeting whose position becomes vacant during the term of office, due to death or resignation, is subject to the laws and regulations in force. These measures are not applicable in the event of the vacancy, for any reason, of the seat of a Director elected by the employees or of the seat of the Director representing the employee shareholders.

4.1.1.2 Profiles, experience and expertise of Directors in office

Diversity within the Board of Directors

Pursuant to the provisions of Article L.225-17 of the French Commercial Code, which established the principle of balanced gender representation on Boards of Directors, at the date of this report, ENGIE's Board of Directors includes seven female Directors from a total of 14 members.

In assessing the ratio of women to men on Boards of Directors, the law stipulates that Directors representing employees (three Directors) and employee shareholders (one Director) are not taken into account.

Thus, the assessment is made on the basis of 10 Directors, five of whom are women, i.e. 50% women.

ENGIE also seeks to increase the diversity and international experience of its Board of Directors. Four nationalities are represented by the 14 Directors (Australian, British, Canadian and French). For further information, please refer to Section 4.1.1.8 Diversity policy for members of the Board of Directors.

On-boarding and training program for new members of the Board of Directors

Each Director may receive any training necessary for the proper performance of his or her role as Director – and, where applicable, as Committee member – provided or approved by the company in accordance with Article 1.10 of the Internal Regulations of ENGIE's Board of Directors and with Article 14 of the Afep-Medef Code.

The ACGC adopted, during its November 30, 2022, meeting, an on-boarding and training program for any new members of the Board in principle within six months of taking office, to allow them to rapidly acquire a good knowledge of the company's structure and activities. This program consists of meetings with members of the Executive Committee, and information sessions delivered by experts from the various business lines of the Group.

In 2023, new Directors therefore benefited from information sessions on hydrogen, renewables, Energy Solutions, thermal, BtoC, nuclear and networks, as well as a session on CSR. This program also includes visits of sites which are representative of the Group's activity. A visit was organized as detailed below.

Training of Directors

In 2023, all Directors took part in several information meetings described in Section 4.1.2.3.

In addition, at its meeting on July 21, 2023, the Board of Directors adopted a training program for Directors representing employees. This program was established in accordance with Article L.225-30-2 of the French Commercial Code, Article 14 of the Afep-Medef Code and Article 4.1 of the internal regulations of the Board of Directors. This program aims to acquire or perfect the necessary knowledge and technical expertise to fulfill their role, and mainly cover the role and operation of the Board of Directors, the rights and obligations of Directors and their responsibilities as well as the Group's structure and activities. The Director representing the employee shareholders benefits from this program.

Site visits

Directors may take part in visits to Company sites. In 2023, they visited the Fos Cavaou LNG terminal located in the industrial zone of the Port of Marseille-Fos, which offers privileged access to the European LNG markets. Directors also discovered the Jupiter 1000 project, the first French Power to Gas demonstrator, which transforms excess renewable electricity into hydrogen and then into methane, injected into the gas network. The Jupiter 1000 project aims to provide greater flexibility to the energy network, encourage the development of renewable energy and produce carbon neutral gas from recycled CO_2.

Summary presentation of the Board of Directors

First and last name, gender [(1)] and age		Nationality	Number of ENGIE shares held [(2)]	Number of offices in other listed companies (excl. ENGIE)	Independent Director	Date of initial appointment	Expiration of term	Seniority on the Board [(3)]	Participation in Board committees
Jean-Pierre Clamadieu M, 65			50,000	2	●	05/18/2018	2026	5	Chairman of the SITC ACGC [(4)]
Catherine MacGregor F, 51			70,000	1	x	05/20/2021	2025	2	ACGC [(4)] SITC [(4)] EESDC [(4)]
Fabrice Brégier M, 62			2,500	2	●	05/03/2016	2024	7	ACGC
Marie-Claire Daveu F, 52			500	1	●	04/21/2022	2026	1	Chair of the EESDC
Ross McInnes M, 69			4,900	2	●	05/18/2018	2026	5	Chair of the Audit Committee EESDC SITC
Marie-José Nadeau F, 70			5,600	0	●	04/28/2015	2027	8	Chair of the ACGC Audit Committee SITC
Lord Peter Ricketts of Shortlands M, 71			750	1	●	05/03/2016 [(5)]	2024	7	ACGC
Céline Fornaro F, 47			0	3	x	03/14/2023	2027	0	Audit Committee SITC ACGC
Patrice Durand M, 70			2,500	0	x	12/14/2016	2027	7	SITC
Lucie Muniesa F, 48			0	0	x	04/26/2023	2027	0	EESDC
Christophe Agogué M, 62			125	0	N/A	05/18/2018	2026	5	Audit Committee
Yoan Kosnar M, 48			70	0	N/A	04/21/2022	2026	1	SITC
Magali Viot F, 52			0	0	N/A	04/21/2022	2026	1	EESDC
Jacinthe Delage F, 47			1,344	0	N/A	05/20/2021	2025	2	ACGC

(1) Female (F), Male (M).
(2) Directors co-opted or elected by the Shareholders' Meeting on the recommendation of the French State, the Director representing the French State and the Directors representing employees or employee shareholders are exempt from ownership of shares of the Company (see Section 4.1.2.1 "Organization and Chairmanship").
(3) In years elapsed.
(4) Attends this committee, or these committees, without being a member.
(5) With effect from August 1, 2016.

Directors elected by the Shareholders' Meeting (7)

JEAN-PIERRE CLAMADIEU

Chairman of the Board of Directors

- **Chairman of the Strategy, Investment and Technology Committee**
- **Attends without being a member the meetings of the Appointments, Compensation and Governance Committee**

Age: 65
Nationality: French
First appointment: 05/18/2018
Expiration of term: 2026
Shares held: 50,000 shares
Business address:
ENGIE – 1, place Samuel de Champlain – 92400 Courbevoie

Jean-Pierre Clamadieu is a graduate of the École Nationale Supérieure des Mines de Paris and an engineer of the Corps des Mines. He began his career within the French administration, particularly working for the Ministry of Industry and as technical advisor to the Minister of Labor. In 1993, he joined the Rhône-Poulenc group where he held several management positions. In 2003, he was appointed Chief Executive Officer of the Rhodia group, and then Chairman-CEO in 2008. In September 2011, following the merger of the Rhodia and Solvay groups, Jean-Pierre Clamadieu was named Vice Chairman of the Solvay Executive Committee. From May 2012 to the end of February 2019, Jean-Pierre Clamadieu served as Chairman of the Executive Committee and CEO of Solvay. On May 18, 2018, he was appointed Director and Chairman of the Board of ENGIE: his term of office was renewed on April 21, 2022. On October 8, 2020, he was also appointed Chairman of the ENGIE Foundation Board of Directors.

Principal activities outside the Company

Director of companies

Current offices and positions held

Offices and positions in Group companies

- Chairman of the Board of Directors of the ENGIE Foundation

Offices and positions in companies outside the Group

- Director of Airbus [(1)] – Member of the appointments, compensation and governance committee, and Chairman of the ethics, compliance and sustainable development committee
- Director of TE Connectivity [(1)] – member of the appointments, governance and member of compliance committee
- Chairman of the Board of Directors of the National Opera of Paris

Offices that have expired in the last five years

- Director and CEO of Solvay (Belgium) [(1)] (until 2019)
- Director of the International Council of Chemical Associations (ICCA) (until 2020)
- Lead Independent Director of AXA [(1)] – Chairman of the Compensation, Governance and Sustainable Development Committee (until 2023)

Areas of expertise

- Office of Chair or Director of a large company
- Executive Management
- Industrial sector

(1) Listed company.

CATHERINE MACGREGOR

Director
Chief Executive Officer

- **Attends without being a member the meetings of the Appointments, Compensation and Governance Committee,**
- **Attends without being a member of the Strategy, Investment and Technology Committee,**
- **Attends without being a member of the Ethics, Environment and Sustainable Development Committee.**

Age: 51
Nationality: French
First appointment: 05/20/2021
Expiration of term: 2025
Shares held: 70,000 shares
Business address:
ENGIE – 1, place Samuel de Champlain – 92400 Courbevoie

Catherine MacGregor joined the ENGIE Group on January 1, 2021, as Chief Executive Officer. Before joining the Group, Catherine MacGregor had spent her entire career in the energy sector, where she held various leadership positions at international level. From 2019 to 2020, she was a member of the Executive Committee of TechnipFMC and directed Technip Energies, the engineering entity, where she prepared the company's IPO. Previously, Catherine MacGregor worked for 23 years for Schlumberger, heading up industrial projects on different continents (Africa, Europe, Asia and North America). She held a range of positions, including operational engineer, chair of various entities (Drilling, Europe and Africa) and deputy chair of the group's human resources. Catherine MacGregor joined Microsoft's Board of Directors as an Independent Director in December 2023. Actively engaged in the World Economic Forum, she is a member of the CEO Climate Leaders Alliance. Catherine MacGregor is an engineer and a graduate of the Ecole Centrale de Paris (CentraleSupélec).

Principal activities outside the Company

None

Current offices and positions held

Offices and positions in companies outside the Group

- Director at Microsoft Inc. [(1)] since December 2023
- Director of AFEP
- Director and member of the Association Française des Entreprises pour l'Environnement (EpE)

Offices that have expired in the last five years

- Director at the ENGIE Foundation (until 2023)
- Member of the Executive Committee of the *World Business Council for Sustainable Development* (Switzerland) (until 2023)

Areas of expertise

- Executive Management
- Industrial sector
- Energy sector

(1) Listed company.

FABRICE BRÉGIER

Director

● **Member of the Appointments, Compensation and Governance Committee**

Age: 62
Nationality: French
First appointment: 05/03/2016
Expiration of term: 2024
Shares held: 2,500 shares
Business address:
Palantir Technologies France - 5, rue Charlot - 75003 PARIS

A graduate of the École Polytechnique, Chief Engineer at the Corps des Mines, Fabrice Brégier began his career at the DRIRE Alsace (Ministry of Industry and Trade), before being appointed Sub-Director of Economic, International and Financial Affairs with the Ministry of Agriculture (Directorate-General for Food) in 1989. After serving as an Advisor to several French Ministers, Mr. Brégier joined Matra Défense in 1993, where he was successively Chairman of Franco-German joint ventures and Director of Stand-Off activities at Matra BAe Dynamics. In 1998, he became CEO of Matra BAe Dynamics. In 2001, he was appointed CEO of MBDA, the leading European missile systems company. Early in 2003, Fabrice Brégier joined Eurocopter, becoming Chairman and CEO in April. In 2005, he was appointed Director of EADS' Eurocopter Division and member of the EADS Executive Committee, then in 2006 was appointed Chief Operating Officer of Airbus and a member of the EADS Executive Committee. From 2012 to 2018, Fabrice Brégier served as Chairman and CEO of Airbus. In September 2018, he became Chairman of Palantir Technologies France, a leading company in the field of Big Data. He was also appointed Chairman of the Board of Directors of SCOR in June 2023.

Principal activities outside the Company

Chairman of Palantir Technologies France and Chairman of the Board of Directors of SCOR

Current offices and positions held

Offices and positions in companies outside the Group

- Chairman of Palantir Technologies France
- Director of KK Wind Solutions (Denmark)
- Chairman of the Board of Directors of SCOR [(1)] since June 2023 – Chairman of the Strategic Committee, Chairman of the Crisis Management Committee, member of the Accounts and Audit Committee and member of the Risk Committee
- Director of Safran [(1)] – Member of the Innovation, Technology and Climate Committee

Offices that have expired in the last five years

None

Areas of expertise

- Executive Management
- Digital, innovation, new technologies
- Industrial sector

(1) Listed company.

MARIE-CLAIRE DAVAU

Director

● **Chair of the Ethics, Environment and Sustainable Development Committee (since July 5, 2023)**

Age: 52
Nationality: French
First appointment: 04/21/2022
Expiration of term: 2026
Shares held: 500 shares
Business address:
KERING - 40, rue de Sèvres - 75007 Paris

A graduate of the École nationale du génie rural, des eaux et des forêts (ENGREF, part of IPEF). She also holds a DESS (Diplôme d'études supérieures spécialisées – French diploma of higher specialized studies) in public management from Université Paris Dauphine. Marie-Claire Daveu began her career in 1997 at the Departmental Directorate of Agriculture and Forestry in the Manche department in France. In 2001, she joined the Ministry for Planning and the Environment. In 2002, she was appointed Technical advisor for ecology and sustainable development in the Office of Prime Minister Jean-Pierre Raffarin, then Chief of Staff to Serge Lepeltier, Minister of Ecology and Sustainable Development in 2004. In 2005, she became Director of Sustainable Development at the Sanofi-Aventis Group. In 2007, she was appointed Chief of Staff to Nathalie Kosciusko-Morizet, first at the office of the Secretary of State for Ecology, then at the office of the Secretary of State for Outlook and Digital Development, and then at the Ministry of Ecology, Sustainable Development, Transport and Housing. In 2012, she joined the Kering Group and was appointed Director of Sustainable Development and International Institutional Relations. She is a member of the Group's Executive Committee.

Principal activities outside the Company

Director of Sustainable Development and International Institutional Relations at Kering

Current offices and positions held

Offices and positions in companies outside the Group

- Director at Crédit Agricole [(1)] – Member of the Risk Committee, member of the Societal Commitment Committee, and member of the Compensation Committee
- Member of the Supervisory Board of the Compagnie du Ponant
- Director at Indosuez Wealth Management

Offices that have expired in the last five years

- Director at Crédit Agricole CIB – Member of the Compensation Committee (until 2020)
- Director at SPAC Transition [(1)] (until 2022)
- Director at Albioma [(1)] – Chair of the Social Responsibility Committee (until 2022)

Areas of expertise

- Office of Chair or Director of a large company
- CSR: Climate and Health & safety
- Energy sector

4

(1) Listed company.

ROSS MCINNES

Director

- **Chairman of the Audit Committee (since July 5, 2023)**
- **Member of the Strategy, Investment and Technology Committee**
- **Member of the Ethics, Environment and Sustainable Development Committee**

Age: 69
Nationality: French and Australian
First appointment: 05/18/2018
Expiration of term: 2026
Shares held: 4,900 shares
Business address:
SAFRAN – 2 boulevard du Général Martial-Valin – 75015 Paris

A graduate of the University of Oxford, Ross McInnes began his career in 1977 with Kleinwort Benson in London and then in Rio de Janeiro. In 1980, he joined Continental Bank (which became Bank of America) where he successively held several positions in corporate finance operations, first in Chicago and then in Paris. In 1989, Ross McInnes joined Eridania Beghin-Say, where he was appointed Chief Financial Officer in 1991, and a member of the Board of Directors in 1999. The following year, Ross McInnes joined Thomson-CSF (now Thales) as Senior Vice President and Chief Financial Officer and worked on the transformation of the Group until 2005. He then joined the PPR Group (now Kering) as Senior Vice President for Finance and Strategy, then became a member of the Supervisory Board of Générale de Santé in 2006. He temporarily chaired the Management Board of Générale de Santé from March until June 2007. He also holds the positions of Vice-Chairman of Macquarie Capital Europe, specializing primarily in network investments. In March 2009, Mr. McInnes joined Safran and became Executive Vice President, Economic and Financial Affairs in June of that year. He served as a member of the Safran Management Board from July 2009 to April 2011, then as Deputy Chief Executive Officer until April 2015. On April 23, 2015, he became Chairman of the Safran Board of Directors. Since February of 2015, Ross McInnes has also served as Special Representative for economic relations with Australia, appointed by the Minister for Europe and Foreign Affairs in the context of French economic diplomacy. From November 2016 to November 2019, he was a member of the High Committee on Corporate Governance. In February 2017, he joined SICOM, the general partner of VIVESCIA Industries, as a "qualified person." In October 2017, the French Prime Minister appointed Mr. McInnes Co-Chairman of the "Public Action 2022" Committee to propose actions to reform public policies. The Committee has since achieved its goals. From January 2018 to January 2024, Ross McInnes was a Trustee and Director of the IFRS Foundation.

Principal activities outside the Company

Chairman of the Board of Directors of Safran

Current offices and positions held

Offices and positions in companies outside the Group

- Chairman of the Board of Directors of Safran (1)
- Lead Director at Lectra (1) – Chairman of the Appointments Committee, member of the Audit Committee and member of the Strategic Committee

Offices that have expired in the last five years

- Director at Lectra (1) (until 2020)
- Director at Eutelsat Communications (1) (until 2022)
- Trustee and Director at the IFRS Foundation (until 2024)

Areas of expertise

- Office of Chair or Director of a large company
- Finance
- Industrial sector

(1) Listed company.

MARIE-JOSÉ NADEAU

Director

- **Chair of the Appointments, Compensation and Governance Committee (since July 5, 2023)**
- **Member of the Strategy, Investment and Technology Committee**
- **Member of the Audit Committee**

Age: 70
Nationality: Canadian
First appointment: 04/28/2015
Expiration of term: 2027
Shares held: 5,600 shares
Business address:
ENGIE – 1, place Samuel de Champlain – 92400 Courbevoie

Marie-José Nadeau is an expert on the energy sector. She is an honorary Chair of the international organization World Energy Council, which she chaired from 2013-2016, after being Director for 15 years. Moreover, Marie José Nadeau has more than 20 years' experience as a top executive and has served as a member of Audit Committees for 10 years. A trained attorney who holds a master's degree in public law from the University of Ottawa, she assumed strategic functions in the Canadian and Quebec governments before serving as Corporate Secretary and Executive Vice President for Corporate Affairs at Hydro-Québec (Canada). She sits on the Board of Directors of Trans Mountain Corporation, a Canadian company that operates and develops a major pipeline network in Western Canada and the United States. She is also a member of the Board of Directors of Via HFR – Via TGF, a state-owned company of the Government of Canada responsible for the development of a high-frequency train system over a 1000-km distance between the cities of Toronto and Québec. In 2009, she was awarded the title of Advocatus Emeritus by the Quebec Bar for her contribution to the legal profession. In 2016, she was received as a member of the Order of Canada in recognition for her commitment to education and the environment.

Principal activities outside the Company

Director of companies

Current offices and positions held

Offices and positions in companies outside the Group

- Director of Trans Mountain Corporation (Canada)
- Director-Vice-President of Via HFR – Via TGF (Canada)

Offices that have expired in the last five years

- Director of Metro Inc.(1) (Canada) – Chair of Governance and Appointments Committee and member of the Compensation Committee (until 2020)
- Director of the Electric Power Research Institute (United States) (until 2023)

Areas of expertise

- Energy sector
- Office of Chair or Director of a large company
- Executive Board

(1) Listed company.

LORD PETER RICKETTS OF SHORTLANDS

Director

● **Member of the Appointments, Compensation and Governance Committee**

Age: 71
Nationality: British
First appointment: 05/03/2016
Expiration of term: 2024
Shares held: 750 shares
Personal address:
15 Queensmead Road Bromley - Kent BR2 0ER (Royaume-Uni)

A graduate of Oxford University, with a Master of Arts in English Literature from Pembroke College, Honorary DLC from the University of Kent and Honorary LLD from the University of Bath, Lord Peter Ricketts of Shortland began his career in 1974 at the Foreign and Commonwealth Office (FCO). In 1975, he was assigned as a Political Attaché in Singapore, and then served as the UK's Permanent Representative to NATO in Brussels, before joining the FCO. At the FCO, he served as the Assistant Private Secretary to former Foreign Secretary Sir Geoffrey Howe in 1983, First Secretary at the British Embassy in Washington (United States) in 1985, Division Chief in Hong Kong in 1990, Advisor for European and Economic Affairs at the British Embassy in France in 1995, and Deputy Director of Policy in 1997. In 2000 he was appointed Chairman of the Joint Intelligence Committee, then in 2001 he was named Policy Director of the FCO. From 2003 to 2006 he was Permanent Representative of the United Kingdom to NATO. In 2006, he became Corporate Secretary of the FCO, and in 2010 he was named National Security Advisor of the United Kingdom. Finally, from 2012 to January 2016, he was the United Kingdom's Ambassador to France and Monaco. In October 2016, he was appointed to the House of Lords. He has been appointed Chairman of the European Affairs Committee of the House of Lords since June 2023.

Principal activities outside the Company

Chairman of the Franco-British Council
Member of the House of Lords – Chairman of the European Affairs Committee, London (United Kingdom)
Vice-Chair, Royal United Services Institute, London (United Kingdom)
Member, Royal Academy

Current offices and positions held

Offices and positions in companies outside the Group

- Director of Getlink [(1)] – Chairman of the Appointments and Compensation Committee

Offices that have expired in the last five years

- Strategic Consultant, Lockheed Martin (United Kingdom) (until 2021)

Areas of expertise

- Geostrategic challenges
- Public sector
- Social dialog / human resources

(1) Listed company.

Director representing the French State, appointed by decree (1)

Director from the public sector

CELINE FORNARO

Director representing the French State, appointed by decree

- **Member of the Audit Committee**
- **Member of the Strategy, Investment and Technology Committee**
- **Member of the Appointments, Compensation and Governance Committee**

Age: 47
Nationality: French
First appointment: 03/14/2023
Expiration of term: 2027
Shares held: 0 share
Business address:
Agence des Participations de l'État139, rue de Bercy 75572 – Paris Cedex 12

Céline Fornaro is a former student of the École Nationale de l'Aviation Civile (French School of Civil Aviation) (class of 1997) and an Msc graduate of the College of Aeronautics at Cranfield University (United Kingdom). She began her career in 2000 as Marketing and Product Manager in aircraft sales at Embraer. In 2004, she joined Bank of America Merril Lynch and was promoted to head up the research team in Aeronautics, Defense and Satellites in 2009. In 2016, Céline Fornaro joined UBS as Managing Director of European Industrials Equity Research in aerospace, equipment and new energy sources. This professional experience enabled her to acquire thorough knowledge of investment banking and the finance, equipment, aerospace and transport sectors, with a global vision of these sectors in the medium and long term. Céline Fornaro joined Agence des Participations de l'État (APE) as Chief Financial Officer in June 2022 and was appointed Deputy Chief Executive of the APE, effective October 1, 2023.

Principal activities outside the Company

Deputy Chief Executive of the APE

Current offices and positions held

Offices and positions in companies outside the Group

- Director of Safran (1) representating the French State – member of the audit and risk Committee and member of the appointments and compensation Committee
- Director of Air France – KLM (1) representating the French State – member of the Audit Committee, member of the Compensation Committee and member of the Appointments and Governance Committee
- Director of Orange (1) representating the French State – member of the Audit Committee
- Member of Chatham House, the Royal Institute of International Affairs (United Kingdom)
- Member of the Royal Aeronautical Society (United Kingdom)
- Member of Women on Boards (United Kingdom)

Offices that have expired in the last five years

- Director of EDF (1) representating the French State (until 2022)
- Director of RATP representating the French State (until 2023)

Areas of expertise

- Office of Chair or Director of a large company
- Public sector
- Finance

(1) Listed company.

Directors appointed by the Shareholders' Meeting on the recommendation of the French State (2)

PATRICE DURAND

Director appointed by the Shareholders' Meeting on the recommendation of the French State

- **Member of the Strategy, Investment and Technology Committee**

Age: 70
Nationality: French
First appointment: 12/14/2016
Expiration of term: 2027
Shares held: 2,500 shares
Business address:
ENGIE – 1, place Samuel de Champlain – 92400 Courbevoie

A graduate of the Ecole Polytechnique and of the Ecole Nationale d'Administration, Patrice Durand began his career in 1978 as Sub-Prefect, Director of the office of the Prefect of Eure-et-Loir and then the Haute-Normandie region in 1979. From 1981 to 1994, he served successively as head of mission in the Directorate-General of Administration at the Ministry of the Interior, Deputy Corporate Secretary and Corporate Secretary of the Paris Club; Head of the Office of Energy, Transport, and Mines and Secretary of the Economic and Social Development Fund, Head of Capital Goods and Other Investments and Deputy Director of Treasury Management. In 1994, he became Executive Vice President, then in 1995, Deputy CEO in charge of economic and financial affairs at Air France. From 1999 onwards, he was a member of the Executive Committee, in charge, among other things, of the finances of the Central Risk Management, General Inspection, Legal Affairs, Asset Management, IT and Processing departments, before becoming Deputy CEO of the Crédit Lyonnais Group in 2002. In 2003, he was also named Director of Operations and Logistics and a member of the Executive Committee of Crédit Agricole S.A.. In 2005, he joined Thales as Deputy CEO in charge of finance and administration. From 2012 to 2015, he was Deputy CEO in charge of finance and operations at the Ingenico Group. Since 2016, he has served as a Director of French and foreign companies.

Principal activities outside the Company

Director of companies

Current offices and positions held

Offices and positions in companies outside the Group

None

Offices that have expired in the last five years

- Member of the Supervisory Board of Global Collect Services BV (until 2019) and GCS Holding BV (the Netherlands) (until 2019)

Areas of expertise

- Finance
- Industrial sector
- Services sector

LUCIE MUNIESA

Director appointed by the Shareholders' Meeting on the recommendation of the French State

● **Member of the Ethics, Environment and Sustainable Development Committee**

Age: 48
Nationality: French
First appointment: 04/26/2023
Expiration of term: 2027
Shares held: 0 share
Business address:
PAPREC – 128 boulevard Haussmann – 75008 Paris

A graduate of the École nationale de la statistique et de l'administration économique (ENSAE), the Paris school specializing in economics, sociology and statistics, Lucie Muniesa began her career at INSEE (French national institute of statistics and economic studies), before being appointed deputy manager of the Concentrations et Aides d'État (Merger and Aid) department at the French ministerial General Directorate for Competition Policy, Consumer Affairs and Fraud Control in 2002. She joined the French State Investment Agency (APE) in 2004, as deputy manager of the "Energy, Chemicals and other investments" and "La Poste – France Telecom" divisions, before being appointed Corporate Secretary of APE in 2007. In 2010, Lucie Muniesa joined Radio France as Chief Financial Officer and then Executive Vice President in charge of finance, purchasing, legal and development of own resources, before becoming Director and Deputy Corporate Secretary of the French Ministry of Culture and Communications in 2014. In February 2016, Lucie Muniesa was appointed Deputy Chief Executive Officer of APE. From 2018 to 2020, she was Chief of Staff for the French Minister of Culture and from 2020 to March 2022 she was Chief of Staff for the French Minister Delegate for Foreign Trade and Attractiveness at the Ministry for Europe and Foreign Affairs. In April 2022, she joined the PAPREC Group, the French leader in recycling and second largest waste management operator in France, as Director of Sustainable Development, Compliance and Institutional Affairs.

Principal activities outside the Company

Director of Sustainable Development, Compliance and Institutional Relations of PAPREC

Current offices and positions held

None

Offices that have expired in the last five years

None

Areas of expertise

- CSR: Climate
- Finance
- Industrial sector

4

(1) *Listed company.*

Directors elected to represent employees (3)

CHRISTOPHE AGOGUÉ

Director elected by employees, sponsored by the CFE-CGC Federation

● **Member of the Audit Committee**

Age: 62
Nationality: French
First appointment: 05/18/2018
Expiration of term: 2026
Shares held: 125 shares
Business address:
GRDF – 6 rue Condorcet – 75009 Paris

Christophe Agogué is an HEC graduate with a specialization in finance. In 1986, he joined EDF where he was responsible for negotiations with COGEMA on the reprocessing of used fuel. After a period in the management office, he was responsible for managing and then served on the Management Board of the subsidiary Nersa, in charge of the Superphénix reactor. In 2001, he moved to Gaz de France where he led the real estate department and participated in the operations to buy back the transmission network from the French State, and in the first studies on the regulation of infrastructure activities. Having joined GRDF at its inception, he works on the construction of several transmission tariffs. He has held union positions on behalf of CFE-Énergies since 2009. He has been the union representative to the Central Works Committee of GRDF and to the ENGIE France Group Committee and the secretary for his local Works Committee. Since 2018, he provides financial support to GRDF's Regulation and Economy Department.

Principal activities outside the Company

Author of essays, novels and plays

Current offices and positions held

Offices and positions in companies outside the Group

- Member of the French Strategic Committee of the Industry New Energy Systems (Comité Stratégique de Filière Nouveaux Systèmes Énergétiques, CSF NSE) for CFE-CGC

Offices that have expired in the last five years

Director of ENGIE Rassembleurs d'Energie (until 2022)

Areas of expertise

- Finance
- Social dialog / human resources
- Energy sector

YOAN KOSNAR

Director elected by employees, sponsored by the Chemical Energy Federation – CFDT trade union

● **Member of the Strategy, Investment and Technology Committee**

Age: 48
Nationality: French
First appointment: 04/21/2022
Expiration of term: 2026
Shares held: 70 shares
Business address:
ENGIE ENERGIE SERVICES - 1, place Samuel de Champlain – 92400 Courbevoie

With a BTS (French higher technical certificate) in Water Management and Control, with a wastewater option, Yoan Kosnar began his career in maintenance and quality control at a mutualist healthcare establishment. He then joined the Group in 2007 as Site Manager at ENGIE Energies Services S.A. (Cofely) and since 2017, while maintaining his operational activity, supports the national CFDT coordinator with social dialog for the ENGIE Group. Yoan Kosnar was appointed employee representative in 2011, then trade union representative. He was certified Director of companies by Sciences Po / IFA in 2023.

Principal activities outside the Company

None

Current offices and positions held

None

Offices that have expired in the last five years

Within the ENGIE Energies Services S.A. scope

- Member of the SEC representing the West and Treasurer of the SEC (until 2022)
- Local Representative (until 2022)
- Member of Central SEC (until 2022)
- Trade Union Representative for the institution (until 2022)
- Gender-based harassment referent (until 2022)

At the Group level

- Member of the European Works Council (until 2022)

Areas of expertise

- Social dialog / human resources
- Energy sector
- Digital, innovation, new technologies

MAGALI VIOT

Director elected by employees, sponsored by the National Federation of Mines and Energy – CGT trade union

● **Member of the Ethics, Environment and Sustainable Development Committee**

Age: 52
Nationality: French
First appointment: 04/21/2022
Expiration of term: 2026
Shares held: 0 share
Business address:
ELENGY – Zone portuaire, BP 35 – 44550 Montoir-de-Bretagne

Magali Viot is an employee at Elengy, seconded for employee representation mandates since the beginning of 2014. Following her Baccalaureate Diploma, she joined the Group in 1996 as a customer advisor in the Electricity and Gas Services Department (EGSD). In 2009, Magali Viot successfully completed professional retraining through a work-study contract and obtained a Certificate of Professional Qualification (CQP) in industrial maintenance which enabled her to become a High-voltage Maintenance Technician. In 2012, she joined the maintenance planning and management division at the Montoir-de-Bretagne terminal before dedicating herself full time to her employee representation mandates starting in 2014.

Principal activities outside the Company

None

Current offices and positions held

Offices and positions in Group companies

- Director representing employees of Elengy

Offices and positions in companies outside the Group

- Member of the Higher Energy Council
- Member of the Strategic French Committee for the Industry New Energy Systems

Offices that have expired in the last five years

None

Areas of expertise

- CSR: Health & safety
- Energy sector
- Social dialog / human resources

Director appointed by the Shareholders' Meeting to represent employee shareholders (1)

JACINTHE DELAGE

Director appointed by the Shareholders' Meeting to represent employee shareholders, on the recommendation of the Link France mutual fund (FCPE), and sponsored by the Group's Association of Employee and Former Employee Shareholders (AG2S)

- **Member of the Appointments, Compensation and Governance Committee**

Age: 47
Nationality: French
First appointment: 05/20/2021
Expiration of term: 2025
Shares held: 1,344 shares
Business address:
ENGIE – 1, place Samuel de Champlain – 92400 Courbevoie

Jacinthe Delage has several post-graduate legal degrees in economic and environmental law and holds an administrator's certificate from ESSEC. After working in companies such as Novergie and Neuf Cegetel as an attorney, she joined ENGIE Cofely in April 2007 as a business development attorney in the South-West region. She then held various successive legal positions within the Group between February 2009 and January 2016 in the Compagnie Parisienne de Chauffage Urbain (CPCU), the Corporate Competition and Regulation department and the Corporate Secretariat of the France BtoB BU. In November 2018, she became Head of the Legal Department of ENGIE Réseaux, which specializes in heating and cooling networks in France and since January 2021, Head of the Network Energy Division within ENGIE Solutions' Legal and Ethics Department. In 2021, she became the representative of AG2S list unitholders on the Supervisory Board of the Link France mutual fund (FCPE). Since September 1, 2023, she has been appointed Regional Director Normandy Center-Val de Loire within the Main Networks and Mobilities entity of ENGIE Solutions France.

Principal activities outside the Company

None

Current offices and positions held

Offices and positions in Group companies

- Member of the Management Committee of Nord region for the Main Networks and Mobilities entity of ENGIE Solutions France
- Chief Executive Officer of BCN, DUNES, FICOBEL, MBES, RECBIA, SDCMG and TMED

Other offices and positions outside the Group

- Chair of the AG2S Association since 2024

Offices that have expired in the last five years

- Member of the Management Committee of SAS GéoMarne (until 2023)
- Member of the Management Committee of the Ile de France region for the Main Networks and Mobilities entity of ENGIE Solutions France (until 2023)
- Director of the AG2S Association (until 2023)

Areas of expertise

- Energy sector
- Public sector
- Regulatory environment

4.1.1.3 Government Commissioner

In accordance with Article L.111-70 of the French Energy Code, the Minister of Energy appoints a Government Commissioner to the Company who attends meetings of the Board of Directors and the committees in an advisory capacity and may present his / her observations to any Shareholders' Meeting.

Sophie Mourlon, Chief Executive Officer of Energy-Climate at the Ministry of Energy Transition, was appointed Government Commissioner by order of the Minister of Energy Transition dated November 3, 2023, replacing Laurent Michel. By the same ministerial order, Alexandre Chevallier was appointed Substitute Government Commissioner, replacing Vincent Delporte, who himself had replaced Alice Vieillefosse on June 16, 2023.

4.1.1.4 Representative of the Social and Economic Committee

Pursuant to Articles L.2312-72 et seq. of the French Labor Code, one full member of the Social and Economic Committee, appointed by the latter, attends all meetings of the Board of Directors in an advisory capacity. Gildas Gouvazé has held this position since January 13, 2023.

4.1.1.5 Absence of conflict of interest or conviction, service agreement and family ties

The Chairman draws the attention of the Board to any conflicts of interest that he has identified, or of which he has been made aware, relating, if applicable, to the Chief Executive Officer or the members of the Board of Directors. He reviews any potential conflicts of interest and agreements disclosed pursuant to Article 3.1.4 of the internal regulations of the Board of Directors.

In addition to the provisions of the French Commercial Code which govern related-party agreements (Articles L.225-38 et seq. of the French Commercial Code), Article 4.7 of the Internal Regulations (see Section 4.1.2.1 "Organization and Chairmanship") stipulates that each Director must make every effort to avoid any conflict that may exist between his / her moral and material interests and those of the Company, and must inform the Board of any conflict of interest in which he / she may be directly or indirectly involved. Where he / she cannot avoid the conflict of interest, the Director must abstain from discussions and voting on any decision concerning such matters.

To ENGIE's knowledge, there are no potential conflicts of interest between the Directors' duties with regard to ENGIE and their private interests and / or other duties.

There are no family ties among the Directors.

To ENGIE's knowledge, during the past five years, none of the Directors or executives of ENGIE has been convicted of fraud, served as manager in a bankruptcy, receivership, liquidation or administration situation, been subject to legal proceedings brought and / or official public sanction issued by a statutory or regulatory authority, or been prevented by a court from serving as a member of an administrative, management or supervisory body of an issuer, nor from participating in the management or oversight of the business of an issuer.

Furthermore, no loans or guarantees have been granted to, or on behalf of, members of the Company's Board of Directors or Executive Committee.

4.1.1.6 Independence of Directors in office

Annually, prior to the Shareholders' Meeting held to approve the financial statements for the previous fiscal year, the Board of Directors is required, in accordance with Article 1.1.2 of the Internal Regulations, to review the independence of each of its members based on criteria determined by the Board. The process for assessing the independence of each Director was performed by the ACGC at its meeting of January 24, 2024, and then by the Board of Directors at its meeting of February 21, 2024.

Both bodies reviewed the status of each Director on a case-by-case basis with respect to the criteria of Afep-Medef Code to which the Company refers.

For the assessment of the significant nature (or not) of business relations, the ACGC and the Board study the importance of the business relationship, particularly in relation to the revenues generated by the contract(s) concerned, in relation to the other suppliers. They also analyze the decision-making power that the Director would have within the company with which ENGIE would have this business relationship.

It is specified that the following Directors, who were appointed as a result of legal or statutory obligations, cannot be deemed independent:

- Céline Fornaro, Director representing French State, as well as Patrice Durand and Lucie Muniesa, Directors appointed by the Shareholders' Meeting on the proposal of the French State;
- Christophe Agogué, Yoan Kosnar and Magali Viot, Directors representing the employees; Jacinthe Delage, Director representing the employee shareholders.

Six Directors are considered independent (see also Section 4.1.1.2 "Profiles, experience and expertise of the Directors in office"). This means that the percentage of Independent Directors is 60%, it being specified that, pursuant to the Afep-Medef Code, the Directors representing employees and employee shareholders are not counted in the calculation of the percentage of Independent Directors.

Independence of the Directors under the independence criteria set forth in Article 10 of the Afep-Medef Code

	Independent (I) Not independent (NI)	Corporate employee during the previous 5 years	Cross-directorships	Significant business relations	Family ties	Statutory Auditor	Term of office longer than 12 years	Status of non-executive corporate officer	Status of major shareholder
Jean-Pierre Clamadieu	I								
Catherine MacGregor	NI	✗							
Fabrice Brégier	I								
Marie-Claire Daveu	I								
Ross McInnes	I								
Marie-José Nadeau	I								
Lord Peter Ricketts of Shortlands	I								
Céline Fornaro	NI								✗
Patrice Durand	NI								✗
Lucie Muniesa	NI								✗
Christophe Agogué	NI / NA (1)	✗							
Yoan Kosnar	NI / NA (1)	✗							
Magali Viot	NI / NA (1)	✗							
Jacinthe Delage	NI / NA (1)	✗							

✗ = *Independence criterion not met.*

(1) Pursuant to the Afep-Medef Code, the number of Directors representing employees or employee shareholders is not taken into account in calculating the percentage of Independent Directors.

Criterion 1: Corporate employee during the previous five years

The director must not be or have been during the previous five years:

- *an employee or executive corporate officer of the Company;*
- *an employee, executive corporate officer or Director of a company consolidated by the Company;*
- *an employee, executive corporate officer or Director of the parent company of the Company or of a company consolidated by said parent company.*

Criterion 2: Cross-directorships

The director must not be an executive corporate officer of a company in which the Company directly or indirectly holds a directorship, or in which an employee designated as such or an executive corporate officer of the Company (current or within the last five years) holds a directorship.

Criterion 3: Significant business relations

The director may not be a customer, supplier, commercial banker, investment banker, consultant:

- *significant to the Company or its Group;*
- *or for whom the Company or its Group represents a significant share of the business.*

The assessment of the significant nature (or not) of the relationship with the Company or its Group is debated by the Board and the quantitative and qualitative criteria that led to this assessment (continuity, economic dependence, exclusivity, etc.) are explained in the annual report.

Criterion 4: Family ties

The director has no close family ties with a corporate officer.

Criterion 5: Statutory Auditor

The Director has not been the Statutory Auditor of the Company during the previous five years.

Criterion 6: Term of office longer than twelve years

The Director has not served for more than twelve years. The status of independent Director is lost on the twelve-year anniversary date.

Criterion 7: Status of non-executive corporate officer

A non-executive corporate officer may not be considered independent if he or she receives variable compensation in cash or securities or any compensation related to the performance of the Company or the Group.

Criterion 8: Status of major shareholder

Directors representing major shareholders of the Company or its parent company may be considered independent when such shareholders do not exercise control over the Company. However, if a director exceeds a threshold of 10% of the capital or voting rights, the Board, based on a report by the Appointments Committee, systematically reviews the independent status of the director(s) concerned, taking into account the structure of the Company's capital and whether or not potential conflicts of interest exist.

4.1.1.7 Multiple Directorships

The number of offices held by the Directors in listed companies outside the Group, including foreign companies, was assessed by the Board of Directors at its meeting on February 21, 2024, in accordance with the provisions of Article 20 of the Afep-Medef Code, which stipulates that: "*An executive corporate officer may not hold more than two other directorships in listed companies outside his / her group, including foreign companies. A Director may not hold more than four other directorships in listed companies outside the Group, including foreign companies.*"

	Number of offices held in listed companies outside the Group	Compliance with the Afep-Medef Code
Jean-Pierre Clamadieu	2	●
Catherine MacGregor	1	●
Fabrice Brégier	2	●
Marie-Claire Daveu	1	●
Ross McInnes	2	●
Marie-José Nadeau	0	●
Lord Peter Ricketts of Shortlands	1	●
Céline Fornaro	3	●
Patrice Durand	0	●
Lucie Muniesa	0	●
Christophe Agogué	0	●
Yoan Kosnar	0	●
Magali Viot	0	●
Jacinthe Delage	0	●

4.1.1.8 Diversity policy for members of the Board of Directors

The Board of Directors works to promote diversity on the Board in terms of the professional qualifications and experience, gender, nationality and age of its members.

With regard to the professional qualifications and experience of the Directors, the objective of the Board is to ensure that its composition is adequate for ENGIE's activities, challenges and strategic plans, thereby contributing to the quality of the decisions made.

Information on three key areas of expertise is provided for each Director, based on his or her professional qualifications and experience. These are set out in the table below and under each of their biographies.

With respect to the proportion of women and men, the legal requirement for at least 40% of Board members to be women and 40% to be men has been met. Indeed, the proportion of women on the Board as of February 21, 2024, is 50% [1].

Four nationalities are represented by the 14 Directors (Australian, British, Canadian and French).

Finally, in terms of age, the Board has three Directors aged over 70. The applicable legal requirement, in the absence of a specific provision in the bylaws, is therefore satisfied, i.e. Directors over the age of 70 must not make up more than one third of the Directors in office.

(1) Pursuant to the applicable rules of the French Commercial Code and the Afep-Medef Code, in assessing the ratio of women to men on Boards of Directors, the law stipulates that Directors representing employees or employee shareholders are not counted.

Individual key areas of expertise of Directors

List of areas of expertise	Executive Manage-ment	Office of Chair or Director of a large company	CSR	Finance	Digital, Innovation, New technologies	Social dialog Human Resources	Energy sector	Services sector	Industri-al sector	Public sector	Geostra-tegic issues	Regula-tory environ-ment
Jean-Pierre Clamadieu	●	●							●			
Catherine MacGregor	●						●		●			
Fabrice Brégier	●				●				●			
Marie-Claire Daveu		●	●				●					
Ross McInnes		●		●					●			
Marie-José Nadeau	●	●					●					
Lord Peter Ricketts of Shortlands						●				●	●	
Céline Fornaro		●		●						●		
Patrice Durand				●				●	●			
Lucie Muniesa			●	●					●			
Christophe Agogué				●		●	●					
Yoan Kosnar					●	●	●					
Magali Viot			●			●	●					●
Jacinthe Delage							●			●		●

4.1.1.9 Changes in membership structure of the Board of Directors

At its meeting of February 21, 2024, the Board of Directors decided to convene the Ordinary and Extraordinary Shareholders' Meeting to be held on April 30, 2024, at Dock Pullman – 87 avenue des Magasins Généraux in Aubervilliers (93), France.

We would like shareholders to note that both postal and electronic means may be used to vote at the Shareholders' Meeting and to send written questions to the Board, under the conditions set out by the regulations.

The documents for the Shareholders' Meeting will be available on the Company website (www.engie.com/en/general-meeting-april-2024).

Shareholders are invited to visit this page of the website regularly. It will specify the arrangements for participating.

The terms of office as independant Director of Fabrice Brégier and Lord Peter Ricketts of Shortlands will expire at the end of this Shareholders' Meeting.

The Board of Directors' meeting of February 21, 2024, on the recommendation of the ACGC proposed that the Shareholders' Meeting of April 30, 2024 (i) renew the term of office as Director of Fabrice Brégier as it wishes to continue to benefit from his expertise and (ii) appoint Michel Giannuzzi as an independant Director to replace Lord Peter Ricketts of Shortlands for a period of four years.

Fabrice Brégier's experience, as an executive of major industrial companies operating in a global market, and his knowledge of the digital, innovation and new technologies sectors are an asset for the Board. He will continue to bring this experience to the Board and will actively contribute to strategic discussions, monitoring the implementation of strategy as well as the issues relating to the talents and their development.

Michel Giannuzzi's experience as a Director of listed industrial companies, as well as his international experience and knowledge of energy-intensive industrial sectors and decarbonization issues, will complement the experience and skills present on the Board of Directors, which helps to strengthen the quality of the Group's governance.

At the close of the Shareholders' Meeting of April 30, 2024, and subject to approval of these resolutions, the Board of Directors would be consist of 14 members.

4.1.2 ACTIVITIES AND FUNCTIONING OF THE BOARD OF DIRECTORS

4.1.2.1 Organization and Chairmanship

Organization of the Board of Directors

The **operating procedures** of the Board of Directors are defined in Article 14 of the bylaws. Its organizational procedures are set out in Article 3 of the Board of Directors' Internal Regulations, which specify the ways and means by which the Board can operate efficiently on behalf of the Company and its shareholders, as well as the responsibilities incumbent on each Director.

The Board of Directors meets as often as the Company's interests require and, in accordance with its Internal Regulations, at least six times a year, including at least once each quarter. Board of Directors' meetings may be held via any means of videoconference or telecommunication that allows Directors to be identified and ensures their effective participation.

Since 2016, a **digital platform** is available to Directors for them to carry out their role. The platform is accessible via an app on a tablet provided by the Company to all members of the Board of Directors. It notably allows documents related to meetings of the Board of Directors and its committees to be shared securely.

Board of Directors' meetings are also attended by the Government's Commissioner and the representative of the Social and Economic Committee, who each have an advisory role. They are also attended by the Corportate Secretary and the Secretary to the Board of Directors, as well as the Statutory Auditors.

Once a year, the Board of Directors carries out a **self-assessment** under the guidance of the ACGC; at least every three years, a formal assessment is carried out with the help of an external consultant (see Section 4.1.2.5 Assessment of the functioning of the Board of Directors). Pursuant to Article 11.2 of the Afep-Medef Code, the purpose of the review its practices to verify that key issues are properly prepared and discussed, and to assess the actual contribution of each Director to the Board's work.

The **Secretary of the Board of Directors** provides administrative services to the Board and records the minutes of the meetings.

On the recommendations of the ACGC of February 20, 2024, the Board of Directors' meeting of February 21, 2024, strengthened the bylaw obligation of holding share in the Company in the Internal Regulations: each Director must hold a minimum of 25% of his / her annual compensation in shares. The Director will have a period of one year from his / her appointment to acquire these shares. This requirement does not, however, apply to Directors ratified or elected by the Shareholders' Meeting on the recommendation of the French State, the Director representing the French State, the Directors representing the employees or the Director representing employee shareholders (the number of shares personally owned by the Directors is provided in Section 4.1.1.2 and in the biographies of each of them).

Directors undertake to devote the necessary time and attention to their duties. They must stay informed of the activities and the specifics of ENGIE, its issues and values, including by talking with principal officers. They must assiduously and diligently attend Board meetings.

The individual attendance rates of the Directors for meetings of the Board and its committees are set out in Section 4.1.2.6 "Attendance by Directors at meetings of the Board of Directors and its committees in 2023" below.

The appendix to the Internal Regulations (https://www.engie.com/en/by-laws-ENGIE) sets out the rules governing trading in the Company's securities and the offense of insider trading applicable to corporate officers and all employees. It expresses the Company's desire to ensure prudent management of its securities, and to comply and ensure others' compliance with current regulations governing securities transactions carried out by corporate officers and employees.

In addition to these documents, the Regulation for Employee Directors, approved by the Board of Directors at its meeting of December 9, 2009, lay down conditions under which these Directors are to exercise their duties.

Powers and responsibilities of the Chairman of the Board of Directors

The Chairman of the Board of Directors:

- organizes and directs the work of the Board and reports on this to the Shareholders' Meeting;
- chairs the Board's meetings, oversees deliberations, ensures compliance with the bylaws and the Internal Regulations, and may suspend the session at any time;
- upholds the quality of dialog and ensures that the Board's decisions are made on a collective basis;
- makes sure that the Board spends enough time on discussions and allots time to each of the items on the agenda in proportion to the importance that each issue represents for the Company. The Directors ensure, collectively, that the time allotted to each of them to express their views is evenly balanced;
- pays particular attention to ensuring that the issues raised on the agenda receive an appropriate response;
- ensures that the Board and its committees function properly, assisting them and submitting questions to them for opinions;
- ensures that the principles of good governance are applied (particularly that Directors have the information they need to carry out their duties, sufficiently in advance and in a clear and appropriate form);
- ensures that the Shareholders' Meetings that he / she chairs are properly organized;
- answers questions from shareholders and, more generally, ensures good relations with them. If necessary, he / she provides assistance in responding to the requests of shareholders not represented on the Board and makes him or herself available to meet with them and listen to their comments and suggestions (see also Section 4.1.2.7 "Discussions with shareholders").

In conjuction with the Chief Executive Officer, the Chairman of the Board is also responsible for:

- organizes the strategic work of the Board;
- monitors the preparation and implementation of succession plans for the members of the Executive Committee;
- representing the Group at a high level with national and international bodies and institutions in the interest of the Group.

The Chairman also:

- devotes his / her best efforts to promoting the Group's values and image in all circumstances;
- keeps the members of the Board informed, as necessary, between two meetings;
- is the only person authorized to speak and act on the Board's behalf;
- draws the attention of the Board to any conflicts of interest that he / she has identified, or of which he / she has been made aware, concerning, where applicable, the Chief Executive Officer or the members of the Board of Directors. He / she examines situations of potential conflicts of interest.

The Board may assign information or consultation missions to the Chairman on specific subjects within the Board's purview.

The Chairman works in coordination with the Chief Executive Officer, who has responsibility for Group administration and operational management.

As well as exercising the powers conferred on him / her by law, he / she may be consulted by the Chief Executive Officer on any matter relating to the conduct of the business.

The Chairman is kept regularly informed by the Chief Executive Officer about significant events in the life of the Group, particularly with regard to strategy, organization, investment and disinvestment. At the Chief Executive Officer's invitation, the Chairman may attend internal meetings with the Company's executives and teams to provide his / her point of view on strategic issues.

If he or she is unable to serve, the Chairman is replaced, pursuant to Article 3.1.1 of the Internal Regulations, by a Vice-Chairman or, if that is not possible, by the Chief Executive Officer if the CEO is a Director or, if not, by another Director chosen by the Board at the beginning of the meeting.

4.1.2.2 Tasks of the Board of Directors

The Board of Directors, on a collective basis, determines the Company's business strategy and oversees its implementation.

Subject to the applicable laws and regulations and the Company bylaws, it determines the supervisory framework of Executive Management. It exercises the following powers:

Governance	• choosing the Executive Management system.
Appointments and Compensation	• appointing Chairman and the Chief Executive Officer and setting their compensation; • reviewing, at least once a year, the professional and salary equality policy.
Strategy	• ensuring that shareholders and investors receive relevant, balanced and educational information about the Company's strategy and development model, the handling of significant non-financial issues and the Company's long-term prospects; • reviewing, at least once a year, the Group's industrial strategy and financial strategy
Finance	• dealing with all matters concerning the efficient running of the Company and, through its decisions, managing the Company's business; • performing any checks and verifications it considers appropriate; • reviewing, at least once a year, the budget.
CSR	• working to promote long-term value creation by the company by taking into consideration the social and environmental challenges of its activities as well as its purpose; • reviewing, at least once a year, market trends, the competitive context and principal challenges, including in the area of the Group's social and environmental responsibility.

Sharing of powers and responsibilties between the Board of Directors and the Chief Executive Officer

The Chief Executive Officer is vested with the broadest powers to act in all circumstances on behalf of the Company and represents the Company in its relations with third parties. However, certain significant operations are subject to prior authorization by the Board of Directors, such as the following operations:

- acquiring or disposing of any of the Company's direct or indirect interests in any company formed, or to be formed, taking an interest in the formation of any company, joint venture, consortium or body or subscribing to any issue of shares, share equivalents or bonds in which the Company's or the Group's financial exposure exceeds €250 million for the transaction in question;
- becoming involved in asset contribution or exchange transaction, with or without a cash balance, relative to goods, securities, stocks or bonds for an amount exceeding €250 million;
- entering into supply, works or service contracts (with the exceptions of contracts related to long-term energy purchase transactions), including successive amendments thereto, if any, for an amount exceeding €400 million;
- resolving disputes by way of agreement, settlement or arbitration decision for an amount exceeding €200 million;
- entering into long-term energy procurement plans on behalf of the Group that involves quantities, per transaction, in excess of:
  - 30 billion kWh of gas per year, including the terms of transmission,
  - 20 billion kWh of electricity per year, including the terms of transmission;
- entering into significant transactions beyond the scope of the Company's stated strategy;
- real estate acquisition or disposal transactions for an amount exceeding €200 million;
- entering into the following transactions for an amount exceeding €1.5 billion:
  - granting or contracting any loans, borrowings, credit or cash advances by the Company, or authorizing any Group subsidiary or financing medium for this purpose,
  - acquiring or assigning any receivables, by any method,
  - entering into significant agreements with the French State relating to the objectives and terms and conditions of implementation of public service assignments entrusted to the Company or its subsidiaries, within the limits set by law.

In addition, each year, the Board of Directors authorizes the Chief Executive Officer to issue guarantees, other securities and bonds for amounts determined by the Board of Directors.

4.1.2.3 Work of the Board of Directors

13	14	97%
MEETINGS	DIRECTORS	ATTENDANCE

The Board of Directors of ENGIE met 13 times in 2023, with an average attendance rate of 97%. The average individual attendance rate at meetings of the Board of Directors and the committees for 2023 is indicated, for each director, in Section 4.1.2.6 "Attendance by Directors at meetings of the Board of Directors and its committees in 2023."

The agenda of Board meetings is established by the Chairman in conjuction with the Chief Executive Officer. The objective is to prioritize discussions for issues which, under the Group's governance principles and pursuant to the texts in force, such as the Internal Regulations, involve a decision.

Each meeting begins with an item devoted to health & safety, during which the changes in results since the previous meeting is examined, as well as a detailed analysis of the causes of fatal accidents (if any) and the progress made with the health & safety improvement One Safety plan. The Chief Executive Officer also provides an update on the situation of the Group.

STRATEGIC PLANNING SEMINAR

The Board held its strategic planning seminar during July 2023. During this seminar, Board members discussed strategic developments for the Group and in particular the strategies for certain Hydrogen and Energy Solutions activities. They also took stock of the electricity markets and the work launched on ENGIE 2030.

Main activities in 2023

Group strategic planning and monitoring of its operations	• developments in the nuclear project in Belgium and the terms of the agreement with the Belgian government; • operational implementation of strategic guidelines; • continuation of repositioning of ENGIE for long-term and sustainable growth by focusing on Renewables and Energy Solutions which support its customers' decarbonization; • preparation and follow-up for the Board's annual strategic planning seminar (see box); • the gas supply policy.
Investments and sales of assets	• review of a series of investment and divestment projects requiring a decision by the Board.
Finance, audit and risks	• approval of the parent company and consolidated financial statements, the proposed allocation of earnings and their draft press release; • dividend policy and guidance; • approval of the provisional management documents; • approval of the budget and medium-term business plan; • renewal of the annual authorizations granted to the Chief Executive Officer to issue bond loans and to issue guarantees and other securities; • refinancing of the syndicated credit line maturing in 2024; • 2023 risk review, in particular cybersecurity priority risk.
Governance, appointments and compensation	• lessons to be learned from the dialog between the Chairman and the shareholders, investors and proxy advisors, particularly in the context of governance roadshows; • preparation for the Ordinary and Extraordinary Shareholders' Meeting and responses to written questions from shareholders; • diversity, expertises and independence policy for Directors in office; • appointments to the Board of Directors and to the Board committees; • assessment of the functioning of the Board and individual contributions of Directors; • employee share ownership policy; • compensation for corporate officers; • performance share plans; • compensation policy and succession plan for senior management.
Corporate Social Responsibility	• regular monitoring of CSR objectives, including CO_2 emissions, and the climate strategy; • "climate change" priority risk; • professional and salary equality policy; • annual health & safety report; • declaration on modern slavery provided under UK regulations.

EXECUTIVE SESSIONS

Meetings of Directors with no executive functions take place regularly after Board meetings. These executive sessions discuss various issues beyond simple assessment of executive corporate officers' performance. The Audit Committee and the ACGC are systematically preceded, or followed, by a meeting of their members, without management present. Members of the EESDC meet once a year, without management present.

INFORMATION MEETINGS

In 2023, the Directors benefited from four themed information sessions on the following topics: nuclear safety, biodiversity and nature, digital strategy, the global energy landscape and changes in the regulation of the European energy markets. In 2024, there are plans to hold further information meetings for Directors which are expected to focus on seawater desalination, the price scenario, the European Corporate Sustainability Reporting Directive (CSRD) and GEMS.

4.1.2.4 Committees

Four standing committees assist the Board of Directors:

- the Audit Committee;
- the Strategy, Investment and Technology Committee (SITC);
- the Appointments, Compensation and Governance Committee (ACGC); and
- the Ethics, Environment and Sustainable Development Committee (EESDC).

Each committee is chaired by an Independent Director.

These committees are tasked with studying matters and projects related to the Group that the Board or the Chairman has submitted for their opinion. They are also charged with preparing the Board's work and decisions on such matters and projects. The Committees report their conclusions to the Board in the form of reports, proposals, opinions, information or recommendations.

The committees perform their duties under the responsibility of the Board of Directors. No committee may, on its own initiative, address issues that fall outside the scope of its mission. The committees have no decision-making power.

On the Chairman's recommendation, and having heard the opinion of the ACGC, the Board of Directors appoints the members and Chair of each committee, based on the skills, experience, diversity of profiles and availability of each Director (see Section 4.1.1.2 "Experience and expertise of the Directors in office" and the table "Changes of the Board of Directors and committees' membership structure during the 2023 fiscal year" under Section 4.1.1).

In order to carry out their work, the committees may interview members of Company and Group divisions and / or commission technical studies on matters within their competence at the Company's expense, provided that they have informed the Chairman of the Board about this, and that they report on it to the Board. If the committees use the services of external consultants, they must ensure that the advice concerned is objective.

The practice of holding executive sessions, i.e. part of the committee's meeting taking place without the presence of management, is either systematic or occasional, depending on the committee concerned (see box above).

The Corporate Secretariat provides secretarial services to the Board committees.

On December 31, 2023:

AUDIT COMMITTEE

Chairman: Ross McInnes

2 women · **2** men · **7** meetings +3 joint with the SITC

98% Attendance — **66%** Independent (1)

APPOINTMENTS, COMPENSATION AND GOVERNANCE COMMITTEE

Chairman: Marie-José Nadeau

3 women · **2** men · **8** meetings

90% Attendance — **75%** Independent (1)

BOARD OF DIRECTORS

Chairman: Jean-Pierre Clamadieu

7 women · **7** men · **13** meetings

97% Attendance — **60%** Independent (1)

ETHICS, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT COMMITTEE

Chairman: Marie-Claire Daveu

3 women · **1** man · **4** meetings

80% Attendance — **66%** Independent (1)

STRATEGY, INVESTMENT AND TECHNOLOGY COMMITTEE

Chairman: Jean-Pierre Clamadieu

2 women · **4** men · **8** meetings +3 joint with the Audit Committee

99% Attendance — **60%** Independent (1)

(1) Pursuant to the Afep-Medef Code, Directors representing employees and employee shareholders are not taken into account when determining the proportion of Independent Directors within the Board and its committees.

4.1.2.4.1 The Audit Committee

7	3	4	98%
MEETINGS	JOINT MEETINGS WITH THE SITC	DIRECTORS	ATTENDANCE

The Audit Committee has four members: Ross McInnes [(1)] (Chairman since July 5, 2023), Christophe Agogué, Céline Fornaro (since March 14, 2023), and Marie-José Nadeau [(1)].

The Audit Committee met 10 times in 2023 (of which three joint meetings with the SITC), with an average attendance rate of 98%.

The Executive Vice-President in charge of Finance, Corporate Social Responsibility and Procurement and the Vice-President in charge of Group Audit attended all the meetings of the Audit Committee. The Statutory Auditors attended all of these meetings, with the exception of the joint meetings with the SITC.

Each meeting of the Committee was followed by an executive session.

The Committee reports regularly to the Board of Directors on the performance of its duties. It also reports on the results of the audit assignment, how it contributed to the completeness of the financial information and the role it played in this process. The Committee also monitors the process of preparing non-financial information. It immediately notifies the Board of Directors of any problems encountered.

The period between the examination of the accounts by the Audit Committee and the closing of the accounts by the Board of Directors is at least 48 hours.

Main missions and activities in 2023

Subject	Missions	Activities
Financial statements	• to monitor the process of preparing financial information and, if necessary, to make recommendations to ensure its integrity; • to examine in advance, and provide an opinion on, the draft annual and interim financial statements; • to interview, whenever it deems this to be necessary, the Statutory Auditors, Executive Management, Finance Department, Internal Audit and any other management member; • to examine important financial press releases before they are released.	• the review of the consolidated and parent company financial statements as at December 31, 2022, and June 30, 2023, the financial information for the first and third quarters of 2023 and the corresponding press releases with the Vice-President of Group Financial Control and the Group Accounting Director; • the annual and interim assumptions and forecasts and the provisional management documents; • 2023 financial trajectory and guidance; • the operating fees of the Chairman and the Board of Directors; • the draft Universal Registration Document 2022 (apart from sections covered by other committees) and the draft financial resolutions submitted to the Shareholders' Meeting; • the dividend policy; • the definition of the amount of the guarantees package; • tax reform projects; • related-party and current agreements; • investor relations, including feedback from governance roadshows.
Risk management	• to monitor the efficiency of the Group's risk management systems and procedures, with regard to procedures for preparing and processing accounting and financial data; • to regularly obtain updates on the Group's financial position, cash position and significant commitments and risks.	• the annual risk review (in the presence of the Group Finance, Risk and Insurance Director); • the market risk review; • the review of priority risks: cybersecurity, safety, supply chain, and nuclear; • focus on energy procurement / resale activity.
Internal control	• to monitor the efficiency internal control systems and procedures; • to examine, with the internal audit managers, the plans and actions taken in the area of internal audit, the conclusions of these planned measures and actions and the subsequent recommendations and follow-up.	• the 2022 review of the Group's internal control and targets for 2023; • the quarterly activity reports from the internal audit, the follow-up of audit recommendations and the 2023 and 2024 annual audit plans (in the presence of the Vice-President, Group Audit).

(1) Independent Director.

Subject	Missions	Activities
External control and Statutory Auditors	• to select, appoint and re-appoint the Statutory Auditors; • to monitor the performance by the Statutory Auditors of their assignments; • to ensure that the Statutory Auditors comply with the conditions of independence; • to monitor the provision by the Statutory Auditors of services other than the auditing of the financial statements and the application of the rules for the capping of the related fees; • to examine, each year, the Statutory Auditors' audit fees and their scheduled work.	• prior approval of the work entrusted to the Statutory Auditors outside their audit assignment and the follow-up of these tasks; • the report on the 2022 fees of the Statutory Auditors; • the review of the 2023 work program after hearing the Statutory Auditors; • the preparation of the end of the Statutory Auditors' mandates.

4.1.2.4.2 The Strategy, Investment and Technology Committee

8	3	6	99%
MEETINGS	JOINT MEETINGS WITH THE AUDIT COMMITTEE	DIRECTORS	ATTENDANCE

The Strategy, Investment and Technology Committee has six members: Jean-Pierre Clamadieu [1] (Chairman), Patrice Durand, Céline Fornaro (since March 14, 2023), Yoan Kosnar, Ross McInnes [1] and Marie-José Nadeau [1].

The Chief Executive Officer attends meetings of the SITC.

The SITC met 11 times in 2023 (of which three joint meetings with the Audit Committee), with an average attendance rate of 99%.

Main missions and activities in 2023

Subject	Missions	Activities
Strategy review	• to provide an opinion on the Company's main strategic aims, particularly with regard to strategy; • to examine all external and internal growth projects, disposals, strategic agreements, alliances or partnerships, that are submitted to the Board; • to examine strategic decisions relating to technological developments, as well as questions concerning the construction and upgrading of industrial facilities and annual and multi-year supply, works or services contracts, procurement policy and significant real estate projects.	• a series of investment and disposal projects; • the staging posts of projects in progress; • the medium-term business plan in terms of strategy; • the preparation and follow-up for the Board's annual strategic seminar; • the monitoring of industry trends and highlights; • an update on the nuclear situation in Belgium.
Joint meetings of the Audit Committee and the SITC		• the agreement with the Belgian government on nuclear power in Belgium; • the GET (Global Enterprise Transformation) project aimed at aligning and standardizing support function processes and related IT systems; • budget and medium-term business plan.

(1) *Independent Director.*

4.1.2.4.3 The Appointments, Compensation and Governance Committee

8	5	90%
MEETINGS	DIRECTORS	ATTENDANCE

The Appointments, Compensation and Governance Committee has five members: Marie-José Nadeau [(1)] (Chair since July 5, 2023), Fabrice Brégier [(1)], Jacinthe Delage, Céline Fornaro (since March 14, 2023) and Lord Peter Ricketts of Shortlands [(1)].

The Chairman of the Board of Directors and the Chief Executive Officer attend meetings of the ACGC, unless the meetings address matters that concern them.

Each meeting of the Committee results in an executive session.

The ACGC met eight times in 2023, with an average attendance rate of 90%.

Main missions and activities in 2023

Subject	Missions	Activities
Appointments and Governance	• the review of all nominations for appointment to the Board that must be submitted to the Shareholders' Meeting for approval, as well as for membership of committees and chairmanship of such committees; • directing the process for the annual assessment of the Board's work; • assessing, with the Chairman, the proper operation of governing bodies; • the succession of the Company's Chairman and Chief Executive Officer; • the consultative review of the succession plan for the Company's executives and information on Executive Management projects relating to the appointment of members of the Executive Committee and on their compensation policy; • the review of all nominations of the Chairman and the Chief Executive Officer for any corporate office in a listed company outside the Group.	• monitoring the policy on diversity within the Board, the composition of the Board and its committees, independence and expertise of Directors; • assessment of the functioning of the Board; • senior management succession plans; • an update on the talent policy; • monitoring the promotion of ONE ENGIE culture; • changes in proxy and investor voting policies and results of governance roadshows led by the Chairman of the Board of Directors; • the Link 2022 and Link 2024 employee shareholding plans; • the monitoring of the increase in the number of women in management bodies; • the training of Employee Directors; • draft resolutions within its remit submitted to the 2023 Shareholders' Meeting; • the governance Section of the draft Universal Registration Document 2022.
Compensation	• the recommendations on the compensation, pension and welfare plans, benefits in kind and various pecuniary rights awarded to the Chairman and to the Chief Executive Officer, as well as to any members of the Board that hold employment contracts with the Company. • the amount and distribution of Directors' compensation.	• compensation for corporate officers; • the success rate of performance share plans; • the allocation of Performance Shares to the Chief Executive Officer for 2023; • the new performance share plan for 2024; • information regarding compensation of members of the Executive Committee and the compensation policy for senior management; • equity ratios; • draft resolutions within its remit submitted to the 2023 Shareholders' Meeting; • the Compensation section of the draft Universal Registration Document 2022.

(1) Independent Director.

4.1.2.4.4 The Ethics, Environment and Sustainable Development Committee

4	4	80%
MEETINGS	DIRECTORS	ATTENDANCE

The Ethics, Environment and Sustainable Development Committee has four members: Marie-Claire Daveu [(1)] (Chair since July 5, 2023), Ross McInnes [(1)], Lucie Muniesa (since July 5, 2023) and Magali Viot.

The Chief Executive Officer attends meetings of the EESDC.

Once a year, the members of the Committee meet without the presence of management.

The Committee met four times in 2023, with an average attendance rate of 80%.

Main missions and activities in 2023

Subject	Missions	Activities
Ethics and compliance	• to ensure that the Group has the right level of commitment with regard to ethics, non-financial compliance, and corporate, social and environmental responsibility; • to examine the Group's policies, guidelines and charters in these areas; • to ensure, where applicable, the establishment of a system to prevent and detect corruption and influence peddling;	• the 2022 management report of the Ethics, *Compliance & Privacy* Department; • examination of significant ethical and compliance issues; • the new Ethical Code of Conduct; • the declaration on modern slavery (UK regulations).
Environmental and social responsibility	• to examine the risks and opportunities related to climate change and more generally to monitor the Group's approach to non-financial issues and the long-term outlook, including by setting non-financial objectives.	• the Group's CSR performance and a report by one of the Statutory Auditors on this performance; • the 2022 report on the 2030 CSR targets and the 2023-2025 forecasts; • the Science-Based Targets initiative (SBTi) certification process; • The medium-term CO_2 business plan; • the "climate change" priority risk and the implementation of the recommendations of the Task force on Climate-related Financial Disclosure (TCFD); • the Group actions plan following the adoption and entry into force of the CSRD Directive; • taxonomy reporting; • the draft 2023 integrated report; • the non-financial statement (Chapter 3 of the draft 2022 Universal Registration Document).
Employer's social responsibility	• to examine human resources policies and learn about the monitoring of the corresponding risks.	• the 2023 annual health & safety report; • the progress of the ENGIE One Safety Health & safety Plan; • the review of each fatal accident; • the "Human Resources and Transformation Risk" priority risk; • the results of the annual ENGIE&Me employee engagement survey; • the 2022 report on the objectives for female representation on the governing bodies; • conclusions regarding professional and salary equality.

4.1.2.5 Assessment of the functioning of the Board of Directors

The assessment of the functioning of the Board of Directors and its committees in 2023, as well as the individual contributions of the Directors, was led by the ACGC, with the assistance of an external consultancy firm.

This assessment shows that the Directors have a positive perception of the Board's functioning. In addition, the skills of the Directors are varied and the relationships between the Board and the management are balanced.

The Board of Directors has decided to focus on the following areas of improvement for 2024:

- review of strategic topics directly by the Board of Directors and SITC (which becomes ITC - Investment and Technology Committee) working on the review of projects, the Board's Internal Regulations will be amended accordingly;
- further work on management succession plans;
- development of a feedback culture within the Board.

4.1.2.6 Attendance by Directors at meetings of the Board of Directors and its committees in 2023

	Board of Directors	Audit Committee	SITC	ACGC	EESDC
Jean-Pierre Clamadieu	100%		100%		
Catherine MacGregor	100%				
Fabrice Brégier	100%			88%	
Marie-Claire Daveu	100%				100%
Françoise Malrieu (1)	100%	100%		100%	
Ross McInnes	100%	100%	100%		100%
Marie-José Nadeau	100%	100%	100%	100%	
Lord Peter Ricketts of Shortlands	100%			100%	
Stéphanie Besnier (2)	100%	100%	100%	50%	
Céline Fornaro (3)	83%	80%	90%	83%	
Patrice Durand	100%		100%		
Mari-Noëlle Jégo-Laveissière (1)	100%				0%
Lucie Muniesa	78% (4)				100%(5)
Christophe Agogué	100%	100%			
Yoan Kosnar	100%		100%		
Magali Viot	100%				100%
Jacinthe Delage	100%			100%	
OVERALL ATTENDANCE RATE	**97%**	**98%**	**99%**	**90%**	**80%**

(1) Until April 26, 2023.
(2) Until March 14, 2023.
(3) Since March 14, 2023
(4) Since April 26, 2023
(5) Since July 05, 2023

4.1.2.7 Discussions with shareholders

The Chairman of the Board holds regular discussions with individual shareholders through various in-person and virtual events and meetings:

- prior to the Shareholders' Meeting of April 26, 2023, invited the ENGIE Shareholders' Advisory Committee, the representatives of employee shareholders and the main associations and federations of individual shareholders to an exchange session;
- during the Shareholders' Meeting, the Chairman opened two Q&A sessions with shareholders present in the room and those following the event online. The first focused on climate;
- the Chairman took the floor and met with shareholders at the Investir Day trade show dedicated to individual investment in November 2023 in Paris.

The Chairman also supports ENGIE's initiatives toward individual shareholders: shareholder meetings held in Marseille, Nantes, Nice and Brussels in 2023, site visits and meetings with our experts.

In addition, each year the Chairman speaks with the main institutional investors and voting advisory agencies, particularly in the context of the governance roadshows that take place in February and March.

4.1.3 EXECUTIVE MANAGEMENT

Since January 1, 2021, the Company's Chief Executive Officer is Catherine MacGregor. Her term of office as Chief Executive Officer will expire at the same time as her Directorship, i.e. at the end of the Shareholders' meeting held in 2025 to approve the financial statements for the fiscal year ending on December 31, 2024.

The Chief Executive Officer is vested with the broadest powers to act in all circumstances on behalf of the Company, exercises her functions within the limits of the corporate purpose and subject to the powers expressly vested to Shareholders' General Meetings and the Board of Directors by laws and regulation. Limits imposed by the Board of Directors on the powers of the Chief Executive Officer are set out in the Internal Regulations (see Section 4.1.2.2 "Tasks of the Board of Directors").

The implementation of ENGIE's strategy and its operational monitoring is carried out by two executive bodies – the Executive Committee and the Operational Management Committee.

The Executive Committee, which is in charge of Group management, comprises the Executive Vice Presidents under the management of the Chief Executive Officer. It formulates strategic decisions according to the guidelines defined by the Board of Directors. It develops ENGIE's long-term outlook and ensures that the short-term objectives are achieved. It makes all major decisions particularly concerning investment, reviews performance, and monitors the pace of the Group transformation.

At the date of this Universal Registration Document, the Executive Committee has the following 10 members:

- **Catherine MacGregor,** Chief Executive Officer;
- **Paulo Almirante,** Senior Executive Vice President in charge of the Renewables and Energy Management activities;
- **Sébastien Arbola**, Executive Vice President in charge of FlexGen & Retail activities, also responsible for Hydrogen activities;
- **Jean-Sébastien Blanc**, Executive Vice President in charge of Human Resources and Corporate;
- **Biljana Kaitovic,** Executive Vice President in charge of Digital and Information Technology;
- **Frank Lacroix**, Executive Vice President in charge of Energy Solutions activities;
- **Cécile Prévieu**, Executive Vice President in charge of Networks activities;
- **Pierre-François Riolacci**, Executive Vice President in charge of Finance, Corporate Social Responsibility and Procurement;
- **Thierry Saegeman,** Executive Vice President in charge of Transformation & Geographies and Nuclear Production;
- **Claire Waysand,** Executive Vice President in charge of the Corportate Secretariat, Strategy, Research & Innovation, Communication.

The Operational Management Committee, known as OPCOM, is in charge of operational activities, and is composed of the Executive Vice Presidents, the Chief Executive Officers of the entities, the directors of the Global Business Units, the regions and main countries and the managers of the main functional departments.

It is chaired by the Chief Executive Officer. The OPCOM implements ENGIE's strategic decisions; it is also in charge of taking the Group's transformation closer to the geographic areas.

Equal opportunities policy for women and men in management bodies

In accordance with Article L.22-10-10 para. 2 of the French Commercial Code, the report on corporate governance includes "*information on how the company seeks balanced representation of women and men within the committee set up, where appropriate, by the Executive Management for the purposes of regularly assisting it in carrying out its general functions, and information on the results in terms of diversity in the 10% of positions with higher responsibility. If the company does not apply such a policy, the report shall contain an explanation of the reasons for this.*"

As the "*committee set up, where appropriate, by the Executive Management for the purposes of regularly assisting it in carrying out its general functions*" corresponds to the Executive Committee.

With respect to 10% of positions with higher responsibility, if the scope described by the French Commercial Code is that of the Company, i.e. ENGIE, in terms of the organization of the Group, its integrated structure, and its positioning in around 30 countries for a total of around 97,300 employees, it seems more appropriate to consider the Group as a whole with regard to the spirit of the law. ENGIE considers that the relevant scope to use for the 10% of positions with higher responsibility is that of the OPCOM.

The Executive Committee consists of 10 members, including four women (40%), and five nationalities. On the recommendation of the Executive Management, the Board of Directors set a target of at least 40% of women and at least 40% of men on the Executive Committee by 2025.

As of January 1, 2024, OPCOM has 54 members, including 22 women (40.7%, an increase of more than five percentage points in one year). It comprises 13 nationalities.

For several years, the Group's appointments policy has strengthened gender diversity. The Group seeks to develop mixed talent pools, comprising executive managers with strong potential, thus helping to increase female representation in the two bodies mentioned above, namely the Executive Committee and OPCOM. Therefore, for key positions in the Group, the final appointment decision is made on the basis of a list of candidates that includes men and women. Most appointments are made from this talent pool, comprising around 740 people, 41% of whom are women (an increase of four percentage points in a year).

These actions aim to change career paths and talent development, opening them up to various profiles, so as to eventually form governing bodies that fully embody the Group's diversity policy.

4.2 COMPENSATION OF CORPORATE OFFICERS AND MEMBERS OF THE EXECUTIVE COMMITTEE

Compensation of corporate officers is determined by the Board of Directors based on the recommendations of the ACGC. It is subject to a presentation and binding votes at the Annual Shareholders' Meeting in accordance with Articles L.22-10-8, L.22-10-9, and L.22-10-34 of the French Commercial Code.

4.2.1 COMPENSATION OF THE CHAIRMAN OF THE BOARD AND THE CHIEF EXECUTIVE OFFICER ALLOCATED OR PAID FOR FISCAL YEAR 2023 (EX-POST SAY ON PAY)

Pursuant to Article 10.6 of the Afep-Medef Code, the Chairman of the Board of Directors, as an independent director, does not receive variable compensation linked to the Company's performance.

Compensation of the Chief Executive Officer generally includes:

- a fixed component, which remains unchanged throughout the term of office, unless the Board of Directors, on the recommendation of the ACGC, decides otherwise;
- a variable component, balanced relative to total compensation, the purpose of which is to reflect the executive's personal contribution to the Group's development and results; and
- a long-term incentive component, subject to performance conditions.

Stringent performance criteria are set both for the variable component and for long-term incentive plans, maintaining a link between the Group's performance and the compensation of its directors in the short, medium and long term and contributing to the Company's strategy and sustainability.

4.2.1.1 Compensation of the Chairman of the Board of Directors

The 2023 compensation structure of the Chairman of the Board of Directors complies with the compensation policy set out in Section 4.4.3.1 of the 2022 Universal Registration Document and previously approved by the Shareholders' Meeting of April 26, 2023.

For his term of office as Chairman of the Board, Jean-Pierre Clamadieu received annual fixed compensation. He does not receive variable compensation, nor does he receive compensation for his participation in the work of the Board and its committees. He received social security coverage and health care coverage and, in addition, received a benefit in kind in the form of a company car.

Fixed annual compensation in 2023

Jean-Pierre Clamadieu, Chairman of the Board of Directors, received €450,000 in compensation.

2023 variable compensation

Jean-Pierre Clamadieu, Chairman of the Board of Directors, receives no variable compensation in respect of his office, in accordance with the compensation policy which stipulates that the compensation of the Chairman of the Board will not include any annual variable compensation.

Long-term incentive compensation (Performance Shares)

Jean-Pierre Clamadieu, Chairman of the Board of Directors, was not awarded any Performance Shares (PS) for 2023, in accordance with the compensation policy, which stipulates that the compensation of the Chairman of the Board will not include any long-term incentive plan.

Pension plans

Jean-Pierre Clamadieu is not covered by any supplementary pension plan in respect of his duties as Chairman of the Board of Directors.

Insurance and healthcare benefit plan

Jean-Pierre Clamadieu will participate in healthcare and insurance benefit plan equivalent to the collective schemes for the ENGIE group's executive officers in France (see Section 4.5).

Compensation for term of office as Director

Jean-Pierre Clamadieu, as a Director, does not receive any directors' fees for sitting on the Board of Directors.

Employment contract, severance pay and non-compete clause

No employment contract has been concluded between Jean-Pierre Clamadieu, Chairman of the Board of Directors, and the Company or a Group company. No provision is made for compensation or benefits due or likely to be due as a result of a termination or change of function or for compensation relating to a non-compete clause.

Benefit in kind

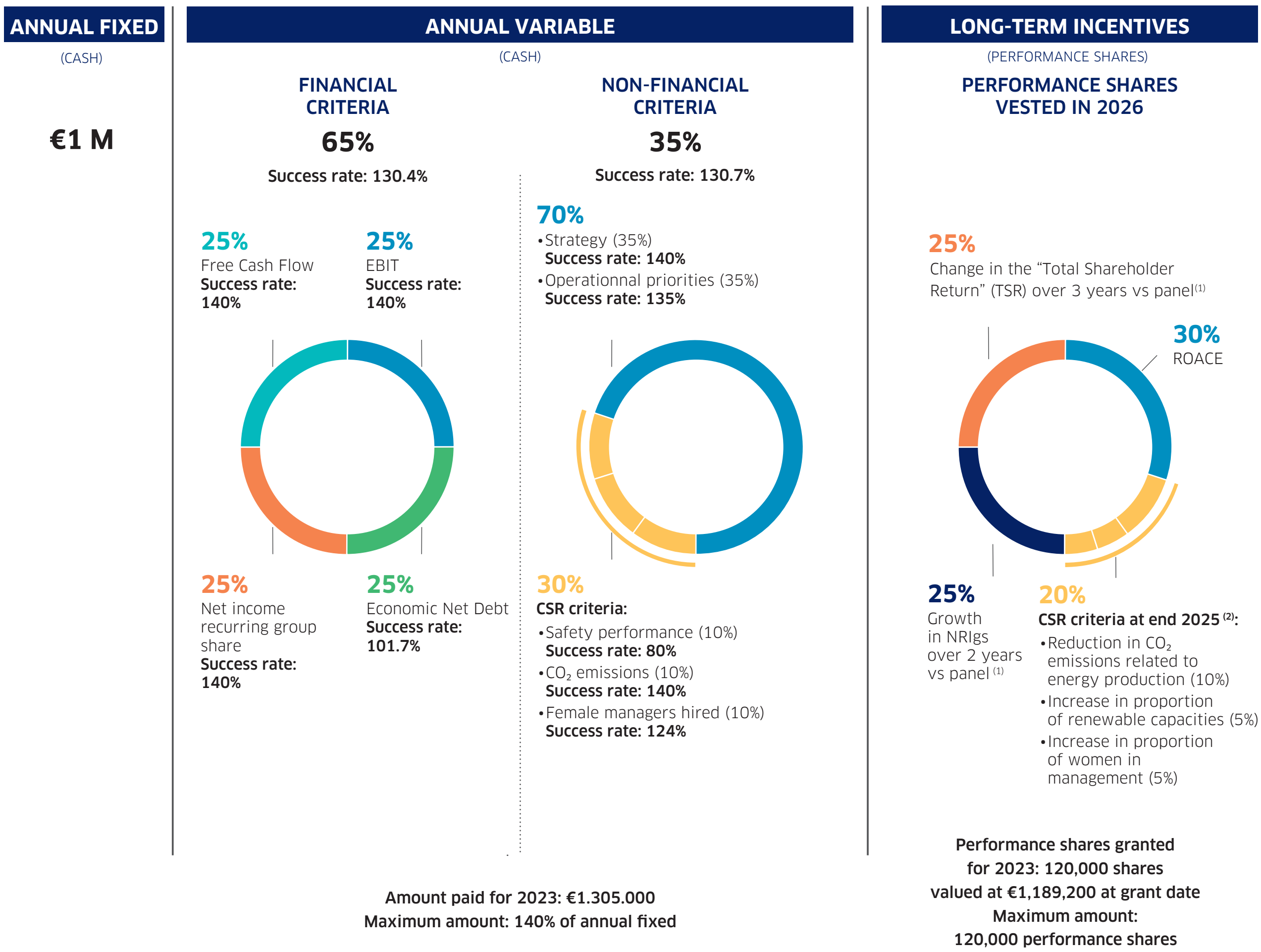
Jean-Pierre Clamadieu has a company car.

4.2.1.2 Compensation of the Chief Executive Officer

The 2023 compensation structure of the Chief Executive Officer is in accordance with the compensation policy set out in Section 4.4.3.2 of the 2022 Universal Registration Document, approved by the Shareholders' Meeting of April 26, 2023.

It consists of annual fixed compensation, annual variable compensation and a long-term incentive plan (in the form of the award of Performance Shares). She receives coverage under social security and pension plans, in addition to a benefit in kind in the form of a company car.

Breakdow of compensation of the Chief Executive Officer



(1) Panel: EDP, ENEL, Iberdrola, Naturgy, Snam and RWE – (2) in line with the trajectory established to reach the 2030 target

Fixed annual compensation in 2023

The fixed annual compensation of Catherine MacGregor, Chief Executive Officer, was set at €1,000,000.

2023 variable compensation

The structure of the Chief Executive Officer's target annual variable compensation for 2023 paid in 2024 remained unchanged. The target amount of variable compensation is €1,000,000, corresponding to 100% of her fixed compensation for a rate of achievement of 100% of her objectives; this variable compensation is capped at €1,400,000 or 140% of her fixed annual compensation. Her variable compensation breaks down into two components: a financial component (65%) and a non-financial component (35%).

For the financial component, the criteria used are net recurring income Group share (25%), EBIT (25%), free cash flow (25%) and economic net debt (25%). The financial targets for 2023 were based on the Group's provisional budget as prepared by the Board of Directors on February 20, 2023.

The non-financial component includes:

- the Group's strategic objectives (35%): the future of the nuclear activities in Belgium, building a more comprehensive medium-term road map toward carbon neutrality in 2045, and communication that ensures better understanding of the Group's activities;
- the Group's operational priorities for 2023 (35%): the deployment of the ENGIE One Safety health & safety plan, the acceleration of growth in the energy transition, the development of talent and the positioning of supply chains as a strategic lever;
- quantifiable CSR criteria (30%):
  - improvement in safety performance (10%);
  - CO_2 emissions related to power generation (10%);
  - proportion of female managers hired at 35% (10%);

At its meeting of February 21, 2024, the Board of Directors, on the recommendation of the ACGC, noted the success rates shown in the table below. The payment of variable compensation for fiscal year 2023 is contingent on the approval of the Shareholders' Meeting that will take place on April 30, 2024.

	Weighting	Payment rate	Board assessment
Financial performance composed as follows, based on quantifiable criteria:			65% of the annual variable compensation
NRIgs	25%	140%	The Board of Directors noted that the objectives had been exceeded: • NRIgs stands at €5,366 million, higher than the 2023 budget, the ceiling of 140% is reached; • EBIT stands at €10,084 million, higher than the 2023 budget, the ceiling of 140% is reached; • FCF stands at €10,552 million, higher than the 2023 budget; the ceiling of 140% is reached; • Economic net debt stands at €41,839 million; the achievement rate is 101.7%.
EBIT	25%	140%	
FCF	25%	140%	
Economic net debt	25%	101.7%	
Subtotal (base of 100%)	**100%**	**130.4%**	**Ranging from 0% to 140%**
Non-financial performance composed as follows, based on qualitative and quantifiable criteria:			35% of the annual variable compensation
Strategic objectives of the Group (Qualitative criteria) • Future of nuclear activities in Belgium • Deepening of the medium-term road map toward carbon neutrality in 2045 • Communication allowing a better understanding of the Group's activities	35%	140%	The Board of Directors assessed the rollout of the strategic road map in 2023 and considered that the objectives had been significantly exceeded. In particular, the following elements were considered: • the Group continued to align its purpose, business model and commitments in terms of carbon neutrality, notably by obtaining SBTi well-below 2°C certification; • the integrated industrial model has been strengthened; • ENGIE and the Belgian government formalized the final agreement on the extension of the Tihange 3 and Doel 4 nuclear reactors, as well as all obligations related to nuclear waste.
Operational priorities of the Group (Qualitative criteria) • Rollout of ENGIE One Safety (health & safety plan) • Accelerating growth in the energy transition • Talent development • Positioning supply chains as a strategic lever	35%	135%	The Board of Directors assessed the achievement at 135%, considering significant progress on several of the Group's operational priorities. The rollout of ENGIE One Safety continues; the gradual improvement of certain indicators shows the positive impact of actions implemented, which nevertheless still need to be stepped up. On purchases, thanks to the actions undertaken in 2023, there has been an improvement in the security of supplies and in integrating the contribution of purchases to the achievement of the well-below 2°C trajectory. Finally, in the area of Human Resources, succession plans have been strengthened in particular for the 3,000 key positions; the new global Diversity, Equity and Inclusion policy has now been rolled out in the 10 priority countries.
CSR criteria (Quantifiable criteria) • Improvement in safety performance (10%) • CO_2 emissions related to power generation (10%) • Proportion of female managers hired at 35% (10%)	30%	114,7%	With regard to safety performance, assessed by a set of indicators (frequency, severity, number of fatal accidents, etc.), the Board of Directors considered, despite progress on some indicators, that the level was, in 2023, below that expected and set a rate of achievement of 80%. The objectives relating to climate and diversity are quantitative objectives. On climate, the achievement rate is 140%. On diversity, the achievement rate is 124%. Of the managers recruited in 2023, 35.6% are women, the target being 35%.
Subtotal (base of 100%)	**100%**	**130,7%**	**Ranging from 0% to 140%**
TOTAL VARIABLE PORTION FOR 2023	**100%**	**130.5%**	
TOTAL TO BE PAID IN EUROS	**100%**	**€1,305,000**	**I.E. THE EQUIVALENT OF 130.5% OF THE REFERENCE FIXED COMPENSATION OF €1,000,000**

Long-term incentive compensation (Performance Shares)

The ACGC, following the recommendations of the Afep-Medef Code, which seeks to promote the long-term engagement of executives, recommended to the Board of Directors that the executive corporate officers compensation include a long-term incentive component, provided that this is reasonable and subject to strict performance conditions, and is comparable to that of other beneficiaries.

The Board of Directors decided on February 14, 2021, that this component may not, when initially awarded, represent more than 50% of the Chief Executive Officer's overall compensation (fixed and variable compensation and Performance Shares).

The allocation as of 2022 of Performance Shares (PS) to the Chief Executive Officer in substitution for the Performance Units from which she previously benefited, helped complete the alignment of the Chief Executive Officer's long-term incentive with that of members of the Executive Committee, executive managers and other employees who receive Performance Shares. The volume of the allocation to the target remains unchanged (120,000 PS in substitution for 120,000 PU).

2023 award

On the recommendation of the ACGC, the Board of Directors decided on February 20, 2023, in accordance with the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting on April 21, 2022, in its 27th resolution, to grant 120,000 PS to the Chief Executive Officer. The PS granted for 2023 were valued at €9.91 per share at the grant date pursuant to IFRS 2, for a total amount of €1,189,200.

Pension plans

Catherine MacGregor, the Chief Executive Officer continues to benefit from a supplementary pension plan, under which the Company does not guarantee the amount of the pension but pays an annual employer contribution, half of which comprises contributions paid to a third-party organization under an optional defined contribution pension plan (Article 82 of the French Tax Code) and half is a cash sum, given the immediate taxation on commencement of this mechanism. The employer contribution corresponds to 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It will also depend on the Company's performance, since the calculation base includes the variable portion linked to the Group's results. The Chief Executive Officer also benefits from the mandatory pension plan (Article 83 of the French Tax Code) applicable to all senior Group managers. The contribution for 2023 is €28,155.

Insurance and healthcare benefit plan

The Chief Executive Officer participates in healthcare and insurance benefit plan equivalent to the collective schemes for the ENGIE group's executive officers in France.

Compensation for term of office as Director

Catherine MacGregor, as a Director, does not receive any directors' fees for sitting on the Board of Directors.

Employment contract, severance pay and non-compete clause

No employment contract has been concluded between Catherine MacGregor, Chief Executive Officer, and the Company or a Group company.

In the event of departure from the Group, the Chief Executive Officer will be bound by a non-compete commitment for a period of one year from the end of his or her term of office and will receive one year's compensation payable in 12 monthly installments. The Board of Directors may waive the application of this clause at the time of the Chief Executive Officer's departure.

In the event of forced departure not resulting from serious misconduct on the part of the Chief Executive Officer, and regardless of the form of such departure, the Chief Executive Officer shall receive an indemnity of two years' compensation, which shall be payable only if the performance conditions attached to the annual variable component of the compensation for the two years preceding the year of departure have been met by at least 90% on average.

All provisions of the Afep-Medef Code are applicable to the non-compete commitment and severance payments, in particular with regard to those two payments combined, which may not exceed two years of compensation. "Year of compensation" within the meaning of the non-compete commitment and severance payments referred to above means the last annual fixed compensation plus the annual variable compensation paid calculated as the average annual variable compensation paid for the two years preceding the year of departure.

Pursuant to Article 25.4 of the Afep-Medef Code, the payment of the non-compete indemnity will be excluded if the Chief Executive Officer asserts her rights at retirement or over the age of 65.

Benefit in kind

Catherine MacGregor has a company car.

4.2.1.3 Summary of the compensation the Chairman and the Chief Executive Officer for 2023

Summary table of the compensation of the Chairman and the Chief Executive Officer

In euros	2023		2022	
	Amounts granted for 2023	Amount paid in 2023	Amounts granted for 2022	Amount paid in 2022
Jean-Pierre Clamadieu *Chairman*				
Fixed compensation	450,000	450,000	450,000	450,000
Variable compensation	0	0	0	0
Employer contribution to retirement plan	0	0	0	0
Extraordinary compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	3,652	3,652	1,826 (1)	1,826 (1)
TOTAL	**453,652**	**453,652**	**451,826**	**451,826**

(1) Company car since July 2022.

In euros	2023		2022	
	Amount granted for 2023	Amount paid in 2023	Amount granted for 2022	Amount paid in 2022
Catherine MacGregor *Chief Executive Officer*				
Fixed compensation	1,000,000	1,000,000	1,000,000	1,000,000
Variable compensation	1,305,000	1,136,000	1,136,000	1,109,000
Employer contribution to retirement plan	576,250	534,000	534,000	527,250
Extraordinary compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	6,192	6,192	6,192	6,192
TOTAL	**2,887,442**	**2,676,192**	**2,676,192**	**2,642,442**

Summary table of the compensation, options and shares awarded to the Chairman and the Chief Executive Officer

In euros	2023	2022
Jean-Pierre Clamadieu *Chairman*		
Compensation granted for the fiscal year (detailed in the preceding table)	453,652	451,826
Valuation of options granted for the fiscal year	0	0
Valuation of Performance Shares granted for the fiscal year	0	0
Valuation of Performance Units granted for the fiscal year	0	0
TOTAL	**453,652**	**451,826**

In euros	2023	2022
Catherine MacGregor *Chief Executive Officer*		
Compensation granted for the fiscal year (detailed in the preceding table)	2,887,442	2,676,192
Valuation of options granted for the fiscal year	0	0
Valuation of Performance Shares granted for the fiscal year	1,189,200 (1)	1,054,800
Valuation of Performance Units granted for the fiscal year	0	0
TOTAL	**4,076,642**	**3,730,992**

(1) The Performance Shares granted for 2023 were valued at €9.91 per share according to IFRS 2, making a total of €1,189,200.

Summary table of employment contracts, special retirement plans, severance pay and non-compete clause

Table 11 – AMF Position-recommendation – DOC-2021-02 (Appendix 2)

	Employment contract	Supplementary pension plan	Compensation or benefits due or likely to be due on termination or change of function	Compensation due under a non-compete clause
Jean-Pierre Clamadieu *Chairman*	No	No	No	No
Catherine MacGregor *Chief Executive Officer*	No	Yes (See Section 4.2.1.2)	Yes (See Section 4.2.1.2)	Yes (See Section 4.2.1.2)

4.2.1.4 Compensation components and benefits of any kind paid in 2023 or awarded for the same year to the Chairman and the Chief Executive Officer of the Company, subject to shareholder approval (*ex-post*)

In accordance with Article L.22-10-34 II of the French Commercial Code, the Shareholders' Meeting of April 30, 2024, will vote on the fixed, variable and extraordinary components of the total compensation and benefits of any kind paid in 2023, or awarded for 2023, to Jean-Pierre Clamadieu, Chairman of the Board, and Catherine MacGregor, Chief Executive Officer.

The variable or extraordinary compensation components awarded for 2023 can only be paid after approval by the Shareholders' Meeting.

4.2.1.4.1 Compensation components and benefits of any kind paid in 2023 or awarded for the same year to Jean-Pierre Clamadieu, Chairman of the Board

Compensation components	Amounts paid in 2023	Amounts granted for 2023	Details
Fixed compensation	€450,000	€450,000	Jean-Pierre Clamadieu's fixed annual compensation amounts to €450,000.
Annual variable compensation	None	None	Jean-Pierre Clamadieu receives no annual variable compensation.
Multi-annual variable compensation	None	None	Jean-Pierre Clamadieu receives no multi-annual variable compensation.
Directors' fees	None	None	Jean-Pierre Clamadieu receives no directors' fees.
Extraordinary compensation	None	None	Jean-Pierre Clamadieu receives no extraordinary compensation.
Allocation of stock options, Performance Shares and any other long-term compensation	None	None	Jean-Pierre Clamadieu is not allocated stock options, Performance Shares or any other long-term compensation.
Compensation associated with the commencem ent or termination of duties	None	None	Jean-Pierre Clamadieu receives no compensation associated with the commencement or termination of duties.
Supplementary pension plan	None	None	Jean-Pierre Clamadieu is not a beneficiary of any supplementary pension plan.
Benefits of any kind	€3,652	€3,652	Jean-Pierre Clamadieu has a company car.

4.2.1.4.2 Compensation components and benefits of any kind paid in 2023 or awarded for the same year to Catherine MacGregor, Chief Executive Officer

Compensation components	Amounts paid in 2023	Amounts granted for 2023	Details
Fixed compensation	€1,000,000	€1,000,000	Catherine MacGregor's fixed compensation was set at €1,000,000

Annual variable compensation	€1,136,000	€1,305,000	The target annual variable compensation to be paid in 2024 for 2023 amounts to 100% of the fixed compensation (€1,000,000) for a 100% target achievement rate, with a maximum of 140% of the fixed compensation (€1,400,000) in the event that targets are exceeded.
			It breaks down into two components: a financial component (65%) and a non-financial component (35%).
			For the **financial component,** the criteria used are NRIgs (25%), EBIT (25%), *free cash flow*(25%) and economic net debt (25%). The financial targets for 2023 were based on the Group's provisional budget as prepared by the Board of Directors on February 20, 2023.
			The **non-financial component** includes:
			• the Group's strategic objectives (35%): the future of nuclear activities in Belgium, the deepening of the medium-term road map toward carbon neutrality in 2045 and the communication allowing a better understanding of the Group's activities;
			• the Group's operational priorities for 2023 (35%): the deployment of the ENGIE One Safety health & safety plan, the acceleration of growth in the energy transition, the development of talent and the positioning of supply chains as a strategic lever;
			• RSE criteria relating to:
			  • improvement in safety performance (10%);
			  • CO_2 emissions related to power generation (10%);
			  • proportion of female managers hired at 35% (10%);
			At its meeting of February 21, 2024, the Board of Directors, on the recommendation of the ACGC:
			• noted that the success rate of the financial criteria was 130.4% (broken down as follows: NRIgs: 140%; EBIT: 140%; Free cash flow: 140%; Economic net debt: 101.7%);
			• set the success rate of non-financial criteria at 130.7% (broken down as follows: Group strategic objectives: 140%; Group operational priorities: 135%; improved safety performance: 80%; CO_2 emissions related to power generation: 140%; proportion of female managers hired of 35%: 124%).
			Based on the respective weightings of financial and non-financial criteria, the overall success rate was determined to be 130.5%, or €1,305,000. This variable compensation for 2023 will only be paid to Catherine MacGregor if approved by the shareholders at the Shareholders' Meeting of April 30, 2024.

Compensation components	Amounts paid in 2023	Amounts granted for 2023	Details
Multi-annual variable compensation	None	None	Catherine MacGregor did not receive any multi-annual variable compensation.
Directors' fees	None	None	Catherine MacGregor did not receive any compensation for her office as a Director.
Extraordinary compensation	None	None	Catherine MacGregor did not receive any extraordinary compensation.
Awarding of stock options, Performance Shares and any other long-term compensation	None	Valuation: €1,189,200	Catherine MacGregor was awarded 120,000 Performance Shares for 2023 (see note on this theoretical valuation in Section 4.2.1.3), i.e. 0,005% of share capital at February 20, 2023.
Compensation associated with the commencement or termination of duties	None	None	In the event of departure from the Group, the former Chief Executive Officer will be bound by a non-compete commitment for a period of one year from the end of his or her term of office and will receive one year's compensation payable in 12 monthly installments. The Board of Directors may waive the application of this clause at the time of the Chief Executive Officer's departure. In the event of forced departure not resulting from serious misconduct on the part of the Chief Executive Officer, and regardless of the form of such departure, the Chief Executive Officer shall receive an indemnity of two years' compensation, which shall be payable only if the performance conditions attached to the annual variable component of the compensation for the two years preceding the year of departure have been met by at least 90% on average. In addition, all provisions of the Afep-Medef Code are applicable to the non-compete commitment and severance payments, in particular with regard to those two payments combined, which may not exceed two years of compensation. "Year of compensation" within the meaning of the non-compete commitment and severance payments referred to above means the last annual fixed compensation plus the annual variable compensation paid calculated on the basis of the average annual variable compensation paid for the two years preceding the year of departure.
Supplementary pension plans	€534,000	€576,250	The Chief Executive Officer continues to benefit from a supplementary pension plan, under which the Company does not guarantee the amount of the pension but pays an annual employer contribution, half of which comprises contributions paid to a third-party organization under an optional defined contribution pension plan (Article 82 of the French Tax Code) and half is a cash sum, given the immediate taxation on commencement of this mechanism. The employer contribution corresponds to 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It will also depend on the Company's performance, since the calculation base includes the variable portion linked to the Group's results. The employer contribution for 2023 amounts to €576,250 and will be paid in 2024 subject to a favorable vote from the shareholders at the Shareholders' Meeting on April 30, 2024.
Benefits of any kind	€6,192	€6,192	Catherine MacGregor benefited from the use of a company car.

It should be noted that for the 2021 fiscal year, Catherine MacGregor was granted 120,000 Performance Units (PUs), vesting on March 15, 2024, subject to her presence on March 14, 2024 and the fulfillment of quantifiable financial and non-financial performance conditions. At its meeting on February 21, 2024, the Board of Directors noted that the success rate for the performance conditions attached to these units was 100%, i.e. 120,000 PUs.

The financial performance criteria, weighted at 80%, were of three types:

- growth in net recurring income / (loss) Group share (NRIgs) over two years compared with a benchmark panel (1) (25%): the success rate was 120%;
- Total Shareholder Return (TSR) (stock market performance, reinvested dividend) over three years compared with the same panel (25%): the success rate was 120%;
- return on capital employed (ROCE, renamed ROACE) (30%): the success rate was 120%.

The non-financial performance criteria, weighted at 20%, were of three types. The target objectives were those set out at the end of 2023 in the trajectory established to achieve the target objectives by 2030:

- reduction of greenhouse gas emissions from energy production (10%): the success rate was 120%;
- increase in the share of renewable capacities (5%): the success rate was 0%;
- increase in the percentage of women in management (5%): the success rate was 120%.

The Board of Directors noted that the overall success rate was 114%; it is capped at 100%.

Catherine MacGregor will have three years, i.e. until March 14, 2027, to exercise the PUs. In the event she exercises such units, she will be required to reinvest two-thirds of the proceeds from such exercise, net of tax and social security withholdings, in ENGIE shares until the target for the holding of ENGIE shares is met, i.e. the equivalent of two years' fixed compensation.

(1) EDP, ENEL, Iberdrola, Naturgy, SNAM, RWE

4.2.1.5 Comparison tables of the level of compensation of the Chairman and the Chief Executive Officer in relation to the compensation of employees – Annual changes in performance and compensation

The equity ratios were calculated taking into account the guidelines published by the AFEP in February 2021. Calculations are made by functions: Chairman and Chief Executive Officer.

Calculation of the numerator: the compensation considered for each corporate officer includes the fixed compensation paid in N, the variable compensation paid in N for N-1, various bonuses and benefits in kind, excluding severance payments, and Performance Shares and Performance Units granted in N at IFRS valuation, excluding items relating to company pensions.

Calculation of the denominator: the parent company ENGIE S.A. is neither representative of the Group's workforce nor of its activity. The denominator is therefore the average compensation in France of employees (fixed compensation + variable components) on permanent and fixed-term contracts counted on a full-time equivalent basis, excluding work-study students. Before 2021, two entities that were sold were not included: LNG and E&P. In 2022, a significant change in scope was to be noted, as EQUANS was not included in the data presented for 2022.

The average compensation has been calculated from the aggregated data of the Group Social Reporting; as the Group is made up of several companies with different pay systems, the median compensation cannot be calculated in the absence of a single database listing individual compensation data.

For the Group, the relevant equity ratio is the one that compares the total compensation of the Chairman and the one of the Chief Executive Officer with the average compensation of all employees in France.

Compensation multiples for the office of Chairman

Table of ratios relating to I.6 and 7 of Article L.22-10-9 of the French Commercial Code (1)

In euros	2019	2020	2021	2022 (2)	2023
Compensation for the **Office of Chairman:**	433,064	450,000	450,000	451,826	453,652
Change from the previous year	24%	4%	0%	0.4%	0.4%
Information on the scope of consolidation of the listed company – not representative in terms of activity and the number of employees					
Average employee compensation	73,845	76,791	77,142	80,849	89,842
Change from the previous year	0%	4%	0%	5%	11%
Median employee compensation	66,487	72,571	66,967	67,673	68,068
Ratio to average employee compensation	-	-	-	-	-
Change from the previous year	-	-	-	-	-
Ratio to median employee compensation	-	-	-	-	-
Change from the previous year	-	-	-	-	-
Additional information about the expanded scope of consolidation (France)(2)					
Average employee compensation	46,476	46,870	48,278	56,997	61,009
Change from the previous year	0%	1%	3%	18%	7%
Median employee compensation	Not available				
Ratio to average employee compensation	9.3	9.6	9.3	7.9	7.4
Change from the previous year	23%	3%	-3%	-15%	-6%
Ratio to median employee compensation	Not calculable				
Change from the previous year	-	-	-	-	
Company performance					
EBIT (3)	14%	-16%	47%	43%	11.5%
Change from the previous year	180%	-214%	194%	-9%	-73%
ROACE (4)	6.10%	5.45%	8.90%	12.60%	11.60%
Change from the previous year	-6%	-11%	63%	42%	-8%
NRIgs (in billion euros)	2.46	1.70	3.20	5.22	5.37
Change from the previous year	3%	-31%	85%	65%	3%

(1) In reference to the Afep guidelines updated in February 2021.
(2) The 2022 data on the company's compensation and performance do not include EQUANS.
(3) Formerly "COI" (Current Operating Income): indicator renamed "EBIT" without changing the calculation methodology.
(4) Formerly "ROCE": indicator renamed "ROACE" without changing the calculation methodology.

4

Compensation multiples for the office of Chief Executive Officer

Table of ratios relating to I.6 and 7 of Article L.22-10-9 of the French Commercial Code [(1)]

FY N-1	2019	2020	2021	2022 [(2)]	2023
Compensation for the **Office of Chief Executive Officer:** Isabelle Kocher from May 3, 2016; to February 24, 2020, then C. Waysand in the interim period from February 24, 2020, to December 31, 2020, then Catherine MacGregor from January 1, 2021	2,588,572	1,287,669	2,608,350	3,169,992	3,331,392
Change from the previous year	2%	-50%	103%	22%	5%
Information on the scope of consolidation of the listed company – not representative in terms of activity and the number of employees					
Average employee compensation	73,845	76,791	77,142	80,849	89,842
Change from the previous year	0%	4%	0%	5%	11%
Median employee compensation	66,487	72,571	66,967	67,673	68,068
Ratio to average employee compensation	-	-	-	-	-
Change from the previous year	-	-	-	-	-
Ratio to median employee compensation	-	-	-	-	-
Change from the previous year	-	-	-	-	-
Additional information about the expanded scope of consolidation (France)					
Average employee compensation	46,476	46,870	48,278	56,997	61,009
Change from the previous year	0%	1%	3%	18%	7%
Median employee compensation	Not available				
Ratio to average employee compensation	55.7	27.5	54.0	55.6	54.6
Change from the previous year	1%	-51%	97%	3%	-2%
Ratio to median employee compensation	Not calculable				
Change from the previous year	-	-	-	-	-
Company performance					
EBIT [(3)]	14%	-16%	47%	43%	11.5%
Change from the previous year	180%	-214%	194%	-9%	-73%
ROACE [(4)]	6.10%	5.45%	8.90%	12.60%	11.60%
Change from the previous year	-6%	-11%	63%	42%	-8%
NRIgs (in billion euros)	2.46	1.70	3.20	5.22	5.37
Change from the previous year	3%	-31%	85%	65%	3%

(1) In reference to the Afep guidelines updated in February 2021.
(2) The 2022 data on the company's compensation and performance do not include EQUANS.
(3) Formerly "COI" (Current Operating Income): indicator renamed "EBIT" without changing the calculation methodology.
(4) Formerly "ROCE": indicator renamed "ROACE" without changing the calculation methodology.

4.2.2 DIRECTORS' COMPENSATION FOR FISCAL YEAR 2023

The compensation for the Directors below will be submitted for shareholder approval at the Annual Shareholders' Meeting of April 30, 2024, in accordance with Article L.22-10-9 of the French Commercial Code.

As a reminder, on the recommendation of the Board of Directors, the Shareholders' Meeting sets the total annual amount of Directors' compensation to be distributed by the Board among its members.

It should also be noted that the Chairman of the Board of Directors and the Chief Executive Officer do not receive compensation for their term as director.

The Board of Directors, at its meeting on February 20, 2023, reviewed the rules for internal distribution of the amount granted by the 2008 Shareholders' Meeting. This review took into account, in particular, its diversity policy with a view to integrating more international profiles, on the recommendation of the ACGC. The amendment to the old allocation rules relates to a 10% increase in the fixed and variable portion of Directors.

The new distribution rules applied were approved by the Shareholders' Meeting on April 26, 2023, and are presented below.

Director		Fixed fee	€16,500 per year
		Variable fee, dependent on attendance	€60,500 (1), if 100% attendance
Audit Committee	Chairman	Fixed fee	€16,500 per year
		Variable fee, dependent on attendance	€48,400 (1), if 100% attendance
	Committee member	Fixed fee	€5,500 per year
		Variable fee, dependent on attendance	€24,200 (1), if 100% attendance
SITC	Chairman	Fixed fee	€11,000 per year
		Variable fee, dependent on attendance	€30,520 (1), if 100% attendance
	Committee member	Fixed fee	€5,500 per year
		Variable fee, dependent on attendance	€18,150 (1), if 100% attendance
EESDC	Chairman	Fixed fee	€11,000 per year
		Variable fee, dependent on attendance	€24,200 (1), if 100% attendance
	Committee member	Fixed fee	€5,500 per year
		Variable fee, dependent on attendance	€18,150 (1), if 100% attendance
ACGC	Chairman	Fixed fee	€11,000 per year
		Variable fee, dependent on attendance	€24,200 (1), if 100% attendance
	Committee member	Fixed fee	€5,500 per year
		Variable fee, dependent on attendance	€18,150 (1), if 100% attendance

(1) Variable portion increased by 25% for European non-residents and 50% for non-European non-residents, in the event of physical attendance at meetings.

4.2.2.1 Compensation of Directors appointed by the Shareholders' Meeting

The Directors were awarded the compensation shown in the table below for fiscal year 2023. Unless otherwise indicated, no other compensation was awarded to these officers by the Company or by its subsidiaries for the said fiscal year.

In euros	Fiscal year 2023 (1)	Fiscal year 2022 (1)
Fabrice Brégier	98,381 (2)	91,500 (2)
Marie-Claire Daveu	106,425 (2)	65,125 (2)
Patrice Durand (3)	85,553 (2) (4)	77,775 (2) (4)
Mari-Noëlle Jégo-Laveissière (3)	21,307 (2) (4)	77,775 (2) (4)
Françoise Malrieu	51,290 (2)	150,500 (2)
Ross McInnes	174,861 (2)	150,500 (2)
Lucie Muniesa (3) (5)	47,451 (2) (4)	-
Marie-José Nadeau	240,705 (6)	205,216 (6)
Lord Peter Ricketts of Shortlands	111,630 (6)	102,893 (6)
TOTAL	**934,604**	**921,284**

(1) Directors' compensation due for a given fiscal year are paid during the fiscal year concerned.
(2) Before deduction of withholding tax relating to tax and social contributions.
(3) Director appointed from the private sector by the Shareholders' Meeting on the proposal of the French State.
(4) Appointment proposed by the French state, as such, these directors only receive 85% of the compensation. The remaining 15% is paid to the State.
(5) Appointed during the April 26, 2023 Shareholders' Meeting – compensated on a prorata temporis basis.
(6) Before deduction of withholding tax levied on Directors' fees paid to Directors residing outside France.

4.2.2.2 Compensation of the Director representing the French State and the Directors appointed by the Shareholders' Meeting on proposal of the French State

The Directors representing the French State, in their role as civil servants, Stéphanie Besnier and Céline Fornaro, did not personally receive any compensation from the Company or from subsidiaries for their term of office in 2023 in accordance with Article 5 of Ordinance No. 2014-948 of August 20, 2014, concerning the governance and equity transactions of companies with a public shareholder. The compensation for their terms of office amounted to €135,855 and was paid directly into the State budget.

The Directors from the private sector appointed by the Shareholders' Meeting on the proposal of the French State, namely Patrice Durand, Mari-Noëlle Jégo-Laveissière and Lucie Muniesa, received 85% of the compensation corresponding to their office, pursuant to the ministerial Order of December 28, 2014, as amended by the ministerial order of January 5, 2018, taken in application of Article 6 of Ordinance No. 2014-948 of August 20, 2014 concerning governance and equity operations of companies with a public shareholder (see the table above). The remaining 15% of their compensation amounted to €27,231 and was paid into the State budget.

In respect of the foregoing, the Directors' compensation corresponding to these offices, i.e. a total amount of €163,086, was paid directly to the Public Treasury in compliance with regulations.

4.2.2.3 Compensation of Directors representing the employees and employee shareholders

Directors representing employees and employee shareholders on the Board of Directors received no compensation (directors' fees) from the Company or from subsidiaries in consideration of their service as Directors.

These Directors are Christophe Agogué, Jacinthe Delage, Yoan Kosnar and Magali Viot.

4.2.3 COMPENSATION POLICY OF THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER FOR FISCAL YEAR 2024 (EX-ANTE SAY ON PAY)

To determine the compensation and benefits granted to executive corporate officers, the Board of Directors refers, in particular, to the recommendations of the Afep-Medef Code. Thus, the Board of Directors ensures that the compensation policy respects the principles of comprehensiveness, balance, comparability, consistency, transparency and measurement, and takes into account market practices.

The compensation policy for corporate officers is determined by the Board of Directors based on the recommendations of the ACGC. It will be subject to a presentation and binding vote at the Annual Shareholders' Meeting of April 30, 2024, in accordance with Article L.22-10-8 of the French Commercial Code.

The compensation policy is reviewed annually by the ACGC and is based in particular on specific studies.

Pursuant to Article 5.3.1 of the Board's Internal Regulations, corporate officers do not take part in meetings of the ACGC on matters relating to them.

In its recommendations to the Board of Directors, the ACGC seeks to propose a compensation policy that is in line with the corporate interest and the practices of comparable major international groups for similar positions, based on a benchmark established by an external firm that includes CAC40 and Eurostoxx 50 companies.

Pursuant to Article 10.6 of the Afep-Medef Code, the Chairman of the Board of Directors, as an independent director, does not receive variable compensation linked to the Company's performance. Compensation of the Chief Executive Officer generally includes:

- a fixed component, which remains unchanged throughout the term of office, unless the Board of Directors, on the recommendation of the ACGC, decides otherwise;
- a variable component, balanced relative to total compensation, the purpose of which is to reflect the executive's personal contribution to the Group's development and results; and
- a long-term incentive component, subject to performance conditions.

Stringent performance criteria are set both for the variable component and for long-term incentive plans, maintaining a link between the Group's performance and the compensation of its directors in the short, medium and long term and contributing to the Company's strategy and long-term viability.

In accordance with current policy, the Chairman and the Chief Executive Officer do not receive directors' fees for their participation in the work of the Board and its committees.

If the approval rate for the compensation policy is less than 80% at the last Shareholders' Meeting, the ACGC looks at the direction of the vote of the shareholders that opposed the approval of this policy and the possible follow-up to be given to their vote. As a reminder, the Shareholders' Meeting of April 26, 2023, approved the compensation policy of the Chairman of the Board of Directors at 99.92% and of the Chief Executive Officer at 94.18%.

4.2.3.1 Compensation policy for the Chairman of the Board of Directors for 2024

The compensation of the Chairman of the Board of Directors for 2024 remains unchanged from 2023.

Fixed annual compensation

For fiscal year 2024, the fixed compensation of the Chairman of the Board remains unchanged at €450,000.

Variable compensation

The compensation of the Chairman of the Board does not include any variable compensation in respect of his office.

Long-term incentive compensation (Performance Shares)

The compensation of the Chairman of the Board does not include any annual or multi-year variable compensation or long-term incentive plans.

Pension plans

The Chairman of the Board will not be covered by any supplementary pension plan in respect of his duties.

Insurance and healthcare benefit plan

The Chairman of the Board will participate in healthcare and insurance benefit plan equivalent to the collective schemes for the ENGIE group's executive officers in France.

Compensation for term of office as Director

The Chief Executive Officer, as a Director, will not receive any directors' fees for sitting on the Board of Directors.

Employment contract, severance pay and non-compete clause

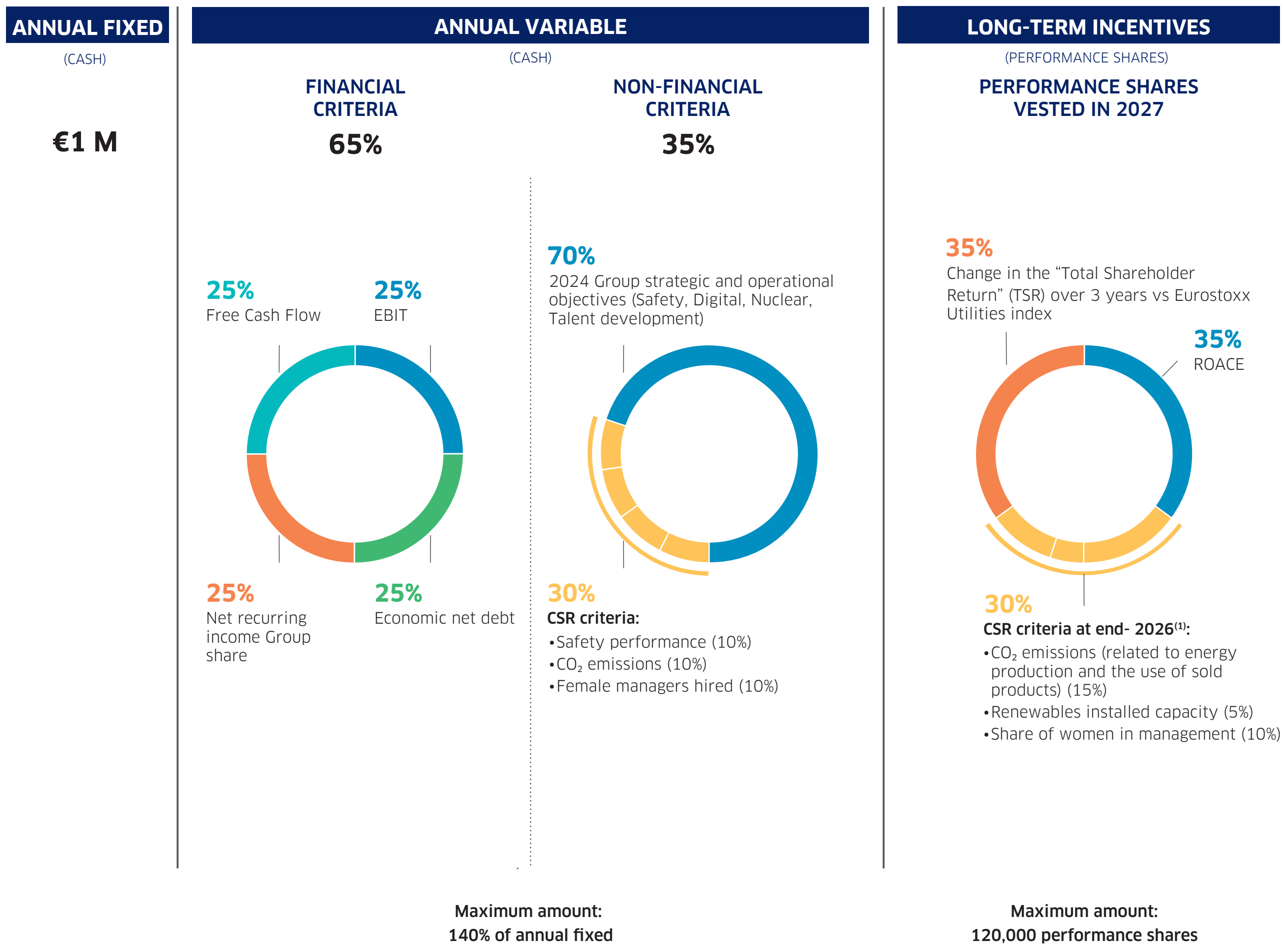
No employment contract has been concluded between the Chairman of the Board of Directors and the Company or a Group company. No provision is made for compensation or benefits due or likely to be due as a result of a termination or change of function or for compensation relating to a non-compete clause.

Benefit in kind

The Chairman of the Board will benefit from a company vehicule.

4.2.3.2 Compensation of the Chief Executive Officer for 2024

The Chief Executive Officer's compensation includes a fixed component, a variable annual component and a long-term incentive component.



(1) In line with the trajectory established to reach the 2030.

Fixed annual compensation

The fixed component is €1,000,000. It was determined according to the role, experience and reference market of the Chief Executive Officer, particularly in relation to the fixed compensation of executive corporate officers of groups similar to ENGIE in terms of size and scope, and, more generally, on the basis of the above benchmark. It does not change for the duration of the term of office, which is four years, unless the Board of Directors, on the recommendation of the ACGC, votes otherwise, in particular with regard to the market context, or any changes in ENGIE's profile or Group employee compensation.

Annual variable compensation

The annual variable component is designed to reflect the executive's personal contribution to the Group's development and results. It is balanced in relation to the fixed component and determined as a percentage of fixed compensation.

The target annual variable component amounts to 100% of the fixed compensation (€1,000,000) for a 100% target achievement rate, with a maximum of 140% of the fixed compensation (€1,400,000) in the event that targets are exceeded.

It is calculated annually, according to the Chief Executive Officer's performance, using financial criteria to compensate economic performance (65%), and non-financial criteria (35%), where at least one criterion reflects the Group's CSR objectives, in accordance with the purpose ("Raison d'être") of ENGIE as stated in the bylaws.

For the **financial component**, the criteria used are NRIgs (25%), EBIT (25%), free cash flow (25%) and economic net debt (25%). The financial targets for 2024 were based on the Group's provisional budget as prepared by the Board of Directors on February 21, 2024.

The **non-financial component** is based on the progress of the work carried out on the Group's strategic and operational objectives (70%) and quantifiable CSR criteria (30%).

The work carried out on the Group's strategic and operational objectives must focus, in particular, on the continued rollout of ENGIE One Safety (health & safety plan), on the development of priority digital solutions for the business, on talent development and on finalization of the project related to nuclear activities in Belgium.

The CSR criteria include the continued improvement in safety performance compared with 2023, assessed with the aid of a series of indicators (frequency rate, severity rate, number of fatal accidents, etc.), the CO_2 emissions related to power generation (in line with the trajectory set for the purposes of hitting the 2030 target) and the proportion of 37% female managers hired. These three criteria account for 30% of the non-financial component and each one is given an equal weighting.

Long-term incentive compensation (Performance Shares)

The Chief Executive Officer's long-term incentive component takes the form of Performance Shares subject to the same performance conditions as those attached to the performance share plans for some employees. These performance conditions are all specified and quantifiable. They include at least one non-financial performance condition that reflects the Group's CSR objectives, in accordance with the Company's purpose as stated in the bylaws. This long-term incentive component is designed to encourage executives to make a long-term commitment as well as to increase their loyalty and align their interests with the Company's corporate interests and the interests of shareholders. This particular component may not account for more than 50% of the executive's total compensation at the initial award.

In accordance with Article 26.3.3 of the Afep-Medef Code, the Chief Executive Officer formally undertakes not to use hedging mechanisms for these Performance Shares. It should be noted that the Chief Executive Officer's target is to create a portfolio of ENGIE shares equivalent to two years' fixed compensation, i.e. €2,000,000. Until this target is met, two-thirds of the Performance Shares vested to the Chief Executive Officer will be non-transferable. On December 31, 2023, the Chief Executive Officer held 70,000 ENGIE shares acquired in a personal capacity.

Subject to the favourable vote of the Shareholders' Meeting of April 30, 2024, a plan to award Performance Shares would be rolled out in 2024 following the Shareholders' Meeting, according to new terms and, in particular, new performance conditions, in line with ENGIE's strategy and ambitions, particularly in terms of CSR. 120,000 Performance Shares at target, which may go up to 120% in the event of outperformance (representing a maximum of 0.006% of the share capital) would be awarded to Chief executive Officer.

Performance conditions

For 2024, the **financial performance conditions** would relate to:

- changes in Total Shareholder Return (TSR) (stock market performance, reinvested dividend) over three years compared with the Eurostoxx Utilities index (constituting 35% of the total performance conditions). The observation of the TSR over the three years period will be carried out, initially, with a reference price corresponding to the average of the index and the ENGIE share price for a defined period of several weeks preceding the first day of the month of allocation and, in the same way, three years later;
- the average annual ROACE (Return On Average Capital Employed) targets in the Medium-Term Business Plan (MTBP) over the three years of the plan (constituting 35% of the total performance conditions).

The Performance Shares would be subject to exclusively quantifiable **non-financial performance conditions** (together constituting 30% of the total performance conditions), selected for consistency with the Company's statutory purpose, i.e.:

- the greenhouse gas emissions related to power generation and the use of products sold (gas sales) (15%);
- the installed renewable capacities (5%);
- the proportion of women among Group managers (10%).

The target objectives aims to be in line with the trajectory established to achieve the target objectives by 2030. Thus, compared with the previous Performance Share Plan, the portion granted to non-financial performance conditions would be increased by 10 percentage points, from 20% to 30%, and the scope of analysis of greenhouse gas emissions would be expanded, including, in addition to emissions related to power generation, those related to the sale of gas.

This plan, these performance conditions and their weighting, would support the implementation of ENGIE's long-term strategy, both financially and non-financially.

Success rate

For each performance condition, there would be a threshold, below which the success rate would be 0%, a target at which the success rate would be 100% and a ceiling associated with a success rate of 120%. The progression between the points would be linear.

The success rate of each criterion could therefore now range from 0% to 120%, without the possibility of offsetting the performance of one criterion with the underperformance of another; the overall success rate could range from 0% to 120%. Therefore, the number of shares could range from 0 to 120% of the target number allocated.

The **TSR** success rate would be:

- 75% for a result equal to that of the index (threshold);
- 100% for a result equal to 105% of the index (target);
- 120% for a result equal to or greater than 120% of the index (ceiling).

The **ROACE** success rate would be:

- equal to zero for a result less than or equal to the threshold;
- 100% for a result equal to the target;
- 120% for a result equal to or greater than the ceiling.

With regard to **non-financial performance conditions**, the slopes would follow the same rules as those applied to the ROACE.

For the ROACE indicator and non-financial performance conditions, the Board would stringently define limits corresponding to a success rate of 0% and a maximum rate of 120% according to medium-term targets and the specific nature of each of these indicators.

Exceptional adjustment

The determination of the above performance criteria derives from the Board of Directors' commitment to the variable nature of the long-term incentive component which rewards financial and non-financial performance in the medium and long term. They are therefore not meant to be reviewed. However, in the event of exceptional circumstances (such as a change in accounting standards, a significant change in scope, the completion of a transformative transaction, a substantial change in market conditions or an unforeseen change in the competitive environment), the Board of Directors may adjust upward or downward the results of one or more of the performance criteria associated with the long-term incentive component to ensure that the results of applying these criteria reflect the Group's performance. This adjustment would be made by the Board of Directors on the proposal of the ACGC, after the Board of Directors was assured that the adjustment can reasonably restore the balance or objective initially sought, adjusted for all or part of the impact of the event on the period under review and that the interests of the Company and its shareholders are aligned with the interests of the executive corporate officer. The Board would then justify, in detail, the adjustments made, which would be communicated.

The application of these exceptional adjustments, if any, will be subject to the approval of the Shareholders' Meeting.

Pension plans

The Chief Executive Officer will benefit from a supplementary pension plan, under which the Company does not guarantee the amount of the pension but pays an annual employer contribution, half of which comprises contributions paid to a third-party organization under an optional defined contribution pension plan (Article 82) and half is a cash sum, given the immediate taxation on commencement of this mechanism. The employer contribution will correspond to 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It will also depend on the Company's performance, since the calculation base includes the variable portion linked to the Group's results.

The Chief Executive Officer will also benefit from the mandatory pension plan (Article 83 of the French Tax Code) applicable to all senior Group managers.

Insurance and healthcare benefit plan

The Chief Executive Officer will participate in healthcare and insurance benefit plan equivalent to the collective schemes for the ENGIE Group's executive officers in France.

Compensation for term of office as Director

The Chief Executive Officer, if also a director, will not receive any directors' fees for sitting on the Board of Directors.

Arrangements related to termination of the term of office of Chief Executive Officer

In the event of departure from the Group, the former Chief Executive Officer will be bound by a non-compete commitment for a period of one year from the end of his or her term of office and will receive one year's compensation payable in 12 monthly installments. The Board of Directors may waive the application of this clause at the time of the officer's departure.

In the event of forced departure not resulting from serious misconduct on the part of the corporate officer, and regardless of the form of such departure, the Chief Executive Officer shall receive an indemnity of two years' compensation, which shall be payable only if the performance conditions attached to the annual variable component of the compensation for the two years preceding the year of departure have been met by at least 90% on average.

In addition, all provisions of the Afep-Medef Code are applicable to the non-compete commitment and severance payments, in particular with regard to those two payments combined, which may not exceed two years of compensation. "Year of compensation" within the meaning of the non-compete commitment and severance payments referred to above means the last annual fixed compensation plus the annual variable compensation paid calculated on the basis of the average annual variable compensation paid for the two years preceding the year of departure.

Pursuant to Article 25.4 of the Afep-Medef Code, the payment of the non-compete indemnity will be excluded if the Chief Executive Officer asserts their rights at retirement or over the age of 65.

Benefit in kind

The Chief Executive Officer will benefit from the use of a company vehicle.

4.2.4 COMPENSATION POLICY FOR DIRECTORS FOR FISCAL YEAR 2024

Annual compensation amount for Directors

The annual compensation amount for Directors is €1.4 million, unchanged since 2008. It is proposed to the Shareholders' Meeting of April 30, 2024, that this amount be increased to €1.6 million, to take into account ENGIE's strategy of diversifying the Directors' profiles, which could lead to the inclusion of members with international profile.

Rules for distribution of Directors' compensation

The rules for the distribution of Directors' compensation remain unchanged in relation to those voted for in Shareholders' Meeting of April 26, 2023 (see Section 4.2.2 "Directors' compensation for fiscal year 2023").

4.2.5 COMPENSATION OF EXECUTIVES WHO ARE NOT CORPORATE OFFICERS (MEMBERS OF THE EXECUTIVE COMMITTEE)

Compensation of executives who are not corporate officers (members of the Executive Committee) is composed of a fixed portion and a variable portion.

Changes in the fixed portion of compensation are linked to changes in specific situations, expansion or significant change in responsibilities and to repositioning made necessary in view of internal equity or a clear discrepancy vis-à-vis the external market.

The main purpose of the variable portion is to reward the contributions of executives to the Group's results.

The amounts below include the variable portions paid in 2023 for 2022 and paid in 2022 for 2021.

The variable component paid in 2023 for fiscal year 2022 was calculated based on economic criteria (NRIgs, EBIT, free cash flow, economic net debt) for 65% and on qualitative and non-financial criteria for 35%.

Summary table of gross compensations, including benefits in kind, for executives who are not corporate officers (Executive Committee members)(1)

In euros	2023	2022
Fixed	4,635,909	4,795,548
Variable	5,307,097	5,362,002
Total	9,943,006	10,157,550
Total of members	10	11

(1) Compensations include: fixed + annual variable compensation for the year.

Pension provisions

Pursuant to the European Directive of April 16, 2014, Order No.2019-697 relating to supplementary occupational retirement plans, published on July 4, 2019, terminated the existing L137-11 plans (referred to as "Article 39") and prohibited the acquisition of new rights and the entry of any new members as from that date.

Following the closure of the plan and the crystallization of random entitlements in 2019, in 2020 the Group converted the random entitlements of beneficiaries, including members of the Executive Committee, into a defined-contribution plan called "Article 82."

4.2.6 AWARD OF PERFORMANCE SHARES (1)

4.2.6.1 Information on the award of bonus shares or Performance Shares

4.2.6.1.1 Availability of Performance Shares

Articles L.225-197-1 and L. 22-10-59 of the Commercial Code place restrictions on the free availability of Performance Shares granted to corporate officers under share plans.

In accordance with these provisions, a system was established specifying the obligation to hold as registered shares a certain percentage (set by the Board of Directors) of vested Performance Shares. The objective is that after a certain point, the Chief Executive Officer and, more generally, Executive Committee members would hold a portfolio of ENGIE shares corresponding to a fraction of their compensation.

At its meeting of March 1, 2017, the Board of Directors decided, on the recommendation of the Appointments, Compensation and Governance Committee, to update the existing system as follows:

- fixed target: build a share portfolio equivalent to two years' fixed compensation for the Chief Executive Officer, and to one and a half years for other members of the Executive Committee. This objective is set in terms of the number of shares for each person concerned, and is calculated based on the fixed annual compensation prevailing at January 1 of the year in question and on the average share price over the previous year;
- until the target is met: continue to hold 2/3 of the vested Performance Shares.

(1) Please note that there are no more ENGIE stock options as of November 9, 2017.

4.2.6.1.2 Bonus share or Performance Share plans implemented for fiscal year 2023

Authorization of the Shareholders' Meeting of April 21, 2022

The 27th resolution of the ENGIE Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022, authorized the Board of Directors to award bonus shares to employees and / or corporate officers of companies belonging to the Group (including the executive corporate officers of the Company) up to the limit of 0.75% of the share capital on the date of the decision to allocate shares, with an annual cap of 0.25% of said share capital. It should also be noted that the Shareholders' Meeting was not asked to grant an authorization for stock options.

Performance Share Plan for 2023 (Board meeting of February 20, 2023)

Under the authorization granted by the Shareholders' Meeting of April 21, 2022 above, the Board of Directors decided to implement Performance Share plans, in particular a plan for Catherine MacGregor, on February 20, 2023 (see Section 4.2.6.2).

In 2023, the Board of Directors and the ACGC initiated a study on the performance conditions of the long-term incentive plans (performance shares) with the goal of submitting a new resolution to the 2024 Shareholders' Meeting. This study resulted in the proposal to set up a new long-term incentive plan that will be submitted to the vote of the Shareholders' Meeting on April 30, 2024. The terms and conditions of this plan, applicable to the Chief Executive Officer and to certain senior executives, managers with strong potential and key contributors of the Group, are described in Section 4.2.3.2 "Compensation of the Chief Executive Officer for 2024." The award for 2024, as well as for future years, shall take place on the same date for the Chief Executive Officer and employees.

4.2.6.2 Performance Shares granted to and available for sale by each corporate officer – Summary of current plans

ENGIE Performance Shares granted to each ENGIE corporate officer by ENGIE and by all other companies of the ENGIE Group in fiscal year 2023

Table 6 – AMF Position-Recommendation – DOC-2021-02 (Appendix 2)

	Performance Shares granted during the fiscal year to each corporate officer by the issuer and by any company of the Group					
	No. and date of the plan	Number of granted shares during the fiscal year	Valuation of shares according to the method used for the consolidated financial statements (in euros)	Vesting date	Availability date	Performance conditions
Catherine MacGregor	02/20/2023	120,000	9.91	03/14/2026	03/15/2027	All these shares are subject to performance criteria (see Section 4.2.3.2)

ENGIE Performance Shares that became available for sale by each corporate officer of ENGIE in fiscal year 2023

None

Summary of current ENGIE Performance Share plans

	2018	2019		2020	
	2018 Plan	2019 Plan	2019 Traders' Plan	2020 Plan	2020 Traders' Plan
Date of authorization from the General Shareholders' Meeting	05/18/2018	05/18/2018	05/18/2018	05/18/2018	05/18/2018
Date of decision from the Board of Directors	12/11/2018	12/17/2019	02/26/2020	12/17/2020	02/25/2021
Share price in euros (1)	9.36	11.59	13.61	9.93	10.9
Start of vesting period (2)	12/11/2018	12/17/2019	02/26/2020	12/17/2020	02/25/2021
End of vesting period	03/14/2022 (3)	03/14/2023 (7)	03/14/2022 (11) 03/14/2023 (11)	03/14/2024 (13)	03/14/2023 (11) 03/14/2024 (11)
Start of holding period	none (4)	none (8)	none	none (14)	none
End of holding period	none (5)	none (9)	none	none (15)	none
Related conditions	(6)	(10)	(12)	(16)	(17)
Shares vested as at 12/31/2022	70,670	4,692,090	126,845	4,665,775	299,865
Shares vested from 01/01/2023 to 12/31/2023	70,670	3,809,122	117,503	11,125	143,590
Shares canceled from 01/01/2023 to 12/31/2023	0	766,054	9,342	247,800	17,224
Balance of shares as at 12/31/2023	0	116,914	0	4,406,850	139,051

(1) Weighted average price (according to the method used for the consolidated financial statements).
(2) Early vesting possible in the event of death or permanent disability. Condition of continuous service at the vesting date.
(3) 03/14/2023 for senior executives outside France and Belgium.
(4) 03/15/2022 for senior executives in France and Belgium.
(5) 03/15/2023 for senior executives in France and Belgium.
(6) With the exception of beneficiaries awarded Performance Shares in the context of innovation programs and similar, a triple condition applies for all beneficiaries: one-third based on net recurring income, Group share, for fiscal years 2020 and 2021, one-third based on ROCE for fiscal years 2020 and 2021, and one-third based on the TSR (stock market performance, dividend reinvested) of ENGIE compared with the TSR of a panel composed of EDF, E.ON, Uniper, Innogy, Enel, Naturgy (ex-Gas Natural), Iberdrola and RWE, with each of the companies receiving an identical weighting, it being specified that E.ON and Uniper, on the one hand, and RWE and Innogy, on the other, are counted as one company (for 50% each) for the purpose of weighting. These conditions apply to all shares awarded to the Group's executives and does not affect the first tranche of 150 shares awarded to the other beneficiaries.
(7) 03/14/2024 for senior executives outside France and Belgium.
(8) 03/15/2023 for senior executives in France and Belgium.
(9) 03/15/2024 for senior executives in France and Belgium.
(10) With the exception of beneficiaries awarded Performance Shares in the context of innovation programs and similar, a triple condition applies for all beneficiaries: one-third based on net recurring income, Group share, for fiscal years 2021 and 2022, one-third based on ROCE for fiscal years 2021 and 2022, and one-third based on the TSR (stock market performance, dividend reinvested) of ENGIE compared with the TSR of a panel composed of EDF, E.ON, Uniper, Innogy, Enel, Naturgy (ex-Gas Natural), Iberdrola and RWE, with each of the companies receiving an identical weighting, it being specified that E.ON and Uniper, on the one hand, and RWE and Innogy, on the other, are counted as one company (for 50% each) for the purpose of weighting. These conditions apply to all shares awarded to the Group's executives and does not affect the first tranche of 150 shares awarded to the other beneficiaries.
(11) For half of shares.
(12) 50% based on 2021 ENGIE Global Markets profit before tax and 50% based on 2022 ENGIE Global Markets profit before tax.
(13) 03/15/2025 for senior executives outside France.
(14) 03/15/2024 for senior executives in France.
(15) 03/15/2025 for senior executives in France.
(16) With the exception of beneficiaries awarded Performance Shares in the context of innovation programs and similar, a triple condition applies for all beneficiaries: one-third based on net recurring income, Group share, for fiscal years 2022 and 2023, one-third based on ROCE for fiscal years 2022 and 2023, and one-third based on the TSR (stock market performance, dividend reinvested) of ENGIE compared with the TSR of the panel composed of EDF, E.ON, Uniper, Innogy, Enel, Naturgy (ex-Gas Natural), Iberdrola and RWE, with each of the companies receiving an identical weighting. These conditions apply to all shares awarded to the Group's executives and does not affect the first tranche of 150 shares awarded to the other beneficiaries
(17) 50% based on 2022 ENGIE Global Markets profit before tax and 50% based on 2023 ENGIE Global Markets profit before tax

	2021		2022			2023
	2021 Plan	2021 Traders' Plan	CEO 2022 Plan	2022 Plan	2022 Traders' Plan	CEO 2023 Plan
Date of authorization from the General Shareholders' Meeting	05/20/2021	05/20/2021	04/21/2022	04/21/2022	04/21/2022	04/21/2022
Date of decision from the Board of Directors	12/16/2021	02/14/2022	04/21/2022	12/08/2022	02/20/2023	02/20/2023
Share price *(in euros)* (1)	9.28	12.13	8.79	10.24	10.89	9.91
Start of vesting period (2)	12/16/2021	02/14/2022	04/21/2022	12/08/2022	02/20/2023	02/20/2023
End of vesting period	03/14/2025 (3)	03/14/2024 (7) 03/14/2025 (7)	03/14/2025	03/14/2026 (9)	03/14/2025 (7) 03/14/2026 (7)	03/14/2026
Start of holding period	none (4)	none	03/15/2025	none (10)	none	03/14/2026
End of holding period	none (5)	none	03/15/2026	none (11)	none	03/15/2027
Related conditions	(6)	(8)	(6)	(12)	(13)	(6)
Shares vested as at 12/31/2022	4,841,205	444,187	120,000	4,739,350	0	0
Shares vested from 01/01/2023 to 12/31/2023	10,825	5,829	0	8,500	0	0
Shares canceled from 01/01/2023 to 12/31/2023	212,475	16,679	0	109,650	0	0
Balance of shares as at 12/31/2023	4,617,905	421,679	120,000	4,621,200	593,327	120,000

(1) Weighted average price (according to the method used for the consolidated financial statements).

(2) Early vesting possible in the event of death or permanent disability. Condition of continuous service at the vesting date.

(3) 03/14/2026 for senior executives outside France.

(4) 03/15/2025 for senior executives in France.

(5) 03/15/2026 for senior executives in France.

(6) With the exception of beneficiaries awarded Performance Shares in the context of innovation programs and similar, a quadruple condition applies for all beneficiaries: 30% ROCE 2024 compared with target ROCE, 25% performance of TSR compared with the Panel (composed of EDP, ENEL, Iberdrola, Naturgy, Snam et RWE), 25% growth in ENGIE's net recurring income Group share compared with the same Panel, 20% non-financial conditions relating to CSR (reducing of greenhouse gas emissions from power generation (10%)), increase in renewable energy capacity (5%) and increase in the proportion of women in management (5%). These conditions apply to all shares awarded to the Group's executives and does not affect the first tranche of 150 shares awarded to the other beneficiaries.

(7) For half of shares.

(8) 50% based on 2023 ENGIE Global Markets profit before tax and 50% based on 2024 ENGIE Global Markets profit before tax.

(9) 03/14/2027 for senior executives outside France.

(10) 03/15/2026 for senior executives in France.

(11) 03/15/2027 for senior executives in France.

(12) With the exception of beneficiaries awarded Performance Shares in the context of innovation programs and similar, a quadruple condition applies for all beneficiaries: 30% ROCE 2025 compared with target ROCE, 25% performance of TSR compared with the Panel (composed of EDP, ENEL, Iberdrola, Naturgy, Snam et RWE), 25% growth in ENGIE's net recurring income Group share compared with the same Panel, 20% non-financial conditions relating to CSR (greenhouse gas emissions from power generation (10%)), increase in renewable energy capacity (5%) and increase in the proportion of women in management (5%). These conditions apply to all shares awarded to the Group's executives and does not affect the first tranche of 500 shares awarded to the other beneficiaries.

(13) 50% based on 2024 ENGIE Global Markets profit before tax and 50% based on 2025 ENGIE Global Markets profit before tax.

Summary of Bonus and Performance Shares held by corporate officers at December 31, 2023

None

4.2.6.3 Performance Shares granted during fiscal year 2023 by ENGIE and by all companies included in the ENGIE performance share scope to the 10 non–corporate officer employees of the issuer and its companies who received the greatest number of Performance Shares

Total number of shares awarded	Share price [1] *(in euros)*	Issuer	Plan
none	none	-	-

(1) *Weighted average price (according to the method used for the consolidated financial statements).*

In 2023, the Board of Directors and the ACGC initiated a study on the performance conditions of the long-term incentive plans (performance shares) with the goal of submitting a new resolution to the 2024 Shareholders' Meeting. This analysis aims to define how all the performance criteria will be evaluated over the plan's three-year term, in line with standard industry practices. The next award will follow the authorization by the Shareholders' Meeting of April 30, 2024. As a result, there was no award in December 2023.

4.2.6.4 Summary of transactions disclosed by executive management and corporate officers in fiscal 2023

	Date of transaction	Type of transaction	Financial instrument	Quantity	Unit price *(in euros)*	Transaction price *(in euros)*
Ross McInnes	02/22/2023	Acquisition	Equity investments	2,200.00	14.1893	31,216.46
Marie-José Nadeau	02/28/2023	Acquisition	Equity investments	2,300.00	13.8960	31,960.80
Sébastien Arbola	03/15/2022	Vesting of performance shares [1]	Equity investments	12,001.00	[2]	[2]
Paulo Almirante	03/15/2022	Vesting of performance shares [1]	Equity investments	50,832.00	[2]	[2]
Frank Demaille	03/15/2023	Vesting of performance shares [1]	Equity investments	10,667.00	[2]	[2]
Cécile Prévieu	03/15/2023	Vesting of performance shares [1]	Equity investments	12,708.00	[2]	[2]
Claire Waysand	03/15/2023	Vesting of performance shares [1]	Equity investments	42,360.00	[2]	[2]
Catherine MacGregor	08/25/2023	Acquisition	Equity investments	15,000.00	14.7555	221,332.50

(1) *Vesting of Performance Shares allocated for 2019.*

(2) *As soon as the Performance Shares are vested, their gross value is correlated to the price of the ENGIE share. It should be noted that, as of March 15, 2023, the ENGIE share price was €14.062.*

4.3 ADDITIONAL INFORMATION CONCERNING CORPORATE GOVERNANCE

To prevent conflicts of interest within French public limited companies, the French Commercial Code provides for an authorization and control procedure for agreements between the Company and its corporate officers or its key shareholders.

Likewise for agreements entered into with other companies with which it has corporate officers in common.

This authorization and control procedure for related-party agreements is organized in five phases:

- information supplied to the Board of Directors;
- prior authorization of the signing, amendment, renewal or cancellation of a related-party agreement by the Board of Directors;
- information supplied to the Statutory Auditors on related-party agreements authorized over the fiscal year and on those that are already authorized and are ongoing;
- special report of the Statutory Auditors;
- consultation of the Ordinary Shareholders' Meeting. After reviewing the Statutory Auditors' special report, the Shareholders' Meeting decides whether or not to approve the agreements.

Without officially being subject to this procedure, agreements that have already been authorized and which are ongoing, are reviewed by the Board on an annual basis.

Their existence and consequences are noted in the report presented by the Statutory Auditors to the Shareholders' Meeting (Section 4.5).

4.3.1 AGREEMENTS RELATING TO CURRENT OPERATIONS CONCLUDED UNDER NORMAL CONDITIONS

In accordance with the provisions of Article L.22-10-12 of the French Commercial Code and on the recommendation of the Audit Committee, the Board of Directors adopted a procedure on December 17, 2019, to assess whether the agreements relating to current operations, concluded under normal conditions by the company, actually fulfill these conditions (https://www.engie.com/en/by-laws-ENGIE).

A committee within ENGIE's Corporate Secretariat informed about all draft agreements likely to be classified as a regulated or current agreement is tasked with analyzing the characteristics of this agreement and both submitting it to the authorization and control procedure provided for in the related-party agreements, and classifying it as an agreement concerning current operations concluded under normal conditions.

This procedure also provides for follow-up in the form of an annual update on its implementation to the Audit Committee and the Board of Directors. In accordance with the regulations, it should also be noted that persons directly or indirectly involved in one of the above agreements do not take part either in discussions or in voting on its assessment and its adoption.

4.3.2 REGULATED AGREEMENTS AND RELATED-PARTY AGREEMENTS

The special report of the Statutory Auditors on related-party agreements referred to in Article L.225-38 et seq. of the French Commercial Code for fiscal year 2023 is provided in Section 4.5.

Details of transactions with related parties as specified by the regulations adopted under EC regulation 1606/2002, are provided in Note 20 to the Consolidated Financial Statements (Section 6.2.2).

4.3.3 SERVICE CONTRACTS BINDING MEMBERS OF ADMINISTRATIVE AND MANAGEMENT BODIES

To ENGIE's knowledge, there is no service contract binding members of the Company's management bodies or any of its subsidiaries that provides for benefits to be granted under such a contract.

4.3.4 AUTHORIZATIONS RELATING TO SHARE CAPITAL AND SHARE EQUIVALENT AND THEIR UTILIZATION

The Company's shareholders delegated the following powers and authorizations in relation to financial matters to the Board of Directors:

Authorizations granted by the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022

Resolution	Nature of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
16th	Issue of shares and / or marketable securities with PSR [1] *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (19th resolution)	**€225** million for shares [2] [3] and **€5** billion for marketable securities representing debt	None	Full amount of the authorization
17th	Issue of shares and / or marketable securities without PSR [1] *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (20th resolution)	**€225** million for shares [2] [3] and **€5** billion for marketable securities representing debt	None	Full amount of the authorization
18th	Issue of shares and / or marketable securities without PSR [1] in the context of an offer governed by Article L.411-2-1 of the French Monetary and Financial Code *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (21th resolution)	**€225** million for shares [2] [3] and **€5** billion for marketable securities representing debt	None	Full amount of the authorization

4

Resolution	Nature of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
19th	Increase in the amount of capital increases (greenshoe option) carried out pursuant to the 16th, 17th and 18th resolutions *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (22th resolution)	Up to **15%** of the initial issue (2) (3)	None	Full amount of the authorization
20th	Issue of ordinary shares and / or various securities in consideration for contributions of securities made to the Company, up to a limit of 10% of the share capital *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (23th resolution)	**€225** million for shares (2) (3) and **€5** billion for marketable securities representing debt	None	Full amount of the authorization
22nd	Issue of shares via the capitalization of additional paid-in capital, retained earnings, profit or any other amounts *(to be used outside public tender offer periods only)*	**26 months until June 20, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020 (25th resolution)	Total amount of the sums that may be incorporated (excluding ceiling)	None	Full amount of the authorization
26th	Authorization to be given to the Board of Directors for the purpose of awarding bonus shares (i) to employees and / or corporate officers of ENGIE Group companies (with the exception of corporate officers of ENGIE S.A.) and (ii) to employees participating in a group international employee shareholding plan of the ENGIE group	**38 months until June 20, 2025** Terminates, up to the unused portion, the delegation granted by the Combined Shareholders' Meeting of May 20, 2021 (18th resolution)	**0.75%** of the share capital, (with an annual cap of 0.25% of the share capital), **ceiling common to the 26th and 27th resolutions of the Ordinary and Extraordinary Shareholders' Meeting of 04/21/2022**	*Dated December 22, 2022* Award of 247,163 bonus shares as a contribution to the international classic formula for the Link 2022 transaction • *i.e. a total award of 0.01% of capital as at December 31, 2022*	0.51% of share capital (4)

Resolution	Nature of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
27th	Authorization for the purpose of awarding bonus shares to certain employees and corporate officers of ENGIE Group companies, (including executive corporate officers of ENGIE	**38 months until June 20, 2025** Terminates, up to the unused portion, the delegation granted by the Combined Shareholders' Meeting of May 20, 2021 (19th resolution)	**0.75%** of the share capital, (with an annual cap of 0.25% of the share capital), **ceiling common to the 26th and 27th resolutions of the Ordinary and Extraordinary Shareholders' Meeting of 04/21/2022**	For 2022 • *Dated April 21, 2022* Allocation of 120,000 perfor mance shares to the Chief Executive Officer; • *Dated December 08, 2022* Award of 4,739,350 performance shares *i.e. a total award of 0.20% of capital as at December 31, 2022* For 2023 • *At February 20, 2023* Award of 713,305 perfor mance shares, including 120,000 performance shares to the Chief Executive Officer, *i.e. a total award of 0.024% of capital as at February 20, 2023.* I.e. a total award in 2022 and 2023 of 0.24% as at December 31, 2023.	0.51% of share capital (4)

Authorizations granted by the Ordinary and Extraordinary Shareholders' Meeting of April 26, 2023

Resolution	Nature of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
5th	Authorization to trade in the Company's shares	**18 months until October 25, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022 (5th resolution)	Maximum purchase price: **€30** Maximum ownership: **10%** of the share capital Aggregate amount of purchases: **€7.3** billion ***May not be used during a public tender offer for the shares of the Company***	0.57% of share capital at 12/31/2023	Remaining 9.43% of share capital
14th	Capital increase reserved for employees who are members of employee saving plans of the ENGIE group	**26 months until June 25, 2025** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022 (24th resolution)	**2%** of the share capital as of the date of implementation of the delegation. **Amount common with the 15th resolution of the Ordinary and Extraordinary Shareholders' Meeting of April 26, 2023** (3)	None	Full amount of the authorization
15th	Capital increase reserved for all entities formed as part of the implementation of the international employee shareholding plan offered by the ENGIE group	**18 months until October 25, 2024** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022 (25th resolution)	**0.5%** of the share capital as of the date of implementation of the delegation, **which will be counted against the 2% ceiling under the 15th resolution of the Shareholders' Meeting of 04/26/2023** (3)	None	Full amount of the authorization
16th	Authorization to reduce the share capital by canceling treasury shares	**26 months until June 25, 2025** Terminates the delegation granted by the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022 (23rd resolution)	10% of the share capital per 24 month period	None	Full amount of the authorization

(1) PSR: Preferential subscription rights.

(2) Amounts common to issues of marketable securities decided under the 16th, 17th, 18th, 19th and 20th resolutions of the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022.

(3) Common ceiling set by the 21st resolution of the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022, under the 16th, 17th, 18th, 19th, 20th, 24th and 25th resolutions of the same Meeting, and the 14th and 15th resolutions of the Ordinary and Extraordinary Shareholders' Meeting of April 26, 2023: €265 million for shares and €5 billion for marketable securities representing debt.

(4) Unused common amounts for authorizations decided under the 26th and 27th resolutions of the Ordinary and Extraordinary Shareholders' Meeting of April 21, 2022.

4.3.5 PROVISIONS IN THE BYLAWS ON THE PARTICIPATION OF SHAREHOLDERS AT SHAREHOLDERS' MEETINGS

Notice to attend meetings (Articles 20, 21 and 22 of the bylaws)

Ordinary and Extraordinary Shareholders' Meetings and, where applicable, Special Shareholders' Meetings, are called, meet and deliberate in accordance with the conditions provided for by law. The party issuing the notice convening the meeting also draws up the meeting agenda. However, one or more shareholders may, in accordance with the conditions provided for by law, request that draft resolutions be entered on the agenda.

The meeting may take place at the Company's head office or at any other location stated in the notice.

Meetings are chaired by the Chairman of the Board of Directors or, in his absence, by the Vice-Chairman of the Board of Directors, a Deputy Chief Executive Officer if he or she is also Director, or, in the absence of a Deputy Chief Executive Officer, by a Director specially authorized by the Board for this purpose. Otherwise, the meeting elects its own Chairman.

The two members of the General Shareholders' Meeting present who accept the duties thereof and who hold the greatest number of votes act as vote tellers. The officers of the meeting appoint the secretary, who may be chosen from outside the shareholders.

An attendance sheet is kept in accordance with the conditions provided for by law. Minutes of meetings are drawn up and copies thereof are issued and certified in accordance with the conditions provided for by law.

Attendance at meetings (Article 20 of the bylaws)

All shareholders have the right to attend the meetings provided their shares are paid in full.

The right to attend meetings or to be represented therein is subject to the registration of the securities in the shareholder's name by midnight (CET) of the second business day prior to the meeting, either in the registered securities' accounts held by the Company or in bearer securities' accounts held by the authorized intermediary.

The Board of Directors may, if it deems necessary, send to the shareholders individualized admission cards in each shareholder's name and require them to be presented in order to gain access to the Shareholders' Meeting.

If the Board of Directors so decides at the time the Meeting is called, shareholders may participate in the meeting by videoconference or by any telecommunication or remote transmission means, including via the Internet, that permits their identification in accordance with the terms and conditions set under current regulations. Where applicable, this decision shall be announced in the notice convening the meeting published in the *Bulletin des Annonces Légales Obligatoires* (Bulletin of Mandatory Legal Announcements or BALO).

Voting rights (Articles 10, 11, 12 and 20 of the bylaws)

Unless otherwise provided for by law, each shareholder has as many voting rights and may cast as many votes at meetings as he or she holds shares, which are fully paid up. Effective April 2, 2016, in accordance with Article L.22-10-46 of the French Commercial Code, all registered and fully paid-up shares registered in the name of the same beneficiary for at least two years are automatically entitled to a double voting right (see Section 5.1.1.3 "Voting rights").

The shares are indivisible with regard to the Company. Where the shares are subject to a right of usufruct, voting rights attached to shares belong to the beneficial owner of the shares in the case of Ordinary Shareholders' Meetings, and to the bare owner in the case of Extraordinary Shareholders' Meetings.

Any time it is necessary to own several shares in order to exercise any right whatsoever, the owners of isolated shares or an insufficient number of shares may exercise such a right provided that they combine or, as the case may be, buy or sell the necessary shares or rights.

Any shareholder may cast a vote by proxy in accordance with the terms and conditions provided for by the law and regulations in all meetings. The owners of securities mentioned in the seventh paragraph of Article L.228-1 of the French Commercial Code may be represented, in accordance with the conditions provided for by law, by a registered intermediary. Any shareholder may cast a vote by proxy in accordance with the terms and conditions provided for by the law and regulations. The shareholders may, in accordance with the terms and conditions provided for by the law and regulations, send their postal proxy form either as a printed form or, further to a decision of the Board of Directors published in the notice of meeting and the notice to attend the meeting, by electronic transmission.

Dividends (Article 26.2 of the bylaws)

Any shareholder who can, at the end of a fiscal year, provide proof of registration for at least two years and continuation thereof on the dividend payment date for the fiscal year in question, shall receive a 10% increase in the dividend for the shares so registered, over the dividend paid on other shares. This increase will be capped at 0.5% of the share capital for a single shareholder.

Golden share (Article 6 of the bylaws)

In accordance with the French Energy Code and Decree No. 2015-1823 of December 30, 2015, the share capital includes a golden share resulting from the conversion of one ordinary share, which is held by the French State and is aimed at protecting France's critical interests in the energy sector and ensuring the continuity and safeguarding of energy supplies (see Section 5.4.4 "Golden share").

4.3.6 INFORMATION ON ELEMENTS THAT COULD HAVE AN IMPACT ON TAKEOVER BIDS OR PUBLIC EXCHANGE OFFERS

Pursuant to Article L.22-10-11 of the French Commercial Code, the elements that could have an impact in the event of a public tender offer or exchange offer are specified in Section 3.4.4.1 "Social protection, employee savings plans, compensation and employee shareholding," 4.1 "Organization and functioning of governance," 4.1.2 "Activities and functioning of the Board of Directors," 4.2 "Compensation paid to corporate officers and members of the Executive Committee," 4.3.4 "Authorizations relating to share capital and share equivalent and their utilization," 4.3.5 "Provisions in the bylaws on the participation of shareholders at Shareholders' Meetings," 5.4.2 "Breakdown of share capital," 5.4.3 "Disclosure thresholds," 5.4.4 "Golden share" and 7.1 "General information on ENGIE and its bylaws."

4.3.7 STATUTORY AUDITORS

Deloitte & Associés

Company represented by Patrick Suissa and Nadia Laadouli.

6, place de la Pyramide, 92908 Paris-La Défense Cedex, France

Deloitte & Associés has been a Statutory Auditor for the Company since July 16, 2008. Its term of office was renewed at the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020, for a period of six years and will expire at the close of the 2026 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2025.

Ernst & Young et Autres

Company represented by Charles-Emmanuel Chosson and Guillaume Rouger.

1/2, place des Saisons, 92400 Courbevoie – Paris-La Défense 1, France

Ernst & Young et Autres has been a Statutory Auditor for the Company since May 19, 2008. Its term of office was renewed at the Ordinary and Extraordinary Shareholders' Meeting of May 14, 2020, for a period of six years and will expire at the close of the 2026 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2025.

Previously, Ernst & Young Audit was Statutory Auditor between 1995 and 2007.

4.4 CORPORATE GOVERNANCE CODE

ENGIE maintains its commitment to implementing corporate governance guidelines and for this purpose refers to the Afep-Medef Corporate Governance Code for listed companies (amended in December 2022), with the exception of the following:

AFEP-MEDEF Code recommendations	Explanation
18.1 Composition With regard the Appointments Committee, the committee must not include any executive corporate officers and must be composed on majority of independent Directors. It is recommended that the Chairman of the committee is independent and that an employee Director is a member.	Each Board committee includes either a Director representing employees or a Director representing employees shareholders. In line with the appointment of two new Directors representing employees, and the suitability of the profiles with Committee membership, ENGIE has decided to appoint a director representing employee shareholders as a member of the ACGC. A possible adjustment will be considered at the end of the term of office of the Director representing the employee shareholders, in 2025.

4.5 STATUTORY AUDITORS' REPORT ON RELATED PARTY AGREEMENTS

Shareholders' Meeting held to approve the financial statements for the year ended December 31, 2023

To the ENGIE Shareholders' Meeting,

In our capacity as statutory auditors of your Company, we hereby present to you our report on related party agreements.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements indicated to us, or that we may have identified in the performance of our engagement, as well as the reasons justifying why they benefit the Company. We are not required to give our opinion as to whether they are beneficial or appropriate or to ascertain the existence of other agreements. It is your responsibility, in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)*, to assess the relevance of these agreements prior to their approval.

We are also required, where applicable, to inform you in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)* of the continuation of the implementation, during the year ended December 31, 2023, of the agreements previously approved by the Shareholders' Meeting.

We performed those procedures which we deemed necessary in compliance with professional guidance issued by the French Institute of Statutory Auditors *(Compagnie nationale des commissaires aux comptes)* relating to this type of engagement. These procedures consisted in verifying the consistency of the information provided to us with the relevant source documents.

Agreements submitted for approval to the Shareholders' Meeting

We hereby inform you that we have not been notified of any agreements authorized during the year ended December 31, 2023 to be submitted to the Shareholders' Meeting for approval in accordance with Article L. 225-38 of the French Commercial Code *(Code de commerce)*.

Agreements previously approved by the Shareholders' Meeting

In accordance with Article R.225-30 of the French Commercial Code *(Code de commerce)*, we have been notified that the implementation of the following agreements, which were approved by the Shareholders' Meeting in prior years, continued during the year ended December 31, 2023.

With Mr. Clamadieu, Chairman of the Board of Directors of your Company

a) Benefit plan

Nature, purpose and terms

Your Board of Directors, at its meeting of June 19, 2018, resolved to grant the Chairman of the Board of Directors a benefit plan equivalent to the policy for all your Company's executives in France, through a group insurance policy taken out by your Company. This policy provides life insurance and disability insurance.

b) Healthcare plan

Nature, purpose and terms

Your Board of Directors, at its meeting of December 11, 2018, resolved to grant to the Chairman of the Board of Directors a health insurance policy equivalent to the policy for all your Company's executives in France, through a group insurance policy taken out by your Company. This policy covers the standard coverage items for reimbursement of medical costs for the insured and his beneficiaries.

Paris-La Défense, March 5, 2024

The Statutory Auditors

French original signed by

DELOITTE & ASSOCIES		ERNST & YOUNG et Autres	
Patrick E. Suissa	Nadia Laadouli	Charles-Emmanuel Chosson	Guillaume Rouger

5

INFORMATION ON THE SHARE CAPITAL AND SHAREHOLDING

5.1 INFORMATION ON CAPITAL

5.1.1 SHARE CAPITAL AND VOTING RIGHTS

5.1.1.1 Share capital

ENGIE shares are listed on Compartment A of Euronext Paris and Euronext Brussels under ISIN Code FR0010208488 and ticker symbol ENGI. ENGIE shares are included in the CAC 40 index, the main index published by Euronext Paris, and are eligible for the Deferred Settlement Service (SRD). ENGIE is also listed on the following main indexes: SBF 120, STOXX Europe 600, STOXX Europe 600 Utilities, Euro STOXX Utilities, MSCI Europe, MSCI Europe Utilities.

As of December 31, 2023, ENGIE's share capital stood at €2,435,285,011, divided into 2,435,285,011 fully paid-up shares with a par value of €1 each.

5.1.1.2 Pledges, guarantees and collateral

Pledges of assets

The percentage of shares pledged is not significant.

Other pledges

In millions of euros	Total Value	2024	2025	2026	2027	2028	2026 to 2029	> 2029	Account Total	Corresponding %
Intangible assets	190	184	-	-	-	-	-	6	8,449	2.2%
Property, plant and equipment	1,625	206	4	17	2	2	19	1,376	57,950	2.8%
Equity investments	2,985	277	20	-	478	-	26	2,184	11,339	26.3%
Bank accounts	479	240	90	51	11	23	5	60	16,578	2.9%
Other assets	700	538	57	9	25	12	10	49	50,362	1.4%
TOTAL	**5,979**	**1,445**	**171**	**77**	**516**	**37**	**60**	**3,675**	**144,678**	**4.1%**

Note: the total amount of the pledge relating to equity instruments may relate to consolidated equity instruments with zero value in the consolidated balance sheet (elimination of these equity instruments upon consolidation).

5.1.1.3 Voting rights

Each shareholder has as many voting rights and may cast as many votes at meetings as he or she holds shares which are fully paid up.

However, in accordance with Articles L.22-10-46 and L.225-123 of the French Commercial Code, all registered and fully paid-up shares registered in the name of the same beneficiary for at least two years are automatically entitled to a double voting right.

On December 31, 2023, the Company had 2,435,285,011 shares corresponding to 3,199,086,726 theoretical voting rights.

Pursuant to Article L.111-68 of the French Energy Code as modified by law no. 2019-486 of May 22, 2019, the French government is required to hold at least one share of the Company.

In addition, pursuant to the French Energy Code and Decree 2007-1790 of December 20, 2007, ENGIE's share capital includes a golden share (for details, see Section 5.4.4 "Golden share").

5.1.2 POTENTIAL CAPITAL AND SHARE EQUIVALENTS

As of December 31, 2023, there were no share equivalents conferring direct or indirect access to ENGIE's share capital.

5.1.3 FIVE-YEAR SUMMARY OF CHANGES IN THE SHARE CAPITAL

Date	Event	Nominal *(in euros)*	Premium *(in euros)*	Share capital *(in euros)*	Number of shares	Par value per share *(in euros)*
12/22/2022	Increase of the share capital resulting from the subscription of 2,310,951 shares under the capital increase reserved for participants in an employee savings plan offered by the Group (Link 2022)	2,310,951	22,000,254	2,437,595,962	2,437,595,962	1.00
12/22/2022	Increase of the share capital resulting from the subscription of 770,823 shares under the capital increase reserved for Link International Employees (Link 2022)	770,823	7,338,235	2,438,366,785	2,438,366,785	1.00
12/22/2022	Reduction of the share capital resulting from the cancellation of 3,081,774 treasury shares	3,081,774	-	2,435,285,011	2,435,285,011	1.00

5.1.4 STOCK REPURCHASE

5.1.4.1 Treasury stock

The 5th resolution of the Ordinary and Extraordinary Shareholders' Meeting of April 26, 2023, authorized the Company to trade in its own shares in order to manage its shareholders' equity according to the applicable laws and regulations.

Terms:

- maximum unit purchase price: €30 (excluding transaction costs);
- maximum number of shares that may be purchased for the duration of the program: 10% of the share capital;
- maximum total amount of acquisitions, net of fees: €7.3 billion.

A one-year liquidity agreement, renewable by tacit agreement, of an initial value of €55 million was signed on May 2, 2006, on the Euronext Paris market with Rothschild & Cie Banque. This agreement was amended on several occasions, with the latest major amendment signed on January 24, 2019, in order to comply with the AMF's decision of July 2, 2018, setting the maximum amount of the contract at €50 million as of January 1, 2019.

The main purpose of this agreement is to reduce the volatility of the ENGIE share and therefore the risk perceived by investors. This agreement complies with the Code of Conduct drawn up by the Association Française des Entreprises d'Investissement (French Association of Investment Companies). This agreement continued to apply in 2023.

Between January 1 and December 31, 2023, the Company purchased 28,238,105 shares, for a total value of €409.7 million (or €14.51 per share) under the liquidity agreement. Over the same period, and also under this liquidity agreement, ENGIE disposed of 28,238,105 shares for a total price of €410 million (or €14.52 per share).

Moreover, between January 1 and December 31, 2023, ENGIE purchased 3,755,821 shares for a total value of €56.8 million (or €15.12 per share) to hedge the employee shareholding plan.

Between January 1 and February 29, 2024, ENGIE purchased 7,019,612 shares for a total value of €104.8 million (or €14.93 per share) under the liquidity agreement. Over the same period, and also under this agreement, ENGIE disposed of 6,584,612 shares for a total price of €98.0 million (or €14.89 per share).

Furthermore, between January 1 and February 29, 2024, ENGIE did not purchase any shares to cover its commitments to the beneficiaries of stock options, bonus shares, and company savings plans.

On February 29, 2024, the Company held 0.59% of its share capital, or 14,268,188 shares to cover its commitments to the beneficiaries of stock options, bonus shares, and company savings plans.

5.1.4.2 Description of the treasury stock repurchase program to be submitted to the Shareholders' Meeting of April 30, 2024

Pursuant to Articles 241-1 to 241-5 of the AMF's General Regulations, the purpose of the following program description is to set out the objectives, terms and conditions of ENGIE's stock repurchase program, as it will be submitted to the Shareholders' Meeting to be held on April 30, 2024.

A. Main features of the program

The main features and goals of the program are summarized below:

- relevant securities: shares listed on Eurolist – SRD at the Paris Stock Exchange or on Eurolist at the Brussels Stock Exchange;
- maximum capital repurchase percentage authorized by the Shareholders' Meeting: 10% of the share capital;
- maximum unit purchase price: €30 (excluding transaction costs).

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B. Objectives of the stock repurchase program

The objectives of the ENGIE stock repurchase program are summarized below:

- to ensure liquidity in the Company's shares by an investment service provider under liquidity agreements;
- to provide for the subsequent cancellation of the repurchased shares under a decision or authorization to reduce the share capital by the Extraordinary Shareholders' Meeting;
- to allocate or dispose of such shares to employees or former employees and corporate officers or former corporate officers of the Group;
- to set up stock purchase plans, bonus share plans on existing shares, or employee shareholding plans under company savings plans;
- to allocate or dispose of such shares to any entity as part of implementing an international employee shareholding plan;
- to provide for the holding and subsequent delivery of shares (as exchange, payment or otherwise) in the context of external growth transactions within the limit of 5% of the share capital;
- to provide for the hedging of securities conferring entitlement to Company share allocations, through issuance of shares, upon the exercise of the rights attached to securities conferring entitlement to Company shares by conversion, redemption, exchange, upon presentation of a warrant or other means of allocation;
- to implement any other market practices previously or subsequently authorized or to be authorized by market authorities.

C. Terms and conditions

Maximum percentage of share capital that may be repurchased and maximum amount payable by ENGIE

The maximum number of shares that may be purchased by ENGIE may not exceed 10% of the share capital of the Company on the date of the Shareholders' Meeting, i.e. 243.5 million shares, for a maximum theoretical amount of €7.3 billion. ENGIE reserves the right to hold the maximum amount authorized.

On December 31, 2023, ENGIE directly held 13,835,367 shares, i.e. 0.57% of the share capital.

Therefore, based on the estimated share capital on the date of the Shareholders' Meeting, the stock repurchase program could cover 229.7 million shares, representing 9.43% of the share capital, for a maximum amount of €6.9 billion.

Maximum term of the stock repurchase program

The stock repurchase program will be in effect for a period of 18 months beginning on April 30, 2024, date of this Shareholders' Meeting, i.e. until October 29, 2025.

5.1.4.3 Book value and nominal value

The book value and the nominal value of the shares held by ENGIE itself or in its name, or by its subsidiaries, are indicated respectively in Note 7 "Marketable securities" of Section 6.4.2 "Notes to parent company financial statements," and in Section 5.1.3. "Five-year summary of changes in the share capital."

5.2 NON-EQUITY SECURITIES

5.2.1 DEEPLY SUBORDINATED PERPETUAL NOTES

No issue or redemption of deeply-subordinated perpetual notes was launched in 2023. The outstanding amount of deeply-subordinated perpetual notes was as follows at December 31, 2023:

Currency	Coupon rate	Issue date	Maturity	First call date (1)	Outstanding amount *(in millions of euros)*	Exchange	ISIN Code
EUR	3.875%	06/02/2014	Perpetual	06/02/2024	337.8	Paris	FR0011942283
EUR	3.250%	01/28/2019	Perpetual	11/28/2024	1,000.0	Paris	FR0013398229
EUR	1.625%	07/08/2019	Perpetual	04/08/2025	500.0	Dublin	FR0013431244
EUR	1.500%	11/30/2020	Perpetual	05/30/2028	850.0	Paris	FR0014000RR2
EUR	1.875%	07/02/2021	Perpetual	01/02/2031	705.1	Paris	FR00140046Y4

(1) First Call Date, or nearest date for early redemption in accordance with applicable conditions.

All of the above securities are rated Baa3 by Moody's, BBB- by Standard and Poor's, and BBB by Fitch.

In accordance with the provisions of IAS 32, and given their characteristics, these instruments are recognized in equity in the Group's consolidated financial statements (see Note 16.2.1 of Section 6.2.2 "Notes to consolidated financial statements").

5.2.2 EURO MEDIUM TERM NOTE (EMTN) PROGRAM

ENGIE has a €30 billion Euro Medium Term Note (EMTN) program. This program, valid for 12 months, is renewed every year. The latest version of the program's base prospectus is available on ENGIE's website (www.engie.com/en/finance/fixed-incomes/debt-programmes-mtn-cp).

5.2.3 BOND ISSUES

The main features of the bond issues outstanding as of December 31, 2023, issued by the Company, are detailed in Note 11 "Borrowings and debt" of Section 6.4.2 "Notes to the parent company financial statements."

5.3 GREEN BONDS

5.3.1 DESCRIPTION OF THE BOND

To support its development plan in line with its purpose (“Raison d’être”), particularly in renewable energy and energy efficiency, ENGIE issued eight new green bonds in three currencies in 2023 for respective total amounts of €4,825 million, GBP 650 million and CHF 415 million.

A green bond of €500 million issued in 2017 was also repaid at its contractual maturity in February 2023.

Following these transactions, as of December 31, 2023, the outstanding amount of green bonds issued by the Group was the following:

Type	Currency	Coupon rate	Issue date	Maturity	Outstanding amount *(in currency millions)*	Exchange	ISIN Code	Details on allocations
Senior	EUR	2.375%	05/19/2014	05/19/2026	1,246.3	Paris	FR0011911247	Registration documents 2014, 2015 and 2016
Senior	EUR	0.875%	03/27/2017	03/27/2024	478	Paris	FR0013245859	Registration Document 2017
	EUR	1.500%	03/27/2017	03/27/2028	800	Paris	FR0013245867	
Senior	EUR	1.375%	09/28/2017	02/28/2029	750	Paris	FR0013284254	Registration Document 2018
Hybrid	EUR	3.250%	01/28/2019	Perpetual (11/28/2024 [1])	1,000	Paris	FR0013398229	2019 Universal Registration Document
Senior	EUR	0.375%	06/21/2019	06/21/2027	750	Paris	FR0013428489	2020 Universal Registration Document
	EUR	1.375%	06/21/2019	06/21/2039	750	Paris	FR0013428513	
Senior	EUR	0.500%	10/24/2019	10/24/2030	900	Paris	FR0013455813	2020 Universal Registration Document
Senior	EUR	1.750%	03/27/2020	03/27/2028	750	Paris	FR0013504677	2020 and 2021 Universal Registration Documents
	EUR	2.125%	03/27/2020	03/30/2032	750	Paris	FR0013504693	
Hybrid	EUR	1.500%	11/30/2020	Perpetual (05/30/2028 [1])	850	Paris	FR0014000RR2	2020 and 2021 Universal Registration Documents
Hybrid	EUR	1.875%	07/02/2021	Perpetual (01/02/2031 [1])	705.1	Paris	FR00140046Y4	2021 Universal Registration Document
Senior	EUR	0.375%	10/26/2021	10/26/2029	750	Paris	FR0014005ZP8	2021 and 2022 Universal Registration Documents
	EUR	1.000%	10/26/2021	10/26/2036	750	Paris	FR0014005ZQ6	
Senior	EUR	3.500%	09/27/2022	09/27/2029	650	Paris	FR001400A1H6	2022 Universal Registration Document
Senior	EUR	3.625%	01/11/2023	01/11/2030	1,100 [2]	Paris	FR001400F1G3	2023 Universal Registration Document
	EUR	4.000%	01/11/2023	01/11/2035	1,175 [2]	Paris	FR001400F1I9	
	EUR	4.250%	01/11/2023	01/11/2043	750	Paris	FR001400F1M1	
Senior	GBP	5.625%	04/03/2023	04/03/2053	650	Paris	FR001400H1V0	2023 Universal Registration Document

Type	Currency	Coupon rate	Issue date	Maturity	Outstanding amount *(in currency millions)*	Exchange	ISIN Code	Details on allocations
Senior	CHF	2.340%	07/04/2023	01/04/2027	190	SIX	CH1277582008	2023 Universal Registration Document
	CHF	2.490%	07/04/2023	07/04/2031	225	SIX	CH1277582016	
Senior	EUR	4.500%	09/06/2023	09/06/2042	900	Paris	FR001400KHI6	2023 Universal Registration Document
Senior	EUR	3.875%	12/06/2023	12/06/2033	900	Paris	FR001400MF86	-

(1) First Call Date, or nearest date for early redemption in accordance with applicable conditions.
(2) Including increase by TAP operation.

The total amount of Green Bonds issued by ENGIE reached €20.89 billion at the end of 2023, of which €17.87 billion is still outstanding. The volume of new green bonds issued reached a record level in 2023 with an amount equivalent to €5.99 billion. ENGIE therefore maintains its leadership and commitment to playing a leading role in the energy transition while supporting the development of green finance.

The green bonds meet the terms of a referential framework (the "Green Bond Framework," updated and renamed "Green Financing Framework" in March 2020 and updated again in June 2023) that ENGIE has defined for its green bond issues. The Green Bond Framework and Green Financing Framework are available on ENGIE's website at the following address: www.engie.com/en/finance/credit/green-finance.

The principles of the Green Financing Framework of June 2023, which are a continuation of those set out in the Green Financing Framework of March 2020, are as follows:

- the funds raised are allocated to projects supporting the transition to a low-carbon economy directly linked to ENGIE's strategy ("Green Eligible Projects"). The Green Eligible Projects must fall in a pre-defined category of projects and meet certain technical criteria. The eligibility criteria were determined by ENGIE and approved by Moody's Investor Service. The second party opinion provided by Moody's is available on ENGIE's website at the following address: https://www.engie.com/sites/default/files/assets/documents/2023-06/MIS%20SPO_Engie_Final_20230613.pdf;
- until the funds raised are entirely allocated to Green Eligible Projects (or after, in case of a substantial change in allocations), ENGIE is committed to providing information in its Universal Registration Document on the fund allocations made during the period concerned;
- the funds may be allocated to Green Eligible Projects carried out after the issue of the green financing instrument, or used to refinance capex or opex on Green Eligible Projects having taken place in the 24 months prior to the issue of the green financing instrument (vs. Green Financing Framework of March 2020: no time limit for capex, and having taken place in the 24 months prior to the issue of the green financing instrument for OPEX). The amounts allocated are calculated after deduction of any external funding already dedicated to these projects;
- the funds raised can be allocated for refinancing other green financing instruments previously issued by ENGIE. For each issue, ENGIE undertakes to allocate at least 50% of the funds raised to new spending (on Green Eligible Projects) not allocated before (vs. Green Financing Framework of March 2020: 25%);
- as of December 31 of each year, the Group must hold cash (and cash equivalents) of an amount at least equal to the funds raised by the Green Bond, less amounts allocated to fund Green Eligible Projects at that date.

ENGIE aims to have fully allocated each Green Bond within two years of the date of issue (three years if the bond has a maturity of 10 years or more). If, for a given fiscal year, several Green Bonds must be allocated, the allocation in that year will be based, as far as possible, on the following principles:

- first by issuance date order, i.e. priority will be given to bonds issued first; and
- then in order of duration, with a shorter tranche having priority over a longer one.

In the specific case of refinancing of Green Eligible Projects, these projects will be allocated to all the Green Bonds in proportion to the amounts remaining to be allocated to them. It is however specified that in the event of repurchase of Green Bonds with a new concomitant green issue, the Green Eligible Projects will be reallocated as a priority to this new issue.

In line with its commitments, ENGIE requested one of its Statutory Auditors (Deloitte & Associés), to provide a statement certifying compliance of the selected projects with the eligibility criteria and the amounts allocated to those projects (see Section 5.3.4).

ENGIE follows the four principles established by the International Capital Market Association (Green Bond Principles), which are:

- the use of the proceeds;
- existing processes to evaluate and select Green Eligible Projects;
- the management of the proceeds; and
- reporting.

5.3.2 PROJECTS AND ELIGIBILITY CRITERIA

The categories of projects covered by the Green Financing Framework of 2023 are described below:

- renewable energy production (hydropower, geothermal energy, wind, solar, bioenergy, low-carbon hydrogen, marine energy);
- energy storage (electricity storage by pumped storage and batteries);
- transmission and distribution networks (electricity, renewable and low carbon gases)
- energy efficiency (including district heating and cooling network);
- clean transportation (including electric vehicle charging stations).

The following additional categories are also included in the 2020 Green Financing Framework:

- green buildings;
- carbon capture and storage;
- sustainable management of living natural resources and land use.

They received no allocation in 2023 and were removed from the 2023 Green Financing Framework.

The technical eligibility criteria for the different categories of the Green Financing Framework are available on ENGIE's website at the following address: https://www.engie.com/sites/default/files/assets/documents/2023-06/20230613_Engie_Green_Framework%20%28VDEF%29.pdf.

A Green Bond Committee was established in 2017. This Committee meets regularly to review market developments and Green Eligible Projects and to approve the allocation of the Green Bonds. It is jointly led by the CSR Department and the Finance Department and brings together the Procurement Department, the Global Care Department and the main GBU concerned.

5.3.3 GREEN ELIGIBLE PROJECTS

During 2023, the Group proceeded to the allocation of €4.96 billion of Green Eligible Projects, as per the below repartition:

In millions of euros **Allocated Green Bond**	**Green Financing Framework applicable**	**Nominal amount**	**Amount allocated in 2023** **Reallocations after repurchase / redemption**	**New allocations**	**Allocation balance**
Senior 7 years January 2023 (ISIN FR001400F1G3)	March 2020	1,100	56.3	1,043.7	-
Senior 12 years January 2023 (ISIN FR001400F1I9)	March 2020	1,175	60.1	1,114.9	-
Senior 20 years January 2023 (ISIN FR001400F1M1)	March 2020	750	38.4	711.6	-
Senior 30 years GBP April 2023 (ISIN FR001400H1V0)	March 2020	740.2 (1)	37.9	702.3	-
Senior 3.5 years CHF July 2023 (ISIN CH 1277582008)	June 2023	194.7 (1)	10.0	184.7	-
Senior 8 years CHF July 2023 (ISIN CH1277582016)	June 2023	230.6 (1)	11.8	218.8	-
Senior 19 years September 2023 (ISIN FR001400KHI6)	June 2023	900	39.2	726.9	133.9
Senior 10 years December 2023 (ISIN FR001400MF86)	June 2023	900	-	-	900
TOTAL		**5,990.5**	**253.6**	**4,703.0**	**1,033.9**

(1) Nominal amount of the issue in currency converted into euros at the currency hedge rate / historical rate.

These allocations mean that all the funds raised by the six green bonds issued between January and July 2023 have been fully allocated, and the September 2023 green bond has been partially allocated. In accordance with the principle of allocation by seniority, the Green Bonds issued in December 2023 were not subject to allocation in 2023.

5.3.3.1 Reallocation after redemption

In the context of the aforementioned redemption of the €500 million green bond issued in 2017 (FR0013284247), Green Bonds issued between January and September 2023 benefited from the partial reallocation of the Green Eligible Projects allocated to the redeemed bond.

The distribution of reallocations to Green Bonds issued between January and September 2023 is proportional to the respective fund balances to be allocated to these tranches.

The total amount reallocated is €253.6 million and is established on the basis of the initial amount allocated to the various Green Eligible Projects meeting the criteria of the Green Financing Frameworks of 2020 and 2023.

The production of solar renewable energy represents the main category of reallocated projects (€123.3 million), followed by wind (€107.7 million), power transmission (€19.2 million) and bioenergy (€3.2 million).

The reallocated amounts relate to Green Eligible Projects located in the following geographic areas: South America 37%, Europe 24%, Africa 21%, North America 16%, and Asia / Oceania 2%.

5.3.3.2 New allocations

The main Green Eligible Projects financed by the proceeds from the green bond issues carried out between January 2023 and September 2023 that meet the conditions of the above-mentioned Green Financing Framework are listed in the following table:

			Jan. 23			Apr. 23	Jul. 23		Sept.23
			Senior	Senior	Senior	Senior	Senior	Senior	Senior
In millions of euros	Projects	Country	€1,100 M 7 yrs	€1,175 M 12 yrs	€750 M 20 yrs	GBP 650 M 30 yrs	CHF 190 M 3.5 yrs	CHF 225 M 8 yrs	€900 M 19 yrs
Renewable energy production									
Solar Power			**294.8**	**314.9**	**201.0**	**198.3**	**52.2**	**61.8**	**205.3**
North America	Chillingham, Five Wells, Hopkins, Powells Creek, Ray Ranch, River Ferry, Salt City, Sandy Branch	United States							
Europe	ENGIE Green, CN'AIR	France							
	Various PV projects	Italy, Romania, Germany							
Asia and Oceania	Raghanesda, various	India, Australia							
South America	Calpulapan	Mexico							
Africa	Kathu	South Africa							
Wind Power			**177.3**	**189.4**	**120.9**	**119.3**	**31.4**	**37.2**	**123.5**
Europe	ENGIE Green, CN'AIR	France							
	OW, Meridion Benilde	Spain							
	Porto Torres, Ramingallo, Turna	Italy							
	Victoria, projets repowering	Germany							
North America	Projects repowering	Belgium							
	Century Oak, Limestone, North Bend	United States							
Hydropower			**63.4**	**67.7**	**43.2**	**42.7**	**11.2**	**13.3**	**44.1**
Europe	CNR, SHEM, CN'AIR	France							
	Various small hydro	Germany, Belgium							
Bioenergy			**29.8**	**31.8**	**20.3**	**20.1**	**5.3**	**6.2**	**20.8**
Europe	Ixora (M&A)	United Kingdom							
	ENGIE Bioz (biomethane), biomass plant for DHC	France							
	Biomass projects	Portugal, Poland							
Low carbon H2			**2.8**	**3.0**	**1.9**	**1.9**	**0.5**	**0.6**	**1.9**
Asia and Oceania	Yuri	Australia							
Geothermal			**0.9**	**0.9**	**0.6**	**0.6**	**0.2**	**0.2**	**0.6**
Europe	Champs sur Marnes, Georueil, Meudon	France							
R&D			**5.5**	**5.8**	**3.7**	**3.7**	**1.0**	**1.1**	**3.8**
Europe	R&D	France							

			Jan. 23		Apr. 23		Jul. 23		Sept.23
In millions of euros	**Projects**	**Country**	**Senior €1,100 M 7 yrs**	**Senior €1,175 M 12 yrs**	**Senior €750 M 20 yrs**	**Senior GBP 650 M 30 yrs**	**Senior CHF 190 M 3.5 yrs**	**Senior CHF 225 M 8 yrs**	**Senior €900 M 19 yrs**
Energy storage									
Electricity storage			**377.0**	**402.7**	**257.1**	**253.7**	**66.7**	**79.0**	**262.6**
North America	Broad Reach Power (M&A), Battery Energy Storage Systems for renewables	United States							
Europe	First Hydro (pumped hydropower)	United Kingdom							
	Coo (pumped hydropower), Vilvoorde BESS	Belgium							
Asia and Oceania	Hazelwood BESS	Australia							
R&D			**1.7**	**1.9**	**1.2**	**1.2**	**0.3**	**0.4**	**1.2**
Europe	R&D	France							
Energy Efficiency									
Energy Efficiency			**40.5**	**43.2**	**27.6**	**27.2**	**7.2**	**8.5**	**28.2**
Europe	District heating networks	France							
	Public lighting	Italy							
Middle East	Projet Waste Heat Recovery industriel	United Arab Emirates							
R&D			**5.2**	**5.5**	**3.5**	**3.5**	**0.9**	**1.1**	**3.6**
Europe	R&D	France							
Transmission and distribution infrastructure									
T&D for renewable and low carbon gases			**34.3**	**36.7**	**23.4**	**23.1**	**6.1**	**7.2**	**23.9**
Europe	Biomethane injection	France							
Clean Transportation									
Clean Transportation			**10.6**	**11.3**	**7.2**	**7.1**	**1.9**	**2.2**	**7.4**
Europe	EV charging stations	France, Belgium							
TOTAL			**1,043.7**	**1,114.9**	**711.6**	**702.3**	**184.7**	**218.8**	**726.9**

The projects (and the related capex) set out in the above table for a total of €4.70 billion are allocated globally to the green bond issued between January and September 2023, in proportions enabling finalization of the allocation of the green bonds issued between January and July 2023 and allocating partially the green bond issued in September 2023.

As a reminder, the green bonds issued in 2014, 2017, 2018, 2019, 2020, 2021 and 2022 have been fully allocated. Details of the Eligible Projects and the corresponding allocations were published in the 2014 to 2022 Registration and Universal Registration Documents.

Of the funds allocated to Green Eligible Projects during 2023, 1.2 billion relate to investments made during 2022 and 3.5 billion to investments made in 2023.

The retained allocations contribute to the funding or acquisition of Green Eligible Projects in:

- renewable energy (solar power, wind power, hydraulic, bioenergy, low-carbon hydrogen, and / or geothermal energy);
- energy storage;
- energy efficiency;
- renewable gas transmission and distribution networks;
- clean mobility.

1) Renewable Energy

Energy transition and the development of renewable energy on a global scale are a strategic priority for ENGIE. In 2021, the Group set itself the target of stepping up its investments in renewables to enable it to install 3 GW of additional capacities in 2021, then 4 GW per year on average from 2022 to 2025, and finally 6 GW per year from 2026. The Group's installed electricity production capacity centralized and decentralized, taken at 100% for its renewables production businesses, reached 41.4 GW in 2023, accounting for 41% of its installed capacity. ENGIE is targeting a 58% share of renewable energy installed capacity in its electricity production portfolio taken at 100% by 2030. In 2023, ENGIE continued to expand its portfolio of renewable assets, mainly in wind and solar by developing new projects in particular in North America, South America and Europe. Investments in offshore wind continued via the joint venture Ocean Winds. The Group aims to reaching 100% of renewable gases in its energy mix in 2050, with the intermediate objective of having a production capacity of 10 TWh / year in Europe. In France, ENGIE Bioz initiates, develops, finances, builds and operates biomethane production units, and is one of the market leaders. In September 2023, ENGIE acquired Ixora Energy Ltd, also a leader in biomethane production in the UK, with a production capacity of 160 GWh per year. Moreover the Group aims to have a production capacity of hydrogen by electrolysis of 4 GW by 2035.

In 2023, a total amount of €2.6 billion was allocated to Green Eligible Projects developed in the field of renewable energy. When fully operational, these projects should contribute to avoiding greenhouse gas emissions by a minimum of 2.36 million metric tons of CO_2 eq. per year.

The methodology for calculating avoided emissions is based on a comparison of the Life-Cycle Analysis (LCA) values of the emissions of the energy production technique implemented by the project and the emissions of the energy mix of the country in question. ENGIE evaluates the contribution to avoided emissions resulting from Green Bond-funded projects by multiplying the difference between the two LCA values stated with the plant's capacity and the technology's average load factor. The contribution to avoided emissions is calculated for one year of operation of the projects, considered in a full operational mode and taken at 100% regardless of the Group's ownership rate of these projects.

Per-country reference data for the average operating rates of technologies used and the average CO_2 emissions rates per kWh of the generation mix were drawn from data from Enerdata. The technologies' LCA data is derived from work performed by the Intergovernmental Panel on Climate Change (IPCC).

2) Energy storage

Energy storage solutions play a major role in the energy transition and are an essential link in the electricity networks. By storing energy produced at times when wind and solar sources are at their most productive, and / or when demand is lowest, they respond to the need to balance intermittent supply of renewable energy, which make up an increasing proportion of energy production.

ENGIE invests in pumped storage and battery storage for this reason.

The Green Eligible Projects in question include:

- The acquisition of Broad Reach Power, a Houston-based company specializing in battery storage activities. The transaction involves 350 MW of operational assets, 880 MW of assets under construction with commissioning expected before the end of 2024, and 1.7 GW of projects at an advanced stage of development;
- the Dinorwig (1,728 MW) and Ffestiniog (360 MW) pumped storage facilities in the United Kingdom, owned and operated by First Hydro, which is 75% owned by ENGIE;
- the Coo pumped storage plant (Belgium) where investments are being made to expand its storage facilities in order to increase its installed power by 79 MW;
- the power battery storage project at Hazelwood in Australia.

In 2023, a total amount of €1.7 billion was allocated to Green Eligible Projects developed in the field of energy storage. When fully operational, these projects should contribute to reducing greenhouse gas emissions by a minimum of 0.46 million metric tons of CO_2 eq. per year.

The methodology for calculating the contribution to avoided emissions for storage projects is based on a comparison of the emission factors of the energy production technique implemented by the project and the reference scenario. In some cases, the gas turbine is taken as the reference ; in other cases, the reference is the grid. ENGIE estimates the contribution to avoided emissions of Green Bond-funded projects by multiplying the difference between the above emission factors by the average production of the facilities. The contribution to avoided emissions is calculated for one year of operation of the projects, considered in a full operational mode and taken at 100% regardless of the Group's ownership rate of these projects.

3) Energy Efficiency

Another strategic focus of the Group is the development of high efficiency energy networks supporting the transition to a low-carbon economy. In 2023, ENGIE continued to develop urban heating or cooling networks in Europe and mainly in France.

In 2023, a total amount of €206 million was allocated to Green Eligible Projects developed in the field of energy efficiency. When fully operational, these projects should contribute to reducing greenhouse gas emissions by a minimum of 0.34 million metric tons of CO_2 eq. per year.

The calculation of avoided emissions is done by comparing the level of emissions of ENGIE projects with a reference scenario, in this case the use of an individual gas heating system when it comes to a district heating network, or individual air conditioning in the case of a district cooling network. The contributions to avoided emissions are calculated for one year of operation of the projects, considered in a fully operational mode and taken at 100% regardless of the Group's ownership rate of these projects.

4) Transmission and distribution networks for renewables gases

In France, the Group is pursuing, through its networks business lines, its efforts to develop the methanization of organic waste into renewable gases and to recover them through injection into the gas networks. This notably relates to investments to connect biomethane production units to ENGIE distribution and transmission networks.

In 2023, a total amount of €155 million was allocated to Green Eligible Projects developed in these fields. When fully operational, these projects should contribute to reducing greenhouse gas emissions by a minimum of 0.49 million metric tons of CO_2 eq. per year.

The methodology for calculating avoided emissions is based on a comparison of the Life-Cycle Analysis (LCA) values of the emissions of the energy production technique implemented by the project and the emissions of the energy mix of the country in question.

5) Clean mobility

ENGIE is strongly committed vis-a-vis local authorities, motorway concession-holders and companies to rolling out and connecting a network of charging stations for electric vehicles that are available and competitive for the benefit of users. The Group has won several tenders in France and Belgium in this fast-growing market.

In 2023, a total amount of €48 million was allocated to Green Eligible Projects developed in the field of low-carbon mobility. When fully operational, these projects should contribute to reducing greenhouse gas emissions by a minimum of 0.02 million metric tons of CO_2eq. per year.

The calculation of avoided emissions is done by comparing the level of emissions of ENGIE projects with a reference scenario, in this case the use for the same distance traveled of vehicles representative of the average fleet at the level of the project's country or region, taking into account local decarbonization trends (electrification of part of the fleet, greening of fuels). The contributions to avoided emissions are calculated for an average year of operation of the projects, considered in a fully operational mode and taken at 100% regardless of the Group's ownership rate of these projects.

5.3.3.3 Statement of finalized overall allocations

5.3.3.3.1 Green bonds issued between January and July 2023: FR001400F1G3, FR001400F1I9, FR001400F1M1, FR001400H1V0, CH1277582008, CH1277582016

The allocation of the above-mentioned Green Bonds relates to the same group of Green Eligible Projects, with a proportional distribution to the various bonds. The main geographic areas concerned by the allocation are North America and Europe which respectively accounted for 53.3% and 41.8% of the amounts invested. With regard to the technologies used, the main project sub categories concerned by the allocation are energy storage (34.4%), solar (29.3%), wind (18.3%), hydropower (5.8%) and energy efficiency (4.2%).

Geographic areas	**Allocated funds** *(in %)*
North America	53.3%
Europe	41.8%
South America	2.6%
Africa	1.4%
Asia and Oceania	0.8%
Middle East	0.1%

Technology	**Allocated funds** *(in %)*
Energy Storage	34.4%
Solar Power	29.3%
Wind Power	18.3%
Hydraulic	5.8%
Energy Efficiency	4.2%
Others (bioenergy, transmission and distribution of electricity and of renewable and low carbon gases, geothermal energy, low carbon H_2, clean mobility)	8.0%

In line with the Group's commitments, a more detailed description of the impacts in terms of avoided emissions and the related methodology is available on the Sustainable Development page of the Group's website (www.engie.com/en/csr/green-bonds).

5.3.4 LIMITED ASSURANCE REPORT FROM ONE OF THE STATUTORY AUDITORS ON INFORMATION RELATED TO THE ALLOCATION, AS OF DECEMBER 31, 2023, OF FUNDS RAISED THROUGH THE GREEN BONDS ISSUED ON JANUARY 11, 2023, APRIL 3, 2023, JULY 4, 2023, AND SEPTEMBER 6, 2023

Year ended December 31, 2023

This is a free translation into English of the original report issued in the French language and is provided solely for the convenience of English-speaking users. This report should be read in conjunction, and construed in accordance, with French law and regulations applicable in France.

To the Chairman of the Management Board,

In our capacity as statutory auditor of Engie S.A. ("**the Company**"), and in accordance with your request, we have undertaken a limited assurance engagement on the following information ("the Information"):

- the allocation, as of December 31, 2023, of funds raised through the Green Bonds issued on January 11, 2022, for a total amount of €3 025 million in three tranches, on April 3, 2023, for a total amount of £650 million, on July 4, 2023, for a total amount of CHF 415 million in two tranches, and on September 6, 2023, for a total amount of €900 million (the "Issuances"), contained in the attached document "Green Bonds" (the "**Green Bond Reports**")
- the projects financed by the Issuing and identified as eligible by the Company (the "Eligible Projects").

The Information has been prepared in the context of the green bonds offering dated on January 11, 2023, April 3, 2023, July 4, 2023, and September 6, 2023 (the "Green Bonds Offerings") and the green bonds framework defined by the entity (the "**Green Bonds Framework**").

Our limited assurance conclusion

Based on the procedures we have performed as described under the section "Summary of the work we performed as the basis for our assurance conclusion" and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Information is not prepared, in all material respects, in accordance with the Company's Green Bonds Framework used and the basis of preparation set out in the section "Understanding how Engie has prepared the Information".

We do not express an assurance conclusion on information in respect of earlier periods not covered by the Green Bonds Report or on any other information not included in the Green Bonds Report.

We have not reviewed and do not provide any assurance over other individual project information reported.

Understanding how Engie has prepared the Information

The absence of a commonly used generally accepted reporting framework or a significant body of established practices on which to draw to evaluate and measure the sustainability information allows for different, but acceptable, measurement techniques that can affect comparability between entities and over time.

Consequently, the Information needs to be read and understood together with the Green Bonds Offerings and the Green Bonds Framework available on the internet site or on demand.

Engie's responsibilities

Management of Engie S.A. are responsible for:

- Selecting or establishing suitable criteria for preparing the Information;
- Selecting the Eligible Projects regarding the eligible criteria;
- Preparation of the Information in compliance with the Green Bonds Offerings and the Green Bonds Framework;
- Designing, implementing and maintaining internal control over information relevant to the preparation of the Information that is free from material misstatement, whether due to fraud or error.

Our responsibilities

We are responsible for:

- Planning and performing the engagement to obtain limited assurance about whether the Information is free from material misstatement, whether due to fraud or error;
- Forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- Reporting our conclusion to the Directors of the Company.

As we are engaged to form an independent conclusion on the Information as prepared by management, we are not permitted to be involved in the preparation of the Information as doing so may compromise our independence.

However, we have no responsibility for:

- challenging the eligibility criteria defined in the appendix to the Green Bond Report and, in particular, we give no interpretation on the terms of the Green Bond Report;
- forming an opinion on the effective use of the funds allocated to the Eligible Projects after such funds have been allocated.

Professional standards applied

We performed a limited assurance engagement in accordance with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements and the International Standard on Assurance Engagements 3000 (Revised).

Our independence and quality control

We have complied with the independence and other ethical requirements of the French Code of Ethics for Statutory Auditors (Code de Déontologie) as well as the provisions set forth in Article L.822-11 of the French Commercial Code (Code de Commerce) and the standards issued by the IESBA (International Ethics Standard Board for Accountants).

In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with applicable legal and regulatory requirements, the ethical requirements, and the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements.

Our work was carried out by an independent and multidisciplinary team with experience in sustainability and corporate social responsibility.

Summary of the work we performed as the basis for our Assurance Conclusion

We are required to plan and perform our work to address the areas where we have identified a material misstatement of the Information is likely to arise. The procedures we performed were based on our professional judgment.

In carrying out our limited assurance engagement on the Information we:

- obtained an understanding of the procedures implemented by the Company for producing the Information contained in the attached document;
- assessed the compliance, of the Eligible Projects referred to in the attached document with the eligibility criteria, by performing substantive procedures using sample testing or other selection methods, as defined in the appendix to the Green Bond Report and in the Green Bond Framework;
- verified the appropriate allocation of the funds raised from the Issuances to Eligible Projects;
- verified the global allocation of the capital expenditures incurred in relation to the Eligible Projects financed by each of the Issuances;
- performed the necessary reconciliations between this information and the underlying accounting records, and verified that the information agrees with the data used to prepare the consolidated financial statements for the years ended December 31, 2022 and December 31, 2023.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

This report has been prepared within the context described above and may not be used, distributed or referred to for any other purpose.

Paris-La Défense, March 5, 2024

One of the Statutory Auditors,

Deloitte & Associés

French original signed by:

Nadia Laadouli
Partner, Audit

Patrick E. Suissa
Partner, Audit

5.4 SHAREHOLDING

5.4.1 STOCK EXCHANGE QUOTATION

Trading volumes and high and low prices of ENGIE shares in Paris

2023	High (1) *(in euros)*	Low (1) *(in euros)*	Trading volume (2)
January	13.556	12.472	6,261,548
February	14.25	12.842	6,245,420
March	14.574	13.432	7,375,972
April	15.474	14.516	5,727,734
May	14.868	13.896	4,857,450
June	15.228	14.078	4,313,620
July	15.462	14.90	3,506,877
August	15.032	14.40	3,383,213
September	15.288	14.388	3,645,447
October	15.004	14.002	3,873,062
November	15.918	15.136	3,642,543
December	16.270	15.918	3,277,343

(1) Rate obtained from daily closing prices.
(2) Daily average (source: Bloomberg).

Subsequent to the deregistration of ENGIE with the U.S. Securities & Exchange Commission on October 30, 2009, ENGIE maintains an unlisted Level 1 American Depositary Receipt (ADR) program on a U.S. stock exchange. These ADRs are traded on the Nasdaq over-the-counter market.

5.4.2 BREAKDOWN OF SHARE CAPITAL

5.4.2.1 Change in the breakdown of share capital and voting rights

As of December 31, 2023, the Company held 2,435,285,011 shares, including 13,835,367 in treasury stock.

Major changes in ENGIE shareholdings during the past three fiscal years

	12/31/2023				12/31/2022		12/31/2021	
	Number of shares	% of share capital	% of theoretical voting rights (1)	% of exercisable voting rights	% of share capital	% of theoretical voting rights (1)	% of share capital	% of theoretical voting rights (1)
Public	1,346,613,443	55.30	47.81	47.19	58.07	49.82	58.50	50.28
French State	575,693,307	23.64	33.80	33.95	23.64	33.56	23.64	33.20
The Capital Group Companies	122,615,086	5.03	3.98	4.00	4.83	3.79	5.02 (2)	4.00 (2)
CDC Group (3)	112,201,818 (4)	4.61	4.27	4.29	4.61	4.24	4.59	4.28
BlackRock	121,538,198	4.99	3.83	3.84	4.37	3.32	4.47 (5)	3.46 (5)
Employee shareholding	80,614,947	3.31	3.99	4.01	3.88	4.82	3.16	4.31
Treasury stock	13,835,367	0.57	0.43	0.00	0.60	0.45	0.62	0.47
Management	NS	NS	NS	NS	NS	NS	NS	NS
TOTAL	**2,435,285,011**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

(1) Pursuant to Article 223-11 of the AMF General Regulations, the number of theoretical voting rights is calculated on the basis of all shares to which voting rights are attached, including shares held by the Group, from which voting rights have been removed.
(2) Information not available on December 31, 2021 (data on November 16, 2021, from the disclosures threshold notification).
(3) CDC Group (Caisse des Dépôts et Consignations + CNP Assurances).
(4) Shares allocated in the following way: CDC (directly) holds 88,303,888 shares (3.63% of the share capital and 3.52% of theoretical voting rights) and CNP Assurances holds 23,897,930 shares (0.98% of the share capital and 0.75% of theoretical voting rights).
(5) Information not available on December 31, 2021 (data on December 30, 2021, from the disclosures threshold notification).

Pursuant to the provisions of Article L.233-13 of the French Commercial Code, it is stipulated that, to ENGIE's knowledge, only the French State and The Capital Group Companies held a stake of more than 5% of the share capital or voting rights at the end of fiscal year 2023.

The Group has almost 560,000 individual shareholders. On December 31, 2023, they held around 198.8 million shares, or nearly 8.2% of the Company's share capital.

5.4.2.2 Breakdown of shares held directly and indirectly by employees

On December 31, 2023, employees held 80.6 million ENGIE shares, i.e. 3.31% of the share capital and 4.03% of theoretical voting rights within the meaning of Paragraph 1 of Article L.225-102 of the French Commercial Code, broken down as follows:

Link France mutual fund (FCPE)	44.9 million
Link International mutual fund (FCPE)	10.7 million
Direct shareholding formulas	25 million
TOTAL SHARES HELD BY EMPLOYEES	**80.6 MILLION**

5.4.3 DISCLOSURE THRESHOLDS

Following the acquisition and disposal of ENGIE shares on the market and the change in the number of shares held as collateral, BlackRock and The Capital Group Companies made several disclosures that they had exceeded or dropped below the legal threshold of one-twentieth (5%) of voting rights.

Finally, BlackRock disclosed that it had fallen below the 5% voting rights threshold on February 26, 2024, and held 4.98% of the share capital and 3.81% of the voting rights of ENGIE on that date. On January 11, 2024, The Capital Group Companies exceeded the legal threshold of a twentieth (5%) of ENGIE's share capital and held 6.37% of the share capital and 5.04% of the voting rights of the Company on that date. This threshold was crossed due to shares being acquired by ENGIE on the market.

To the Company's knowledge, as of the date of this Universal Registration Document, only the French State and The Capital Group Companies hold share capital and / or voting rights in ENGIE that exceed one of the legal thresholds.

5.4.4 GOLDEN SHARE

Pursuant to Article L.111-68 of the French Energy Code, the French government is required to hold at least one share of the Company.

Pursuant to Article L.111-69 of the French Energy Code, ENGIE's share capital includes a "golden share" resulting from the conversion of one common share owned by the French State to preserve the essential interests of France in the energy sector relating to the continuity and security of the energy supply. The golden share is granted to the French government indefinitely and entitles it to veto decisions made by ENGIE or its French subsidiaries, which directly or indirectly seek to sell in any form whatsoever, transfer operations, assign as collateral or guarantee, or change the intended use of certain assets covered by the French Energy Code, if it considers they could harm essential French interests, particularly as regards the continuity and security of the energy supply.

Under the terms of Article D.111-20 of the French Energy Code, French State's golden share grants it the rights defined in Article D.111-21 of the French Energy Code, aimed the assets covered by the French State's right of veto, i.e.:

- natural gas transmission pipelines located in France;
- assets related to the distribution of natural gas in France;
- natural gas underground storage located in France;
- liquefied natural gas facilities located in France.

Pursuant to those same provisions, all decisions of this nature must be reported to the French Minister of the Economy.

The decisions mentioned above are deemed to be authorized if the Minister of the Economy does not veto them within one month of the date of their disclosure, as recorded by a receipt issued by the administration. This period may be extended for a period of 15 days by order of the Minister of the Economy. Before the expiration of the aforementioned period, the Minister of the Economy may waive its right to veto. If there is a veto, the Minister of the Economy will communicate the reasons of his or her decision to the Company in question. The decision of the Minister of the Economy may be appealed.

Pursuant to Article 2 of Decree No. 2019-1071 of October 22, 2019, and Article 3 of Decree No. 93-1296 of December 13, 1993, any transaction executed in violation of these rules is automatically null and void.

As of the date of this Universal Registration Document, to ENGIE's knowledge, there is no agreement relating to an operation on any entity that is a member of the ENGIE Group, concerned by these provisions, or any agreement which, if implemented, could lead to a change in its control.

5.4.5 DIVIDEND DISTRIBUTION POLICY

ENGIE seeks to pursue a dynamic and attractive dividend distribution policy. The Board of Directors has thus reaffirmed the Group's dividend policy, which aims to distribute 65 to 75% of net recurring income / (loss) Group share, including a dividend floor of €0.65 per share for the period from 2024 to 2026.

For 2023, the Board of Directors has therefore proposed to distribute 65% of the net recurring income / (loss) Group share, i.e. a dividend of €1.43 per share. This proposal will be submitted to the shareholders for approval at the Shareholders' Meeting on April 30, 2024.

Furthermore, in order to encourage and reward shareholder loyalty, the Shareholders' Meeting of April 28, 2014, instituted a 10% dividend mark-up for shareholders who have held their shares in registered form for at least two years. This 10% may not exceed 0.5% of the share capital for a single shareholder at the closing of the previous financial year, this increase and this ceiling being the maximum authorized by Article L.232-14 of the French Commercial Code, as set out in Article 26.2 of ENGIE's bylaws. This measure was applied for the first time to the dividend payment for fiscal year 2016.

The Group's outlook and guidance, presented in Section 6.1.1.1.2 "2024-2026 outlook and guidance," do not constitute under any circumstances a commitment by the Company. Future dividends will be assessed on a year-by-year basis depending on the Company's results, financial position and any other factors considered relevant by the Board of Directors in preparing its proposals to the Shareholders' Meeting.

Dividend per share in the last five years

Fiscal year *(fully paid-up shares)*	**Net dividend per share** *(in euros)*
2018	1.12
2019 (1)	0
2020	0.53
2021	0.85
2022	1.40

(1) On April 1, 2020, the Board of Directors decided not to distribute dividends for fiscal year 2019, in a spirit of responsibility and prudence in the exceptional context of the Covid-19 epidemic.

After a period of five years, unclaimed dividends are automatically paid to the French Treasury.

5.4.6 SHAREHOLDERS' AGREEMENT

At the date of this Universal Registration Document and to the best of ENGIE's knowledge, there are no shareholders' agreements nor any agreement whose implementation may lead to a change in control over the Company in place.

5.5 FINANCIAL REPORTING SCHEDULE

Publication of annual earnings 2023 and mid-term ambitions	February 22, 2024
Shareholders' Meeting	April 30, 2024
Publication of first quarter 2024 results	May 17, 2024
Publication of the 2024 half-year results	August 2, 2024

6

FINANCIAL INFORMATION

6.1 REVIEW OF THE FINANCIAL POSITION

6.1.1 MANAGEMENT REPORT

6.1.1.1 ENGIE 2023 results

ENGIE FY 2023 results

- Another year of strong growth in results underpinned by successful execution of our strategy;
- Proposed dividend of €1.43 per share for 2023;
- Robust medium-term outlook 2024-2026.

Business highlights

- High pace of growth in Renewables with 3.9 GW of additional installed capacity in 2023 reaching a total of 41.4 GW;
- Acceleration in battery storage with the acquisition of BRP in the United States and the commissioning of Hazelwood in Australia;
- Visibility reinforced on the contribution of Networks in France;
- Continued progress in Net Zero 2045 trajectory with a 54% reduction *vs.* 2017 in GHG emissions from energy production to 52Mt in 2023;
- Signature of the final agreement on Belgian nuclear, thereby fundamentally de-risking the Group.

Financial performance

- Guidance 2023 achieved with NRIgs of €5.4 billion;
- EBIT excluding nuclear of €9.5 billion, an organic increase of 18%, driven mainly by GEMS and Renewables;
- Cash Flow From Operations [1] sharply up by €5 billion supported by improvement in working capital;
- Growth capexup 48% to €8.1 billion;
- Solid balance sheet with economic net debt to EBITDA at 3.1x;
- Net financial debt at €29.5 billion, up €5.4 billion, economic net debt at €46.5 billion, up €7.7 billion;
- 2024 NRIgs [2] expected in the range of €4.2 to €4.8 billion;
- Proposed dividend of €1.43 per share for 2023, corresponding to a pay-out ratio of 65%.

6.1.1.1.1 Key financial figures at December 31, 2023

In billions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
Revenues	82.6	93.9	-12.0%	-11.4%
EBITDA (excluding Nuclear)	13.7	12.2	+12.5%	+12.7%
EBITDA	15.0	13.7	+9.5%	+9.7%
EBIT (excluding Nuclear)	9.5	8.0	+18.2%	+18.3%
Net recurring income of continuing activities, Group share	5.4	5.2	+2.8%	+2.7%
Net income, Group share	2.2	0.2		
CAPEX[1]	10.6	7.9	+17.4%	
Cash Flow From Operations (CFFO)	13.1	8.0	+63.1%	
Net financial debt	29.5	+€5.4 billion *versus* Dec. 31, 2022		
Economic net debt	46.5	+€7.7 billion *versus* Dec. 31, 2022		
Net financial debt	3.1x	+0.3X *versus* Dec. 31, 2022		

(1) Net of DBSO sell down (Develop, Build, Share & Operate), US tax equity proceeds, including net debt acquired.

(1) Cash Flow From Operations: Free Cash Flow before maintenance Capex and nuclear phase-out expenses
(2) Net recurring income Group share.

6.1.1.1.2 2024-2026 outlook and guidance

The objectives for the financial years ending December 31, 2024, 2025 and 2026 presented below are based on data, assumptions and estimates considered reasonable by the Group at the date of publication of this document.

These data and assumptions may change or be modified as a result of uncertainties relating to the financial, accounting, competitive, regulatory and tax environments, or other factors of which the Group is unaware at the date of registration of this document. Furthermore, the realization of forecasts depends on the success of the Group's strategy. Consequently, the Group neither undertakes nor gives any guarantee that the forecasts set out in this section will be achieved.

The objectives presented below and underlying assumptions have also been established in accordance with the provisions of Delegated Regulation (EU) No. 2019/980, a supplement to Regulation (EU) No. 2017/1129, and the ESMA recommendations on forecasts.

These objectives result from the budget and medium-term plan processes described in Note 13 to the consolidated financial statements; they have been established on a basis comparable to historical financial information and in accordance with the accounting policies applied to the Group's consolidated financial statements for the year ended December 31, 2023 described in the consolidated financial statements.

6.1.1.1.2.1 2024-2026 outlook and guidance

ENGIE continues actively to roll out its Strategic Plan aimed at achieving carbon Net Zero by 2045.

Despite decrease in market prices in the last quarters and given the now embedded growth of GEMS contribution to our activities, ENGIE upgrades net recurring income Group share guidance for 2024 to a range of €4.2 to 4.8 billion compared to the previous range of €3.8 to 4.4 billion. EBIT excluding Nuclear is expected within an indicative range of €7.5 to 8.5 billion (compared to €7.2 to 8.2 billion previously announced).

2026: a pivotal year for ENGIE

By 2026, the Group anticipates growth in Renewables fuelled by investments, in Energy Solutions driven by additional capacity and improved margins as well as a higher contribution from Networks and GEMS with a normalized yearly EBIT upgraded from €1.0 billion to €1.5 billion, which allows to offset the impact of the decrease in commodity prices and spreads in Europe, occurred in the second half of last year, on activities exposed to market prices. Batteries activities are also expected to make an increasing contribution to the Group's results from 2024 onwards. Furthermore, as anticipated, ENGIE expects a decrease in Nuclear results following the shutdown of several power plants in Belgium by 2025 and the LTO of Doel 4 and Tihange 3 reactors.

Therefore, ENGIE outlook for 2024-2026 is:

In billions of euros	2024	2025	2026
EBIT excluding Nuclear (new)	**7.5-8.5**	**7.9-8.9**	**8.2-9.2**
EBIT excluding Nuclear (previous)	7.2-8.2	7.5-8.5	n/a
NRIgs guidance (new)	**4.2-4.8**	**3.9-4.5**	**3.7-4.3**
NRIgs guidance (previous)	3.8-4.4	4.1-4.7	n/a

Price assumptions for the 2024-2026 guidance are based on forward prices in Europe as of December 29, 2023.

ENGIE is committed to a strong investment grade credit rating and continues to target a ratio below or equal to 4.0x economic net debt to EBITDA over the long-term.

Main drivers for 2024-2026 EBIT evolution by activity:

2021	2023	Activity	Expectations for main EBIT evolution drivers	vs. 2021[1]	vs. 2023[1]	2026
EBIT excluding Nuclear €5,2 billion	**EBIT excluding Nuclear €9,5 billion**	**Renewables**	Investments contribution, lower prices	++	+	**EBIT excluding Nuclear indication €8.2 billion to €9.2 billion**
		Networks	Regulated tariffs reflecting inflation, cost and revenue clawback from previous period in France, new investments	++	++	
		Energy Solutions	Investments contribution, continued improvement of performance, negative one-offs in 2023	=+	+	
		FlexGen	Prices & volatility normalization, lower thermal volumes partially offset by acceleration in batteries	=-	-	
		Retail	Portfolio management and optimization, high comparison basis in 2023	=+	=-	
		GEMS	Normalization of prices and volatility	++	- - - -	
		Nuclear	Plant shutdowns and LTO impact from 2026	-	-	

(1) *Convention: each "+" sign amounts to c. +€500 m, each "-" sign amounts to c. -€500 m, "=+" sign amounts to a variation between 0 and +250, "=-" sign amounts to a variation between -250 to 0.*

ENGIE forecasts an EBIT excluding nuclear between €8.2 and 9.2 billion in 2026 compared to €9.5 billion in 2023 (and €5.2 billion in 2021). Expected contribution from investments (+€1.6-2.0 billion) and performance (+€0.5-0.7 billion) should be offset by negative price effects of circa -€2.9-3.5 billion and other effects such as exchange rates, scope effects or climate.

The average annual growth rate of EBIT excluding nuclear between 2021 and 2026 is expected to reach 10% to 12%.

Capex

ENGIE confirms its €22-25 billion growth Capex target over 2023 to 2025 and expects to invest a similar yearly amount on average in 2026. Capital allocation is based on strict discipline respecting financial and ESG criteria.

Performance

ENGIE continues its efforts towards efficiency by significantly controlling its general and administrative expenses, improving the efficiency of support functions, and restructuring underperforming activities. The Group aims for a positive impact of these measures on EBIT amounting to circa €200 million p.a. over the period 2024-26.

Disposals

After successfully completing its previous disposal plan with €11 billion over the period 2021-22, the Group significantly reduced the amount of disposals in 2023 (€0.3 billion). ENGIE expects a limited portfolio turnover until 2026, with disposals estimated at less than €1 billion per year in average.

6.1.1.1.2.2 Assumptions

The assumptions used are as follows:

- guidance and indications based on continuing operations;
- no change in accounting policies;
- no major regulatory or macro-economic changes;
- inframarginal rent caps based on current legal texts;
- updated regulatory framework for 2024-2027 on French networks;
- full pass through of supply costs in French B2C retail tariffs;
- average temperature in France;
- average hydro, wind, and solar productions;
- average forex:
  - €/USD: 1.11 for 2024, 1.13 for 2025 and 1.15 for 2026,
  - €/BRL: 5.34 over 2024-26;
- Belgiam nuclear availability: c. 92% in 2024 and c. 94% in 2025, based on reactors availabilities as published on REMIT as of 01/01/2024, excluding LTO;
- contingencies on Belgian operations of €0.2 billion in 2024 and €0.1 billion in 2025;
- market commodity prices as at December 29, 2023;
- recurring net financial costs of €(2.5)-(2.8) billion over 2024-26;
- recurring effective tax rate: 25-27% over 2024-26.

6.1.1.1.3 Dividend policy reaffirmed and €1.43 per share proposal for 2023

The Board has reaffirmed the Group's dividend policy with a payout ratio of 65-75% of net recurring income Group share, and a floor of €0.65 per share for the 2024 to 2026 period.

For 2023, the Board has proposed a payout ratio of 65%. This translates to a dividend of €1.43 per share, which will be proposed for shareholder approval at the Annual General Meeting on April 30, 2024.

6.1.1.1.4 Successful roll-out of the strategic plan

Renewables

ENGIE added 3.9 GW of renewable capacity in 2023, comprising 1.9 GW in Northern America, 0.8 GW in Europe, 0.7 GW in Latin America and 0.4 GW in the rest of the world. Total installed capacity of Renewables at ENGIE is now 41.4 GW. As of December 31, 2023, the Group reported 6.3 GW of capacity under construction from 60 projects. The Group signed more than 70 PPA contracts in 2023 for a total of 2.7 GW, of which 2.0 GW with a duration longer than five years, being the world leader in corporate PPAs.

In 2023, ENGIE strengthened its renewable energy platform in South Africa with the acquisition of BTE Renewables (340 MW in operation with a 3 GW pipeline) and the consolidation of Kathu, a 100 MW concentrated solar power plant.

The Group confirms its total installed capacity target of 50 GW by 2025 and 80 GW by 2030. This ambition is supported by a pipeline of 92 GW at the end of December 2023, up 12 GW compared to end-December 2022.

Networks – Renewable gas

The French Energy Regulatory Commission (CRE) has set the remuneration for gas transport, storage and distribution infrastructure for the period 2024-27. The CRE considers, for this regulatory period, a weighted average cost of capital of 4.10% for transport (compared to 4.25% previously), 4.60% for storage (compared to 4.75%) and 4.00% for distribution (compared to 4.10%). This decision reflects the regulator's desire to maintain the long-term sustainability of tariffs. These tariffs also allow for the recovery of a significant amount related to the regulatory period ending in 2024.

In Brazil, ENGIE Brasil Energia sold 15% of its stake in TAG to CDPQ. The main objective of this partial sale is to promote asset rotation and focus attention on the Company's investment plan in renewables and transmission lines. Also in Brazil, ENGIE strengthened its electricity transmission activity by winning, at the beginning of 2023, a new 30-year concession for the construction and operation of 1,000 km of high-voltage lines in the states of Bahia, Minas Gerais and Espirito Santo.

Biomethane development in France continued its progress with an annual production capacity of up to 10.8 TWh connected to ENGIE networks, an increase of 2.6 TWh compared to end-2022. ENGIE enlarged its biomethane presence in Europe with the acquisition of Ixora Energy Ltd, a leading biomethane producer based in the United Kingdom. The Group confirms its target of 10 TWh of biomethane production per year by 2030.

ENGIE has the ambition to develop green hydrogen production capacity of 4 GW by 2035.

FlexGen – Battery Energy Storage Systems (BESS)

In 2023, ENGIE accelerated its development in batteries with the commissioning of Hazelwood in Australia, its largest battery energy storage system in operation, and the acquisition of Broad Reach Power (BRP) in the United States.

ENGIE also obtained the construction permit for a 200 MW/ 800 MWh battery energy storage system at the Vilvoorde site in Belgium, to be commissioned in 2025, with a 15-year capacity contract with Elia, the Belgian transmission network operator, from 2027.

At the end of December 2023, ENGIE had 1.3 GW of BESS in operation and 3.6 GW secured under development, mainly in the United States, Chile, Australia, Belgium and UK, in line with the objective to reach 10 GW of batteries installed by 2030.

Energy Solutions

Energy Solutions has achieved major wins in District Heating and Cooling (DHC). Backlog in French concessions stood at €21.3 billion in 2023, compared to €19.8 billion last year.

In line with ENGIE's objective of accelerating the transition to a carbon-neutral economy through environmentally friendly solutions, the Group was awarded several decarbonization contracts during the year as part of the on-site production activity.

The Group's ambition is to produce 20 TWh of Green Distributed Heat, Cooling and Power by 2030 for its DHC and on-site production activities.

Disciplined capital allocation

In 2023, gross Capex amounted to €10.6 billion. Growth Capex came to €8.1 billion, of which 83% in Renewables, Energy Solutions and FlexGen, in line with ENGIE's strategic roadmap.

Performance plan

Performance plan results contributed €178 million in 2023, with operational excellence across GBU and improvement of loss-making entities partly offset by an increase in support function costs driven by a highly inflationary context. The Group reached €687 million in the cumulated performance plan between 2021 and 2023, above the €600 million target.

6.1.1.1.5 Belgian nuclear agreement

On December 13, 2023, ENGIE and the Belgian government signed the final agreements[1] for related to the 10-year extension of the Tihange 3 and Doel 4 nuclear reactors as well as all obligations related to nuclear waste. These transaction documents endorse the key principles of the framework agreement signed on July 21, 2023. It allows a balanced sharing of risks associated with the extended operation of the two nuclear units and eliminates uncertainties for the ENGIE group related to the evolution of nuclear waste liabilities.

(1) Subject to the approval by the European Commission under state aid and the adoption of legislative amendments relating to the Belgian nuclear legal and regulatory framework.

6.1.1.1.6 Update on European proposals for windfall taxes

In December 2023, the French government extended the inframarginal rent cap until December 31, 2024.

The Finance Bill for 2024 provides for a rent cap applicable over a period of twelve months, from January 1, 2024 until December 31, 2024. The cap ranges from €42/MWh to €183/MWh depending on the power production technology. The excess revenue is subject to a tax rate of 50%. ENGIE is mainly impacted through the drawing rights on two EDF nuclear power plants (Chooz B and Tricastin, 1.2 GW, 9 TWh of annual output at an availability rate of 85%) subject to a €94/MWh cap and the gas power plants (1.4 GW capacity) subject to a €42/MWh cap on the clean spark spread.

6.1.1.1.7 Progress on key ESG targets

In 2023, greenhouse gas (GHG) emissions from energy production amounted to 52 million tons, down 54% from 2017. This represents 78% of the reduction target to 43 million tons to 2030 compared to 2017. In addition to the structural levers of decarbonisation, this better-than-expected performance is also the result of a lower utilisation rate of the combined cycle gas plants in Europe under the combined effect of mild temperatures and the normalisation of market conditions.

The share of renewables in ENGIE's total power generation capacity increased from 38% at the end of 2022 to 41% at the end of 2023, mainly thanks to the addition of 3.9 GW of renewable capacity during the year.

Concerning gender diversity target, ENGIE had 31% women in management positions at the end of 2023, another increase compared to the previous year. The Group continues to implement action plans to achieve the objective of managerial parity of 40% to 60% between women and men.

Finally, Moody's has assessed the Group's transition plan and given an overall rating of NZ-2, with an ambition aligned with a 1.5°C trajectory and a "solid" level on the implementation of objectives.

6.1.1.1.8 Health & Safety

In 2023, ENGIE completed a crucial turning point through the implementation of a global transformation plan, ENGIE One Safety, aimed at the long-term elimination of serious and fatal accidents. This plan strengthens our governance and oversight, as well as reinforces an ambitious engagement and communications program. Despite the roll-out of the transformation plan, six individuals lost their lives while working for or on behalf of the Group. Achieving the zero-fatality goal will be at the heart of priority in 2024. In addition, the Group continued to improve the prevention of lost-time accidents, as the frequency rate of these accidents fell from 2.0 at the end of 2022 to 1.8 at the end of 2023.

6.1.1.1.9 Full year 2023 financial review

6.1.1.1.9.1 Revenue

Revenue at €82.6 billion was down 12.0% on a gross basis and down 11.4% on an organic basis.

Contributive revenue, after elimination of intercompany operations, by activity:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
Renewables	5,512	6,216	-11.3%	-13.0%
Networks	6,873	6,961	-1.3%	+0.1%
Energy Solutions	11,033	11,441	-3.6%	-2.8%
FlexGen	5,264	7,126	-26.1%	-24.5%
Retail	16,443	16,810	-2.2%	-1.6%
Others	37,322	45,277	-17.6%	-17.0%
Of which GEMS	*37,221*	*45,137*	*-17.5%*	*-16.9%*
TOTAL REVENUES (EXCLUDING NUCLEAR)	**82,447**	**93,830**	**+12.1%**	**-11.5%**
Nuclear	118	35	+237.6%	+237.6%
TOTAL REVENUES	**82,565**	**93,865**	**-12.0%**	**-11.4%**

Revenue for **Renewables** amounted to €5,512 million, -11.3% on a gross basis and -13.0% on an organic basis. Organically, revenue decreased mainly in Europe notably in France due to lower spot power prices compared to last year.

Revenue for **Networks** amounted to €6,873 million, -1.3% on a gross basis and +0.1% on an organic basis. Gross decrease included positive foreign exchange effects mainly in Latin America and scope out effects in Argentina. Organically, revenue increased driven by auctions of capacities for gas transport, favourable market for storage activities in Germany and in the UK and full commissioning of Novo Estado power transmission lines in Brazil partly offset by lower distributed volumes in French distribution.

Revenue for **Energy Solutions** amounted to €11,033 million, -3.6% on a gross basis and -2.8% on an organic basis. The gross decrease included scope out effect in France. Organically, decrease of commodity prices impacted negatively revenues mainly in France.

Revenue for **FlexGen** amounted to €5,264 million, -26.1% on a gross basis and -24.5% on an organic basis. Impact from foreign exchange amounts to -€98 million, mainly in Pakistan and Chile. The organic change is largely explained by Europe, mainly due to lower ancillaries and lower spreads in a normalizing market. In Latin America, revenue increased due to indexation of PPA contracts in Chile and higher generation and prices in Peru.

Revenue for **Retail** amounted to €16,443 million, -2.2% on a gross basis and -1.6% on an organic basis. Impact from foreign exchange amounts to -€93 million, mainly in Australia. Organically, the decrease was mainly driven by lower gas and power volumes due to sobriety and decrease of gas portfolio, partially offset by growth of power contracts and a higher average price of the portfolio.

Revenue for **Others** amounted to €37,332 million. The decrease compared to last year was mainly driven by GEMS, essentially impacted by a negative net impact of commodity prices and lower delivered volumes.

Nuclear reported almost no external revenue post-elimination of intercompany operations.

6.1.1.1.9.2 EBITDA

EBITDA (ex. Nuclear) at €13.7 billion, was up 12.5% on a gross basis and up 12.7% on an organic basis.

6.1.1.1.9.3 EBIT

EBIT (ex. Nuclear) at €9.5 billion was up 18.2% on a gross basis and up 18.3% on an organic basis:

- foreign exchange: a net effect of -€26 million mainly driven by the depreciation of the US dollar and the UK pound sterling partly offset by the appreciation of the Brazilian real and the Australian dollar;
- scope: net effect of +€31 million;
- french temperatures: compared to the average, the temperature effect was a negative €182 million, generating a positive year-on-year variation of €7 million compared to FY 2022 across Networks, Retail and GEMS.

EBIT contribution by activity ; growth mainly driven by GEMS, Renewables and Retail

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)	o/w temp. effect (France) *vs.* 2021
Renewables	2,005	1,627	+23.2%	+19.5%	
Networks	2,265	2,371	-4.5%	-4.5%	10
Energy Solutions	386	523	-26.2%	-26.2%	
FlexGen	1,513	1,768	-14.4%	-11.8%	
Retail	569	(6)	-	-	8
Others	2,741	1,736	+57.9%	+57.7%	2
Of which GEMS	*3,551*	*2,618*	*+35.7%*	*+35.6%*	*2*
TOTAL EBIT (EXCLUDING NUCLEAR)	**9,479**	**8,019**	**+18.2%**	**+18.3%**	**20**
Nuclear	605	1,026	-41.0%	-41.0%	
TOTAL EBIT	**10,084**	**9,045**	**+11.5%**	**+11.5%**	**20**

Activity/geography matrix

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2023
Renewables	574	282	925	216	34	(27)	2,005
Networks	1,415	64	800	(5)	-	(9)	2,265
Energy Solutions	343	190	(1)	(142)	24	(27)	386
FlexGen	-	891	202	35	419	(34)	1,513
Retail	380	145	-	-	64	(20)	569
Others	32	1	1	(9)	-	2,716	2,741
Of which GEMS	*32*	-	-	-	-	*3,519*	*3,551*
TOTAL EBIT (EXCLUDING NUCLEAR)	**2,744**	**1,573**	**1,927**	**96**	**541**	**2,599**	**9,479**
Nuclear	-	605	-	-	-	-	605
TOTAL EBIT	**2,744**	**2,178**	**1,927**	**96**	**541**	**2,599**	**10,084**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2022
Renewables	368	318	796	172	9	(36)	1,627
Networks	1,700	24	658	(3)	-	(8)	2,371
Energy Solutions	311	148	(5)	23	58	(11)	523
FlexGen	-	1,278	50	44	417	(22)	1,768
Retail	(164)	115	6	-	49	(12)	(6)
Others	(1)	(16)	-	(11)	-	1,763	1,736
Of which GEMS	-	-	-	-	-	*2,618*	*2,618*
TOTAL EBIT (EXCLUDING NUCLEAR)	**2,215**	**1,867**	**1,506**	**226**	**532**	**1,674**	**8,019**
Nuclear	-	1,026	-	-	-	-	1,026
TOTAL EBIT	**2,215**	**2,893**	**1,506**	**226**	**532**	**1,674**	**9,045**

Renewables: strong growth mainly driven by contribution of new capacity commissioned as well as higher volumes and prices in Europe

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
EBIT	2,005	1,627	+23.2%	+19.5%
Total CAPEX	4,130	3,333	+23.9%	
CNR achieved prices *(€/MWh)* [(1)]	100	60	66.7%	
DBSO Margins (EBIT level)	19	102	-81.3%	
Operational KPIs				
Capacity additions (GW at 100%)	3.9	3.8		
Hydro volumes France (TWh at 100%)	14.6	12.8	1.8	

(1) Before hydro tax on CNR.

Renewables reported 19.5% organic EBIT growth, driven by the contribution of new capacity commissioned (+€167 million) mainly in the US, Europe and Latin America and by a positive volume effect (+€112 million) due to higher hydro volumes in France and Portugal. EBIT also benefitted from a positive price effect (+€75 million) with higher captured prices mainly for French hydro including the reversal of 2022 buybacks, partly offset by the increase in hydro taxes in France. These positive effects largely offset lower DBSO margins in 2023 (-€83 million).

Networks: lower distributed volumes and higher energy costs in France, growth in international activities

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
EBITDA	4,151	4,212	-1.5%	-1.3%
EBIT	2,265	2,371	-4.5%	-4.5%
Total CAPEX	2,173	2,321	+6.4%	
Operational KPIs				
Normative temp. effect (EBIT - France)	(129)	(139)[(1)]	10	
Smart meters (m)	11.3	10.9	0.4	

(1) Considering ~8€/MWh vs ~7€/MWh used in FY2022 publication.

Networks EBIT was down 4.5% on an organic basis due to lower distributed volumes in France mainly related to energy sobriety as well as higher energy and staff costs driven by inflation. Part of this impact will be mitigated during the forthcoming regulatory period. These effects were partly offset by tariff increase in France, Germany and Romania, an additional contribution from capacity subscribed for gas transit between France and Germany as well as a favourable environment in storage activities mainly in the UK and Germany. Outside Europe, EBIT was up 22% due to full commissioning of Novo Estado power transmission lines in Brazil and good performance mainly from TAG.

Energy Solutions: impacted by one-offs, partly offset by better performance in other activities

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
Revenues	11,033	11,441	-3.6%	-2.8%
EBIT	386	523	-26.2%	-26.2%
Total CAPEX	1,102	864	+27.5%	
Operational KPIs				
Distrib. Infra installed cap. *(GW)*	25.3	25	+0.4%	
EBIT margin (excluding one-off)	5.2%	4.6%	+63 pb	
EBIT margin	3.5%	4.6%	-107 pb	
Backlog - French concessions *(bn€)*	21.3	19.8	1.5	

Energy Solutions EBIT was down 26.2% on an organic basis. EBIT decreased mainly due to two one-offs, cost overruns in the construction of two cogeneration plants in the US (€150 million) and the recognition of a deferred tax liability on Tabreed (€38 million) following the introduction of a corporate income tax in the UAE. Excluding these one-offs, Energy Solutions EBIT was up 10% organically. For local energy networks and on-site energy production, this was driven by improved operational performance, higher contributions from cogeneration units in France and contribution from new commissioning. These elements were partly offset by negative impacts of strikes in France in the first half of 2023 and lower DBSO margins in US solar linked to a change in business model towards full consolidation. For energy performance management activities, EBIT benefitted from contract optimization and increased selectivity in business development.

FlexGen: market normalization in Europe partly offset by positive comparison impacts and improvement in Chile

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
EBITDA	1,929	2,235	-13.7%	-11.2%
EBIT	1,513	1,768	-14.4%	-11.8%
Operational KPIs				
Average captured CSS Europe *(€/MWh)*	37.0	28.0	+30.0%	
Capacity *(GW at 100%)*	59.0	59.5	(0.5)	

FlexGen EBIT was down 11.8% on an organic basis. This fall was mainly driven by price effects (-€377 million) on the back of lower utilization of the assets in Europe following market normalization, partly offset by improvement in Chile (reduction of short positions and lower sourcing prices). EBIT was also weighed by a lower contribution from ancillary services in Europe after very high levels of earnings in 2022. On the positive side, EBIT benefitted from two favourable comparison impacts, as the Group recognised an extraordinary tax in Italy in the first half of 2022 and was also impacted by the cost of unplanned outages on French gas assets last year.

Retail: strong performance due to higher margins and portfolio optimization

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
EBITDA	821	259		
EBIT	569	(6)		
Normative temp. effect (EBIT – France)	(45)	(53)	8	

Retail EBIT amounted to €569 million in 2023 compared to €(6) million in 2022. Organically, the EBIT increase was mainly driven by price effects due to portfolio management optimization resulting in higher margins as well as timing effects in sourcing. These positive factors were partly offset by mild winter and customer sobriety leading to long positions sold at low prices in 2023 *versus* long positions sold at high prices in 2022.

6.1.1.1.9.4 Others: significant contribution from GEMS

GEMS EBIT amounted to €3,551 million, up €933 million year-on-year, driven by the H1 2023 effects:

- the negative impact related to Gazprom contracts considering the risk of physical gas disruption in H1 2022, which did not repeat in 2023;
- the strong performance of energy management activities in Europe, still benefiting from good market conditions, albeit less favorable than in 2022;
- the gradual normalization of market conditions, leading to continuous reversal of market reserves;
- the good performance of the B2B business, in a market environment that allows full valuation of the cost of risk;
- the continued effect of deals signed in 2022 at good conditions which materialize at delivery date.

In the second half, GEMS' contribution decreased significantly compared to last year, as expected, due to a very elevated basis of comparison, the reduction of volumes and margins since the summer, positive timing effects in the first half that reversed in the second half, as well as the contribution from high-margin transactions locked in during 2022 which materialize at delivery date that have been smoothed over time. Excluding timing effects and variations in technical reserves, GEMS' operational performance in the second semester remains at a significantly higher level than in the years preceding the crisis.

Nuclear: negatively impacted by shutdowns and higher taxes, partly offset by higher captured prices and increased availability

En millions d'+euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)	% change (organic basis)
EBITDA	1,285	1,510	-14.9%	-14.9%
EBIT	605	1,026	-41.0%	-41.0%
Total Capex	174	229	-24.0%	
Operational KPIs				
Output (BE + FR, @ share, TWh)	32.0	42.1	-24.0%	
Availability (Belgium at 100%)	+88.8%	+83.6%	+520 pb	

Nuclear EBIT decreased 41.0% organically, driven by the phase-out of the reactors Doel 3 in September 2022 and Tihange 2 in February 2023 (-€538 million), the nuclear inframarginal tax and Belgian nuclear taxes (-€333 million) as well as higher D&A following the increase of the dismantling assets resulting from the 2022 CPN triennial provision review. These negative effects were partly offset by a positive volume effect (+€425 million) mainly due to higher availability for Belgian assets at 88.8% and higher captured prices (+€363 million).

6.1.1.1.9.5 Comparable basis organic growth analysis

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported/organic basis)
Revenues	**82,565**	**93,865**	**-12.0%**
Scope effect	(220)	(399)	-
Exchange rate effect	-	(491)	-
Comparable data	**82,345**	**92,977**	**-11.4%**

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported/organic basis)
EBITDA	**15,017**	**13,713**	**+9.5%**
Scope effect	(96)	(65)	-
Exchange rate effect	-	(43)	-
Comparable data	**14,922**	**13,606**	**+9.7%**

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported/organic basis)
EBIT	**10,084**	**9,045**	**+11.5%**
Scope effect	(76)	(45)	-
Exchange rate effect	-	(26)	-
COMPARABLE DATA	**10,008**	**8,974**	**+11.5%**

The calculation of organic growth aims to present comparable data both in terms of the exchange rates used to convert the financial statements of foreign companies and in terms of contributing entities (consolidation method and contribution in terms of comparable number of months). Organic growth in percentage terms represents the ratio between the data for the current year (N) and the previous year (N-1) restated as follows:

- the N-1 data is corrected by removing the contributions of entities transferred during the N-1 period or *prorata temporis* for the number of months after the transfer in N;
- the N-1 data is converted at the exchange rate for the period N;
- the N data is corrected with the N acquisition data or *prorata temporis* for the number of months prior to the N-1 acquisition.

6.1.1.2 Other income statement items

The reconciliation between EBIT and Net income/(loss) is presented below:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	% change (reported basis)
EBIT	**10,084**	**9,045**	**+11,5%**
(+) Mark-to-Market on commodity contracts other than trading instruments	2,430	(3,661)	
(+) Non-recurring share in net income of equity method entities	(22)	(17)	
Current operating income including operating MtM and share in net income of equity method entities	**12,493**	**5,367**	**+132.7%**
Impairment losses	(1,318)	(2,774)	
Restructuring costs	(47)	(230)	
Changes in scope of consolidation	(85)	91	
Other non-recurring items	(4,945)	(1,328)	
Income/(loss) from operating activities	**6,098**	**1,127**	**+441.3%**
Net financial income/(loss)	(2,163)	(3,003)	
Income tax benefit/(expense)	(1,031)	83	
NET INCOME/(LOSS)	**2,903**	**390**	**+644.9%**
Net recurring income/(loss) relating to continuing operations, Group share	**5,366**	**5,223**	
Net recurring income/(loss) Group share per share	**2.18**	**2.24**	
Net income/(loss) Group share	**2,208**	**216**	
Non-controlling interests	**695**	**173**	

The reconciliation between Net recurring income/(loss) Group share and Net income/(loss) Group share is presented below:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Net recurring income/(loss) relating to continuing operations, Group share	**5,366**	**5,223**
Impairment & Others	(5,456)	(1,494)
Restructuring costs	(47)	(230)
Changes in scope of consolidation	(85)	91
Mark-to-Market on commodity contracts other than trading instruments	2,430	(3,661)
Net recurring income/(loss) relating to discontinued operations, Group share	-	287
Net income/(loss) Group share	**2,208**	**216**

Income from operating activities amounted to €6,098 million, representing a strong increase compared to 2022, mainly due to the change in unrealized gains and losses on commodity financial instruments not qualified as hedges, lower impairment losses and EBIT growth, partly offset by the impact of the revision of nuclear provisions.

Income from operating activities was affected by:

- net impairment losses of €1,318 million (compared with €2,774 million in 2022), mainly relating to renewable energy production assets in North America and assets affected by the Group's exit from coal (see Note 9.1);
- restructuring costs of €47 million (compared with €230 million in 2022) (see Note 9.2);
- negative scope effects of €85 million (compared with a positive €91 million in 2022) (see Note 9.3);

- other non-recurring items amounting to a negative €4,945 million (compared with a negative €1,328 million in 2022), mainly comprising the effects of the revision of nuclear provisions to take into account the agreement signed with the Belgian government on June 29, 2023, which became binding following the signature of supplements to the initial agreement on July 21, 2023 and the implementation of which was set out in the transaction documents signed on December 13, 2023 (see Note 9.4).

The **net financial loss** amounted to €2,163 million in 2023, compared with €3,003 million in 2022 (see Note 10), mainly due to the rise in the cost of debt.

Adjusted for non-recurring items, the net financial loss amounted to €1,975 million in 2023, compared with €1,819 million in 2022. This €156 million deterioration is due to the €96 million increase in other financial expenses (notably the increase in the unwinding adjustment) and the €60 million rise in the cost of net debt.

Income tax for 2023 amounted to a benefit of €1,031 million (compared with a benefit of €83 million in 2022).

Adjusted for these non-recurring items, the recurring effective tax rate was 27.1% at December 31, 2023 compared with 22.6% at December 31, 2022, mainly due to:

- the change in the tax situation in certain countries that only partially recognize, in 2023 and/or 2022, their deferred tax assets (notably Belgium, Italy, Luxembourg, Germany and the Netherlands) – approximately +8.3 points;
- the unfavorable impact in 2022 of the non-deductibility of the one-off tax contribution, recognized as an operating expense, and the temporary solidarity contribution voted in Italy – approximately -3.3 points.

Net recurring income, Group share relating to continuing operations amounted to €5,366 million compared with €5,223 million in 2022. This increase was mainly driven by the growth in EBIT, partly offset by the increase in the tax expense.

Net income, Group share amounted to €2,208 million, up sharply compared to 2022, mainly due to the change in unrealized gains and losses on commodity financial instruments not qualified as hedges, partially offset by the impact of the revision of nuclear provisions.

Net income attributable to non-controlling interests amounted to €695 million, an improvement on the 2022 figure (up €521 million), notably in Renewables in the United States.

6.1.1.3 Changes in net financial debt

Net financial debt stood at €29.5 billion, up €5.4 billion compared to December 31, 2022.

This increase was mainly driven by:

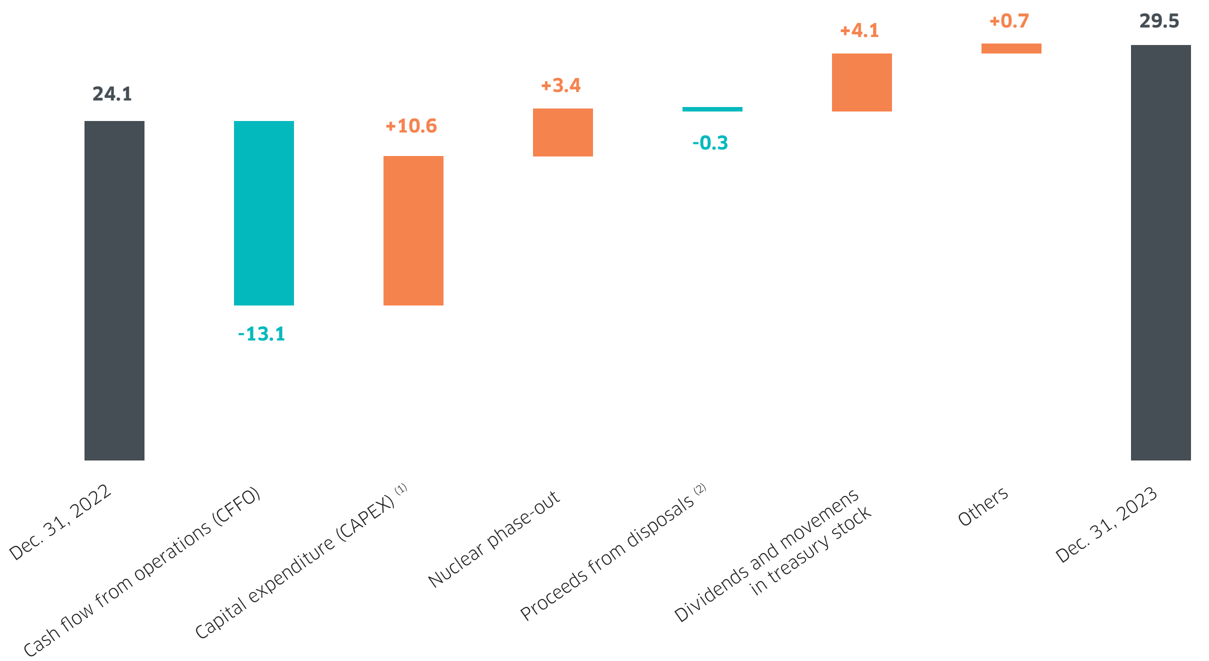
- capital expenditure over the period of €10.6 billion;
- dividends paid to ENGIE SA shareholders and to non-controlling interests of €4.1 billion;
- Belgian nuclear phase-out funding and expenses [1] of €3.4 billion;
- other elements of €0.7 billion.

These elements were partly offset by:

- cash From Operations of €13.1 billion;
- disposals of €0.3 billion.

Changes in net financial debt break down as follows:

In billions of euros



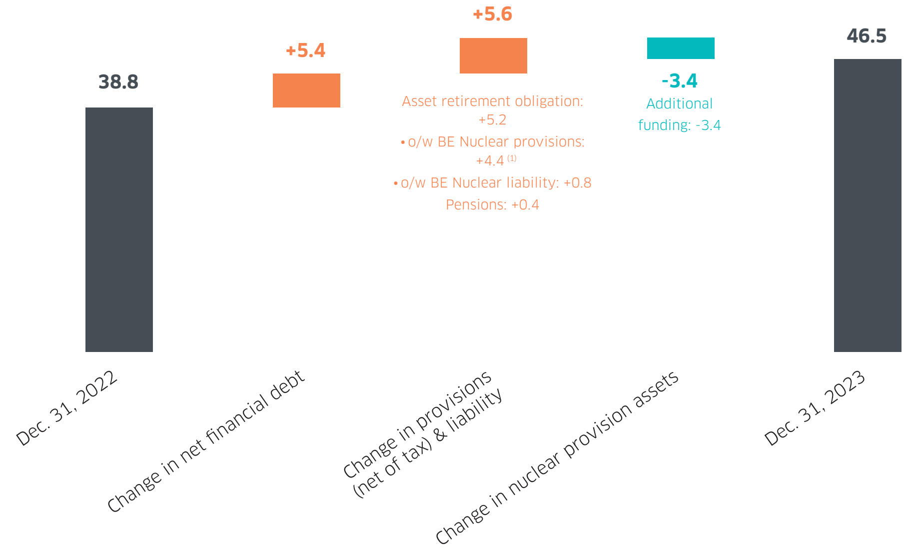
(1) Capital expenditure net of DBSO and tax equity proceeds.
(2) Including scope effects relating to disposals and acquisitions.

(1) Synatom funding previously reported in gross Capex and waste/dismantling expenses previously reported in CFFO.

Economic net debt stood at €46.5 billion, up €7.7 billion compared to December 31, 2022, mostly due to the increase in Asset Retirement Obligation provisions (+€5.6 billion, mainly the increase of nuclear provisions following the agreement reached with the Belgian State) and higher financial net debt (+€5.4 billion), partly offset by the change in nuclear provision assets related to additional funding (-€3.4 billion).

Changes in economic net debt break down as follows:

In billions of euros



(1) Increase in nuclear provisions following the agreement signed with the Belgian government.

The **net financial debt to EBITDA ratio** stood at 2.0x, up 0.2x compared to December 31, 2022.

The average cost of gross debt was 4.31%.

In millions of euros	Dec 31, 2023	Dec 31, 2022
Net financial debt	29,493	24,054
EBITDA	15,017	13,713
NET DEBT/EBITDA RATIO	**1.96**	**1.75**

The **economic net debt to EBITDA** ratio stood at 3.1x, up 0.3x compared to December 31, 2022, and in line with the target ratio of below or equal to 4.0x.

In millions of euros	Dec 31, 2023	Dec 31, 2022
Economic net debt	46,517	38,808
EBITDA	15,017	13,713
ECONOMIC NET DEBT/EBITDA RATIO	**3.10**	**2.83**

6.1.1.3.1 Cash flow from operations (CFFO)

Cash Flow From Operations (CFFO) amounted to €13.1 billion, up €5.1 billion compared to 2022. This increase was mainly supported by an improvement in change in Working Capital Requirements (+€2.8 billion).

Working Capital Requirements were positive at €0.4 billion, with a positive year-on-year variation of €2.8 billion mainly driven by price effects due to gas withdrawal at higher prices (+€3.9 billion), unbilled energy volumes (+€3.5 billion), margin calls (+€1.3 billion) and the positive timing effect on tariff shields (+€0.9 billion). These positive effects were partly offset by the impact of reversal of market reserves at GEMS (-€2.2 billion) which is neutral on CFFO, net receivables (-€1.9 billion) and nuclear impacts (-€2.1 billion) of which mainly taxes.

6.1.1.3.2 Liquidity

Liquidity stood at €23.6 billion at December 3, 2023, including €17.0 billion of cash[1].

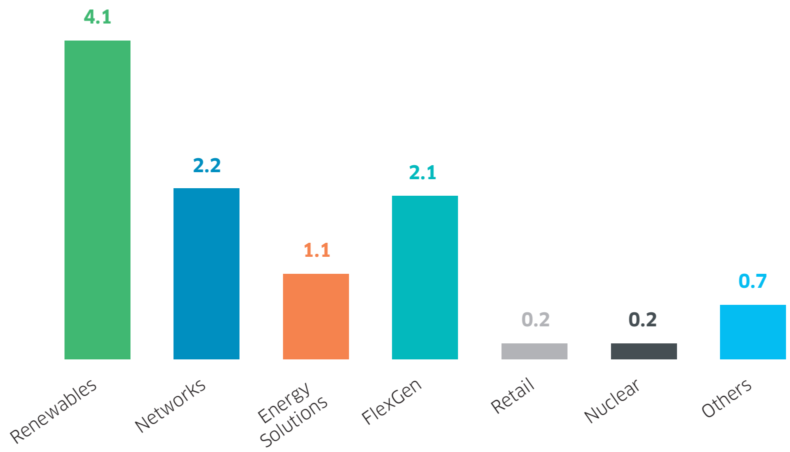
(1) Cash and cash equivalents plus liquid debt instruments held for cash investment purposes minus bank overdrafts.

6.1.1.3.3 Capital expenditure (CAPEX)

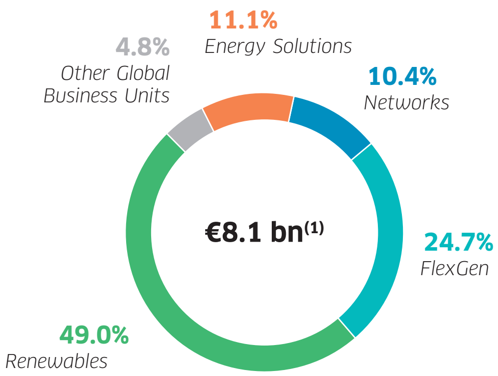
Total Capex amounted to €10.6 billion, including growth CAPEX of €8.1 billion.

Capital expenditure (CAPEX) by activity

In billions of euros



Growth capital expenditure amounted to €8.1 billion, breaking down as follows by activity:



Main projects *(€bn)*	
Renewables	1.3
Kathu Consolidation	0.6
USA: Tacoma	0.8
Brazil: Wind & Solar (Santo Agostinho, Assurua & Assu Sol)	0.5
Trivoli	0.4
Chile & Peru: BESS Coya & Lomas de Taltal & Punta Lomitas wind projects	0.4
USA: Bernard Creek (Solar)	0.3
France Wind & Solar (mainly Engie Green)	0.3
Poland (Stella 2, Cyranka & Pasadena)	0.2
FlexGen	1.8
Broad Reach Power Acquisition	1.5
Flemalle	0.2
Networks	0.8
French regulated infrastructures	0.5
Brazil Transmission Lines	0.2
Energy Solutions	0.9
France large infrstructures (mainly DHC)	0.4
NorthAm On-site PV & storage	0.1

(1) *Net of disposals under DBSO operations, excluding Corporat, and tax equity proceeds.*

The **geography/activity matrix** for growth capital expenditure is presented below:

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2023
Renewables	323	481	1,103	994	1,059	7	3,966
Networks	501	163	174	-	-	-	839
Energy Solutions	477	155	4	136	79	47	897
FlexGen	-	341	14	1,492	(8)	5	1,843
Retail	53	45	-	-	8	54	160
Nuclear	-	-	19	-	-	-	19
Others	-	8	-	1	6	352	368
Of which GEMS	-	-	-	-	-	*82*	*82*
TOTAL GROWTH CAPEX	**1,354**	**1,193**	**1,314**	**2,622**	**1,144**	**464**	**8,090**

In millions of euros	France	Rest of Europe	Latin America	USA & Canada	Middle East, Asia & Africa	Others	Dec. 31, 2022(1)
Renewables	361	1,094	876	648	214	10	3,202
Networks	669	174	245	-	-	-	1,087
Energy Solutions	354	122	19	66	75	58	694
FlexGen	-	181	9	34	(9)	6	220
Retail	62	42	-	-	7	62	173
Nuclear	-	-	-	-	-	-	-
Others	-	4	-	-	-	103	108
Of which GEMS	-	-	-	-	-	*63*	*63*
TOTAL GROWTH CAPEX	**1,445**	**1,617**	**1,148**	**748**	**287**	**240**	**5,484**

(1) *Certain internal reclassifications, which have no impact on the total, have been made between the business lines, at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions activities to Others.*

6.1.1.3.4 Dividends and movements in treasury stock

Dividends paid and movements in treasury stock during the period amounted to €4.1 billion and mainly include ENGIE's dividend payment in April for the 2022 fiscal year for €3.4 billion, and dividends paid by various subsidiaries to their non-controlling interests in an amount of €0.5 billion.

6.1.1.3.5 Net financial debt at December 31, 2023

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2023 a total of 65% of net financial debt was denominated in euros, 19% in US dollars and 10% in Brazilian real.

Including the impact of financial instruments, 89% of net debt was at fixed rates.

The average maturity of the Group's net financial debt is 13.2 years.

At December 31, 2023, the Group had total undrawn confirmed credit lines of €12.2 billion.

6.1.1.3.6 Rating

On November 23, 2023, S&P reaffirmed ENGIE SA long-term issuer rating at BBB+ and short-term rating at A-2 with stable outlook.

On July 13, 2023, Moody's confirmed ENGIE SA long-term issuer rating at Baa1 and short-term rating at P-2 with stable outlook.

On July 18, 2023, Fitch reaffirmed ENGIE SA long-term issuer rating at A- and short-term rating at F1 with stable outlook.

6.1.1.4 Other items in the statement of financial position

In millions of euros	Dec. 31, 2023	Dec. 31, 2022	Net change
Non-current assets	**119,023**	**131,521**	**(12,498)**
Of which goodwill	*12,864*	*12,854*	*10*
Of which property, plant and equipment and intangible assets, net	*66,399*	*62,853*	*3,547*
Of which derivative instruments	*12,764*	*33,134*	*(20,370)*
Of which investments in equity method entities	*9,213*	*9,279*	*(66)*
Current assets	**75,617**	**103,969**	**(28,352)**
Of which trade and other payables	*20,092*	*31,310*	*(11,218)*
Of which derivative instruments	*8,481*	*15,252*	*(6,772)*
Of which assets classified as held for sale	-	*428*	*(428)*
Total equity	**35,724**	**39,285**	**(3,560)**
Provisions	32,593	27,027	5,566
Borrowings	47,287	40,591	6,696
Derivative instruments	24,561	51,276	(26,715)
Other liabilities	54,475	77,311	(22,835)
Of which liabilities directly associated with assets classified as held for sale	-	*371*	*(371)*

The **carrying amount of property, plant and equipment** and intangible assets was €66.4 billion, up €3.5 billion compared with December 31, 2022. This change is mainly due to capital expenditure over the period (positive €8.8 billion), changes in the scope of consolidation (positive €1.9 million), partially offset by depreciation (negative €4.9 billion) and impairment losses recognized over the period (negative €1.2 billion) (see Note 13).

Goodwill amounted to €12.9 billion, stable compared with December 31, 2022 (see Note 13).

Investments in equity method entities increased by €0.1 billion (see Note 4.2).

Total equity amounted to €35.7 billion, a decrease of €3.6 billion compared with December 31, 2022, This decrease stemmed mainly from dividends distributed (negative €3.9 billion), and other comprehensive income (negative €2.6 billion, including a negative €3.1 billion of cash flow hedges on commodities, a negative €0.6 billion of actuarial gains and losses and a positive €0.9 billion of deferred taxes) partially offset by net income for the period (positive €2.9 billion).

Provisions increased by €5.6 billion to €32.6 billion compared with December 31, 2022. This increase is mainly due to the effects of the revision of nuclear provisions to take into account the interim agreement signed with the Belgian government on June 29, 2023, which became binding following the signature of the supplements to the initial agreements on July 21, 2023 and the implementation of which was set out in the transaction documents signed on December 13, 2023 as well as the final opinion of the Commission for Nuclear Provisions (CNP) on July 7, 2023 (see Note 17).

The decrease in **derivative instruments** is mainly due to the extreme volatility in commodity prices over the period.

6.1.1.5 Parent company financial statements

The figures provided below relate to the financial statements of ENGIE SA, prepared in accordance with French GAAP and applicable regulations.

Revenues for ENGIE SA in 2023 totaled €54,149 million, a decrease compared to 2022 (€68,500 million) on the gas market.

The Company reported a net operating loss of €987 million in 2023, a sharp deterioration of €2,038 million compared with income of €1,051 million in 2022. The energy margin deteriorated by €1,042 million.

Net financial income amounted to €662 million, down €1,125 million compared to 2022, mainly due to lower dividends received.

Non-recurring items represented income of €578 million in 2023, mainly comprising changes in the value of equity interests (including Electrabel).

The income tax benefit amounted to €247 million, *versus* an income tax benefit of €321 million in 2022, including a tax consolidation benefit of €233 million.

Net income for the year came in at €500 million.

Shareholders' equity amounted to €28,376 million compared with €31,118 million at the end of 2022. The €2,742 million decrease was mainly due to the 2022 net income of €500 million, and to the 2022 dividend payment of €3,449 million.

At December 31, 2023, borrowings and debt stood at €47,084 million, and cash and cash equivalents totaled €14,004 million (of which €7,828 million relating to subsidiaries' current accounts).

Information relating to payment terms

Pursuant to Articles L.441-14 and D.441-6 of the French Commercial Code, companies whose annual financial statements are subject to a statutory audit must publish information regarding supplier and customer payment terms. The purpose is to demonstrate that there is no significant failure to comply with such terms.

Information relating to supplier and customer payment terms mentioned in Articles L.441-10 to L.441-16 of the French Commercial Code

	Articles L.441-10 to L.441-16: Invoices received, unpaid and overdue at the reporting date						Articles L.441-10 to L.441-16: Invoices issued, unpaid and overdue at the reporting date					
In millions of euros	0 day (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 day (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)
(A) By aging category												
Number of invoices	-					69,321	-					5,900,621
Aggregate invoice amount (incl. VAT)	-	15.7	11.1	0.8	716.7	744.3	-	29.9	26.8	51.5	1,130.4	1,238.6
Percentage of total amount of purchases (incl. VAT) for the period	-	0.02%	0.02%	0.00%	1.14%	1.18%						
Percentage of total revenues (incl. VAT) for the period							-	0.05%	0.04%	0.08%	1.77%	1.94%
(B) Invoices excluded from (A) relating to disputed or unrecognized receivables and payables												
Number of excluded invoices						501						682
Aggregate amount of excluded invoices						(66.9)						1.8
(C) Standard payment terms used (contractual or legal terms - Article L.441-6 or Article L.443-1 of the French Commercial Code)												
Payment terms used to calculate late payments						Legal payment terms: 30 days						Contractual payment terms: 14 days Legal payment terms: 30 days

6.1.2 CAPITAL RESOURCES

6.1.2.1 Borrowing conditions and financial structure applicable to the issuer

6.1.2.1.1 Debt structure

Gross debt, excluding bank overdrafts, amortized cost and financial derivative instruments amounted to €43 billion at the end of 2023, up from year-end 2022. It was primarily composed of €30.3 billion in bond issues and €6.7 billion in bank borrowings. Other borrowings and drawdowns on credit lines accounted for a total of €0.4 billion. Short-term borrowings (short-term marketable securities) accounted for 13% of total gross debt at the end of 2023.

83% of the gross debt was issued on financial markets (bond issues and short-term marketable securities). Net debt, excluding amortized costs, the effect of financial derivative instruments and cash collateral, came to €26.8 billion at the end of 2023. At the end of 2023, net debt was 65% denominated in euros, 19% in US dollars and 10% in Brazilian reals, excluding amortized cost and after the foreign exchange impact of derivatives.

After the impact of derivatives, 89% of the net debt was at a fixed rate. The average cost of gross debt was 4.3%. The average maturity of net debt was 13.2 years at the end of 2023.

The principal contracts entered into by ENGIE SA are described in Note 11 of Section 6.4.2 "Notes to the parent company financial statements."

6.1.2.1.2 Main transactions in 2023

The main transactions performed in 2023 affecting net financial debt are described in Note 14.3.3. of Section 6.2.2 "Notes to consolidated financial statements."

In September 2023, the Group proceeded with the early refinancing of its €5 billion syndicated credit line: on this occasion, the size of the commitment was voluntarily reduced to €4.5 billion, and the maturity was extended to September 13, 2028. This credit has two one-year extension options that have not yet been exercised.

In November 2023, the Group exercised its second option to extend the €4 billion syndicated credit line entered into in December 2021, thus extending its maturity to December 15, 2028.

6.1.2.1.3 Ratings

ENGIE has solicited ratings by Standard & Poor's, Moody's and Fitch.

In November 2023, S&P confirmed ENGIE SA's issuer rating at BBB+/A-2, with a stable outlook.

In July 2023, Moody's confirmed ENGIE SA's issuer rating at -Baa1/P-2, with a stable outlook.

In July 2023, Fitch confirmed ENGIE SA's issuer rating at A-/F1, with a stable outlook.

6.1.2.2 Restrictions on the use of capital

At December 31, 2023, the Group had total undrawn confirmed credit lines of €12.2 billion. These lines are usable, among other things, as back-up lines for the short-term marketable securities programs. Almost 90% of these lines are centrally managed and their availability is not subject to any financial covenant or linked to a credit risk rating. The counterparties of these lines are well diversified, with no single counterparty holding more than 10% of the total of these centralized lines. No centralized credit facility was in use as at the end of 2023.

Furthermore, the Group has set up credit lines for some subsidiaries, for which the documentation includes ratios based on their financial statements. These lines of credit are not guaranteed by ENGIE SA or GIE ENGIE Alliance. The definition, as well as the level of these ratios, also known as "financial covenants," are determined by agreement with the lenders and may be reviewed during the life of the loan.

The most frequent ratios are:

- Debt Service Cover Ratio = Free Cash Flow (Principal + interest expense) or for servicing interest (Interest Cover Ratio = EBITDA/interest expense);
- Loan Life Cover Ratio (adjustment of the average cost of the future Free Cash Flows debt divided by the borrowed amount still owed);
- Debt/Equity ratio or maintenance of a minimum amount of equity.

At December 31, 2023, all Group companies whose debt is consolidated were compliant with the covenants and representations contained in their financial documentation, with the exception of a few non-significant entities for which appropriate actions to achieve compliance are being implemented. No defaults linked to financial ratios or rating levels should be observed on the available centrally managed credit lines.

6.1.2.3 Expected sources of financing to honor commitments relating to investment decisions

The Group believes that its funding needs will be covered by available cash and by calling upon the capital markets on an *ad hoc* basis, as well as by the possible use of its existing credit facilities.

If necessary, dedicated financing could be established for very specific projects.

The Group has a total of €1.9 billion in financing that matures in 2024, excluding the maturity of €5.6 billion in short-term marketable securities. In addition, at December 31, 2023, it had €17.0 billion in cash (net of bank overdrafts) and a total of €12.2 billion in available lines, including €1.6 billion expiring in 2024. The amount of these available lines is not net of the amount of short-term marketable securities.

6.2 CONSOLIDATED FINANCIAL STATEMENTS

6.2.1 CONSOLIDATED FINANCIAL STATEMENTS

Income statement

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
REVENUES	**6.2 & 7**	**82,565**	**93,865**
Purchases and operating derivatives	8.1	(56,992)	(74,535)
Personnel costs	8.2	(8,149)	(8,078)
Depreciation, amortization and provisions	8.3	(4,911)	(5,187)
Taxes	8.4	(2,627)	(3,380)
Other operating income		1,541	1,624
Current operating income including operating MtM		**11,427**	**4,309**
Share in net income of equity method entities	6.2	1,066	1,059
Current operating income including operating MtM and share in net income of equity method entities		**12,493**	**5,367**
Impairment losses	9.1	(1,318)	(2,774)
Restructuring costs	9.2	(47)	(230)
Changes in scope of consolidation	9.3	(85)	91
Other non-recurring items	9.4	(4,945)	(1,328)
NET INCOME/(LOSS) FROM OPERATING ACTIVITIES		**6,098**	**1,127**
Financial expenses		(3,340)	(3,700)
Financial income		1,177	697
NET FINANCIAL INCOME/(LOSS)	**10**	**(2,163)**	**(3,003)**
Income tax benefit/(expense)	11	(1,031)	83
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS		**2,903**	**(1,793)**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS (1)		-	**2,183**
NET INCOME/(LOSS)		**2,903**	**390**
Net income/(loss) Group share		**2,208**	**216**
Of which Net income/(loss) relating to continuing operations, Group share		*2,208*	*(1,965)*
Of which Net income/(loss) relating to discontinued operations, Group share		-	*2,182*
Non-controlling interests		**695**	**173**
Of which Non-controlling interests relating to continuing operations		*695*	*172*
Of which Non-controlling interests relating to discontinued operations		-	*1*
BASIC EARNINGS/(LOSS) PER SHARE *(IN EUROS)*	**12**	**0.88**	**0.06**
Of which Basic earnings/(loss) relating to continuing operations per share		*0.88*	*(0.84)*
Of which Basic earnings/(loss) relating to discontinued operations per share		-	*0.90*
DILUTED EARNINGS/(LOSS) PER SHARE *(IN EUROS)*	**12**	**0.87**	**0.06**
Of which Diluted earnings/(loss) relating to continuing operations per share		*0.87*	*(0.84)*
Of which Diluted earnings/(loss) relating to discontinued operations per share		-	*0.90*

(1) Net income from discontinued operations for 2022 corresponds to the share of income from Equans.

NB:The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

Statement of comprehensive income

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
NET INCOME/(LOSS)		**2,903**	**390**
Debt instruments	14.1	325	(378)
Net investment hedges	15	148	(15)
Cash flow hedges (excl. commodity instruments)	15	(83)	938
Commodity cash flow hedges (1)	15	(3,162)	(4,719)
Deferred tax on recyclable or recycled items		765	951
Share of equity method entities in recyclable items, net of tax		36	871
Translation adjustments		(343)	848
Recyclable items relating to discontinued operations, net of tax		-	(118)
TOTAL RECYCLABLE ITEMS		**(2,315)**	**(1,622)**
Equity instruments	14.1	120	(685)
Actuarial gains and losses		(580)	2,718
Deferred tax on non recyclable items		135	(613)
Share of equity method entities in actuarial gains and losses, net of tax		1	5
Non-recyclable items relating to discontinued operations, net of tax		-	48
TOTAL NON-RECYCLABLE ITEMS		**(324)**	**1,472**
TOTAL RECYCLABLE ITEMS AND NON-RECYCLABLE ITEMS		**(2,639)**	**(150)**
TOTAL COMPREHENSIVE INCOME/(LOSS)		**264**	**240**
Of which owners of the parent		*(717)*	*(257)*
Of which non-controlling interests		*981*	*497*

(1) The fall in commodity market prices during 2023 contributed to significant changes in the fair value of financial instruments, impacting other comprehensive income. In 2023, the hedging of electricity supply activities in France, Belgium and the Netherlands and sales resulting from the production of some of our assets in these same areas qualified as cash flow hedging instruments in accordance with IFRS 9. Unrealized gains and losses on the effective portion of the hedges are now recorded in Other comprehensive income, as are hedges of our gas supply activities in Europe that already qualified, and are recycled to operating income at the same time as the hedged transactions to which they relate.

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

Statement of financial position

Assets

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
Non-current assets			
Goodwill	13.1	12,864	12,854
Intangible assets, net	13.2	8,449	7,364
Property, plant and equipment, net	13.3	57,950	55,488
Other financial assets	14	14,817	10,599
Derivative instruments	14	12,764	33,134
Assets from contracts with customers	7	1	9
Investments in equity method entities	3	9,213	9,279
Other non-current assets	22	990	766
Deferred tax assets	11	1,974	2,029
TOTAL NON-CURRENT ASSETS		**119,023**	**131,521**
Current assets			
Other financial assets	14	2,170	2,394
Derivative instruments	14	8,481	15,252
Trade and other receivables, net	7	20,092	31,310
Assets from contracts with customers	7	9,530	12,575
Inventories	22	5,343	8,145
Other current assets	22	13,424	18,294
Cash and cash equivalents	14	16,578	15,570
Assets classified as held for sale		-	428
TOTAL CURRENT ASSETS		**75,617**	**103,969**
TOTAL ASSETS		**194,640**	**235,490**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

Equity and liabilities

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
Shareholders' equity		30,057	34,253
Non-controlling interests	2	5,667	5,032
TOTAL EQUITY	**16**	**35,724**	**39,285**
Non-current liabilities			
Provisions	17	18,792	24,663
Long-term borrowings	14	37,920	28,083
Derivative instruments	14	16,755	39,417
Other financial liabilities	14	82	90
Liabilities from contracts with customers	7	93	121
Other non-current liabilities	22	3,614	3,646
Deferred tax liabilities	11	5,632	6,408
TOTAL NON-CURRENT LIABILITIES		**82,889**	**102,427**
Current liabilities			
Provisions	17	13,801	2,365
Short-term borrowings	14	9,367	12,508
Derivative instruments	14	7,806	11,859
Trade and other payables	14	22,976	39,801
Liabilities from contracts with customers	7	3,960	3,292
Other current liabilities	22	18,118	23,583
Liabilities directly associated with assets classified as held for sale		-	371
TOTAL CURRENT LIABILITIES		**76,027**	**93,778**
TOTAL EQUITY AND LIABILITIES		**194,640**	**235,490**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

Statement of changes in equity

In millions of euros	Share capital	Additional paid-in capital	Consolidated reserves	Deeply-subordinated perpetual notes	Changes in fair value and other	Translation adjustments	Treasury stock	Shareholders' equity	Non-controlling interests	Total
EQUITY AT DECEMBER 31, 2021	**2,435**	**26,058**	**5,238**	**3,767**	**1,711**	**(2,017)**	**(199)**	**36,994**	**4,986**	**41,980**
Net income/(loss)			216					216	173	390
Other comprehensive income/(loss)			1,311		(2,379)	595		(474)	324	(150)
Total comprehensive income/(loss)			**1,527**		**(2,379)**	**595**		**(257)**	**497**	**240**
Share-based payment	-	3	45					48	-	48
Dividends paid in cash [(1)]		(394)	(1,689)					(2,082)	(482)	(2,565)
Purchase/disposal of treasury stock			(43)				10	(33)	-	(33)
Operations on deeply-subordinated perpetual notes [(1)]			(77)	(374)				(451)		(451)
Transactions between owners [(1) (2)]			154					154	56	210
Transactions with an impact on non-controlling interests			-					-	(41)	(41)
Share capital increases and decreases								-	19	19
Normative changes [(3)]			(116)					(116)	(6)	(121)
Other changes		-	(5)		-			(5)	3	(1)
EQUITY AT DECEMBER 31, 2022	**2,435**	**25,667**	**5,036**	**3,393**	**(668)**	**(1,422)**	**(189)**	**34,253**	**5,032**	**39,285**

(1) Transactions of the period are listed in Note 16 "Equity" to the consolidated financial statements for the year ended December 31, 2022.

(2) Mainly relates to the sale of part of the renewable assets portfolio in the United States (see Note 16.2.4 "Other transactions" to the consolidated financial statements for the year ended December 31, 2022).

(3) SaaS arrangement (see Note 1.1.2 "Other text" to the consolidated financial statements for the year ended December 31, 2022).

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

In millions of euros	Share capital	Additional paid-in capital	Consoli-dated reserves	Deeply-subor-dinated perpetual notes	Changes in fair value and other	Transla-tion adjust-ments	Treasury stock	Sharehol-ders' equity	Non-controlling interests	Total
EQUITY AT DECEMBER 31, 2022	**2,435**	**25,667**	**5,036**	**3,393**	**(668)**	**(1,422)**	**(189)**	**34,253**	**5,032**	**39,285**
Net income/(loss)			2,208					2,208	695	2,903
Other comprehensive income/(loss)			(307)		(2,348)	(270)		(2,925)	286	(2,639)
Total comprehensive income/(loss)			**1,901**	**-**	**(2,348)**	**(270)**	**-**	**(717)**	**981**	**264**
Share-based payment	-	-	53					53	-	53
Dividends paid in cash (1)		(1,752)	(1,675)					(3,427)	(522)	(3,949)
Purchase/disposal of treasury stock			(69)				12	(57)	-	(57)
Operations on deeply-subordinated perpetual notes			(80)	-				(80)	-	(80)
Transactions between owners (2)			(99)					(99)	(68)	(168)
Transactions with an impact on non-controlling interests			-					-	40	40
Share capital increases and decreases								-	201	201
Normative change			(5)					(5)	-	(5)
Other changes (3)		-	137	-	-		-	137	4	140
EQUITY AT DECEMBER 31, 2023	**2,435**	**23,916**	**5,198**	**3,393**	**(3,015)**	**(1,693)**	**(177)**	**30,057**	**5,667**	**35,724**

(1) Transactions of the period are listed in Note 16 "Equity".

(2) Mainly concerns the acquisition of the minority interest held by Mitsui & Co, Ltd ("Mitsui") in International Power (Australia) Holdings Pty Limited ("IPAH") (see Note 4 "Main changes in Group structure").

(3) Mainly concerns the resolution of the dispute with the French tax authorities on the withholding tax receivable assigned without recourse by the Group in 2005. This dispute is presented in Note 23 "Legal and anti-trust proceedings".

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

Statement of cash flows

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
NET INCOME/(LOSS)		**2,903**	**390**
- Net income/(loss) relating to discontinued operations		-	2,183
NET INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS		**2,903**	**(1,793)**
- Share in net income/(loss) of equity method entities		(1,066)	(1,059)
+ Dividends received from equity method entities		1,031	713
- Net depreciation, amortization, impairment and provisions		11,020	8,057
- Impact of changes in scope of consolidation and other non-recurring items		136	74
- Mark-to-market on commodity contracts other than trading instruments		(2,430)	3,661
- Other items with no cash impact		(382)	(157)
- Income tax expense	11	1,031	(83)
- Net financial income/(loss)	10	2,163	3,003
Cash generated from operations before income tax and working capital requirements		**14,407**	**12,415**
+ Tax paid		(1,687)	(1,504)
Change in working capital requirements	**22.1**	**397**	**(2,424)**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**13,117**	**8,488**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		-	**98**
CASH FLOW FROM OPERATING ACTIVITIES		**13,117**	**8,586**
Acquisitions of property, plant and equipment and intangible assets	13.2 & 13.3	(7,328)	(6,379)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	4 & 14	(1,392)	(289)
Acquisitions of investments in equity method entities and joint operations	4 & 14	(237)	(407)
Acquisitions of equity and debt instruments	14	(1,675)	175
Disposals of property, plant and equipment, and intangible assets	13.2 & 13.3	122	173
Loss of controlling interests in entities, net of cash and cash equivalents sold	4 & 14	27	6,728
Disposals of investments in equity method entities and joint operations	4 & 14	131	1,461
Disposals of equity and debt instruments	14	(8)	268
Interest received on financial assets		118	(37)
Dividends received on equity instruments		9	18
Change in loans and receivables originated by the Group and other	5.6	(1,585)	(2,877)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**(11,818)**	**(1,167)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		-	**(3,123)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES		**(11,818)**	**(4,290)**
Dividends paid [(1)]		(4,067)	(2,665)
Repayment of borrowings and debt		(6,671)	(10,972)
Change in financial assets held for investment and financing purposes		15	188
Interest paid		(1,058)	(822)
Interest received on cash and cash equivalents		569	194
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		134	(216)
Increase in borrowings		10,716	8,669
Increase/decrease in capital		200	(259)
Purchase and/or sale of treasury stock		(57)	(115)
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUING OPERATIONS		**(218)**	**(5,997)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		-	**3,019**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES		**(218)**	**(2,979)**
Effects of changes in exchange rates and other relating to continuing operations		(73)	356
Effects of changes in exchange rates and other relating to discontinued operations		-	7
Effects of changes in exchange rates and other		(73)	363
TOTAL CASH FLOW FOR THE PERIOD		**1,008**	**1,680**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**15,570**	**13,890**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**16,578**	**15,570**

(1) The line "Dividends paid" includes the coupons paid to owners of deeply-subordinated perpetual notes (see Note 16 "Equity").

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

6.2.2 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

ENGIE SA, the parent company of the Group, is a French *société anonyme* with a Board of Directors that is subject to the provisions of Book II of the French Commercial Code (Code du commerce), as well as to all other provisions of French law applicable to French commercial companies. It was incorporated on November 20, 2004 for a period of 99 years.

It is governed by current and future laws and by regulations applicable to *sociétés anonymes* and its bylaws.

The Group is headquartered at 1 place Samuel de Champlain, 92400 Courbevoie (France).

ENGIE shares are listed on the Paris, Brussels and Luxembourg stock exchanges.

On February 21, 2024, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2023.

NOTE 1 Accounting framework and basis for preparing the consolidated financial statements

1.1 Accounting standards

Pursuant to European Regulation (EU) 2019/980 dated March 14, 2019, financial information concerning the assets, liabilities, financial position and profit and loss of ENGIE has been provided for the last two reporting periods (ended December 31, 2022 and 2023). This information was prepared in accordance with European Regulation (EC) 1606/2002 "on the application of international accounting standards" dated July 19, 2002. The Group's consolidated financial statements for the year ended December 31, 2023 have been prepared in accordance with IFRS Standards as published by the International Accounting Standards Board and endorsed by the European Union [1].

The accounting standards applied in the consolidated financial statements for the year ended December 31, 2023 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2022, except for those described below.

1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable as from 2023

- IFRS 17 – Insurance Contracts (including amendments).
- Amendments to IAS 1 – Presentation of Financial Statements and the Materiality Practice Statement: Disclosure of Accounting Policies.
- Amendments to IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates.
- Amendments to IAS 12 – Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction.
- Amendments to IAS 12 – Income Taxes: International Tax Reform – Pillar 2 Model.

This standard and these amendments have no material impact on the Group's consolidated financial statements.

1.1.2 IFRS Standards, amendments or IFRIC Interpretations effective from 2024 and that the Group has elected not to early adopt

- Amendments to IAS 1 – Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current.
- Amendments to IFRS 16 – Leases: Lease Liability in a Sale and Leaseback.
- Amendments to IAS 7 – Statement of Cash Flows and IFRS 7 – Financial Instruments: Disclosures – Supplier Finance Arrangements [2].
- Amendments to IAS 21 – The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability [1].

The impact of these amendments is currently being assessed.

1.2 Measurement and presentation basis

1.2.1 Historical cost convention

The Group's consolidated financial statements are presented in euros and have been prepared using the historical cost convention, except for financial instruments, which are accounted for under the financial instrument categories defined by IFRS 9.

1.2.2 Chosen options

1.2.2.1 Reminder of IFRS 1 transition options

The Group used some of the options available under IFRS 1 for its transition to IFRS in 2005. The options that continue to have an impact on the consolidated financial statements are:

- translation adjustments: the Group elected to reclassify cumulative translation adjustments within consolidated equity at January 1, 2004;
- business combinations: the Group elected not to restate business combinations that took place prior to January 1, 2004 in accordance with IFRS 3.

(1) Available on the European Commission's website: http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:02002R1606-20080410
(2) These standards and amendments have not yet been adopted by the European Union.

1.2.2.2 Business combinations

Business combinations carried out prior to January 1, 2010 were accounted for in accordance with IFRS 3 prior to the revision. In accordance with IFRS 3 revised, these business combinations have not been restated.

Since January 1, 2010, the Group applies the purchase method as defined in IFRS 3 revised, which consists in recognizing the identifiable assets acquired and liabilities assumed at their fair values at the acquisition date, as well as any non-controlling interests in the acquiree. Non-controlling interests are measured either at fair value or at the entity's proportionate interest in the net identifiable assets of the acquiree. The Group determines on a case-by-case basis which measurement option to be used to recognize non-controlling interests.

1.2.2.3 Consolidated statement of cash flows

The consolidated statement of cash flows is prepared using the indirect method starting from net income.

"Interest received on non-current financial assets" is classified within investing activities because it represents a return on investments. "Interest received on cash and cash equivalents" is shown as a component of financing activities because the interest can be used to reduce borrowing costs. This classification is consistent with the Group's internal organization, where debt and cash are managed centrally by the Group Treasury Department.

As impairment losses on current assets are considered to be definitive losses, changes in current assets are presented net of impairment.

Cash flows relating to the payment of income tax are presented on a separate line.

1.2.3 Foreign currency transactions

1.2.3.1 Translation of foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing on the date of the transaction.

Functional currency is the currency of the primary economic environment in which an entity operates, which in most cases corresponds to local currency. However, certain entities may have a functional currency different from the local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

At each reporting date:

- monetary assets and liabilities denominated in foreign currencies are translated at year-end exchange rates. The resulting translation gains and losses are recorded in the consolidated income statement for the year to which they relate;
- non-monetary assets and liabilities denominated in foreign currencies are recognized at the historical cost applicable at the date of the transaction.

1.2.3.2 Translation of the financial statements of subsidiaries with a functional currency other than the euro (the presentation currency)

The statements of financial position of these subsidiaries are translated into euros at the official year-end exchange rates. Income statement and cash flow statement items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of these subsidiaries are recorded under "Translation adjustments" as other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of foreign entities are classified as assets and liabilities of those foreign entities and are therefore denominated in the functional currencies of the entities and translated at the year-end exchange rate.

1.3 Use of estimates and judgment

1.3.1 Estimates

The preparation of consolidated financial statements requires the use of estimates and assumptions to determine the value of assets and liabilities and contingent assets and liabilities at the reporting date, as well as income and expenses reported during the period.

Developments in the economic and financial environment, particularly relating to volatile commodities markets, and the war in Ukraine have prompted the Group to step up its risk oversight procedures, mainly in measuring financial instruments and assessing counterparty and liquidity risk. The estimates used by the Group, among other things, to test for impairment and to measure provisions, also take into account this environment and the market volatility.

Accounting estimates are made in a context that remains sensitive to energy market developments, therefore making it difficult to apprehend medium- and short-term economic prospects. Particular attention has been paid to the consequences of fluctuations in the price of gas and electricity.

Due to uncertainties inherent in the estimation process, the Group regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used in preparing the Group's consolidated financial statements relate mainly to:

- measurement of the recoverable amount of goodwill (see Note 13.1), other intangible assets (see Note 13.2) and property, plant and equipment (see Note 13.3);
- measurement of the fair value of financial assets and liabilities, and, in the current context, factoring in the uncertainty surrounding the key assumptions used, in particular updating the main valuation inputs of commodity derivatives, in particular the "bid ask" reserve, to reflect the volatility of commodity prices (see Notes 14 and 15);
- assessment of expected credit losses, particularly in order to update probabilities of default and other inputs, mainly for calculating the CVA (Credit Valuation Adjustment) in a context of market price uncertainty and volatility (see Note 15);

- the measurement of provisions, in particular those relating to the treatment of nuclear waste under the agreement signed on June 29, 2023 with the Belgian government on the extension of the Tihange 3 and Doel 4 nuclear reactors and on all nuclear waste-related obligations, which became binding following the signature of supplements to the initial agreements on July 21, 2023. Transaction documents signed on December 13, 2023 specify the practical implementation of the first agreements of June and July. These estimates also concern provisions for dismantling facilities, disputes, and pensions and other employee benefits (see Notes 17 and 18);
- measurement of un-metered revenues (energy in the meter), for which the valuation techniques have been impacted by changes in certain customers' consumption habits in a context of fluctuations in commodity prices (see Note 7);
- measurement of recognized tax loss carry-forwards, taking into account, where applicable, taxable income revisions and projections (see Note 11).

1.3.2 Judgment

As well as relying on estimates, Group management also makes judgments to define the appropriate accounting policies to apply to certain activities and transactions, particularly when the IFRS Standards and IFRIC Interpretations in force do not specifically deal with the related accounting issues.

In particular, the Group exercised its judgment in:

- assessing the nature of control (see Notes 2 and 3);
- identifying the performance obligations of sales contracts (see Note 7);
- determining how revenues are recognized for distribution or transmission services invoiced to customers (see Note 7);
- recognizing support measures granted by certain governments, particularly in France and Romania ("tariff shield"), aimed at protecting both consumers and suppliers of gas and electricity against sharp fluctuations in commodity prices (see Note 7);
- identifying "own use contracts" as defined by IFRS 9 within non-financial purchase and sale contracts (electricity, gas, etc.) (see Note 14);
- identifying offsetting arrangements that meet the criteria set out in IAS 32 – Financial Instruments: Presentation (see Note 14);
- determining whether arrangements are or contain a lease (see Note 13.3);
- recognizing contributions in the energy sector in Europe (see Note 8).

Entities for which judgment on the nature of control has been exercised are listed in Note 2 "Main subsidiaries at December 31, 2023" and Note 3 "Investments in equity method entities".

1.3.3 Consideration of climate issues in the preparation of the Group's financial statements

In addition to the operational and financial issues and risks taken into account in determining future cash flows, the discount rate net of inflation and projected growth, the Group has also exercised its judgment to use assumptions reflecting climate change issues, in order to determine their potential impact on the consolidated financial statements. In particular, the Group checked whether there were any indications that non-financial assets might be impaired:

- the commitments made by France, Europe and various countries at international level, in particular with regard to long-term carbon neutrality, are taken into account (i) in assessing the value of the Group's assets, in particular through the long-term price scenarios used in impairment tests (see Note 13.4), and (ii) in assessing dismantling provisions, in particular by assessing the useful life of gas infrastructures in France based on the expected change in the energy mix (see Note 17);
- the commitments made specifically by ENGIE are also reflected in the assessment of the value of the Group's assets (see Note 13.4.1), in particular (i) the complete withdrawal from coal activities by 2027, which primarily concerns South America, depending on each asset's specific prospects (closure, conversion or disposal) and (ii) the gradual decarbonization of the Group's power generation activities to net zero by 2045 and, more broadly, the Group's investment strategy in favor of the energy transition by expanding its renewable energy fleet, substituting natural gas with renewable gas, thereby confirming a mixed gas/electricity scenario in the Group's long-term projections under the present regulation/remuneration methods for regulated assets (in France in particular), and developing low-carbon services offerings.

As a reminder, the management of climate and environmental risks and their challenges for the Group are presented in Chapter 2 "Risk factors" and Chapter 3 "Non-Financial Statement and CSR Information" of the Universal Registration Document.

NOTE 2 Main subsidiaries at December 31, 2023

ACCOUNTING STANDARDS

Controlled entities (subsidiaries) are fully consolidated in accordance with IFRS 10 – Consolidated Financial Statements. An investor (the Group) controls an entity and therefore must consolidate it if all of the following three criteria are met:

- it has the ability to direct the relevant activities of the entity;
- it has the rights and is exposed to variable returns from its involvement with the entity;
- it has the ability to use its power over the entity to affect the investor's return.

2.1 List of main subsidiaries at December 31, 2023

The following lists are made available by the Group to third parties, pursuant to Regulation No. 2016-09 of the French accounting standards authority (ANC) issued on December 2, 2016:

- list of companies included in consolidation;
- list of companies excluded from consolidation because their individual and cumulative incidence on the Group's consolidated financial statements is not material. They correspond to entities deemed not significant as regards the Group's main key figures (revenues, total equity, etc.) or entities that have ceased all activities and are undergoing liquidation/closure proceedings;
- list of main non-consolidated interests.

This information is available on the Group's website (https://www.engie.com/en/finance-area Regulated information section). Non-consolidated companies are classified as non-current financial assets (see Note 14.1.1.1) under "Equity instruments at fair value".

The list of the main subsidiaries consolidated under the full consolidation method presented below was determined, as regards operating entities, based on their contribution to Group revenues, EBITDA, net income and net debt. The main equity-accounted investments (associates and joint ventures) are presented in Note 3 "Investments in equity method entities".

Some entities such as ENGIE SA, ENGIE Énergie Services SA or Electrabel SA comprise both operating activities and headquarters functions which report to management teams of different reportable segments. In the following tables, these operating activities and headquarters functions are shown within their respective reportable segments under their initial company name followed by a * sign.

Renewables

			% interest	
Company name	**Activity**	**Country**	**Dec. 31, 2023**	**Dec. 31, 2022**
BTE Renewables	Electricity distribution and generation	South Africa	60.0	-
Compagnie Nationale du Rhône	Electricity distribution and generation	France	50.0	50.0
ENGIE Energía Perú*	Electricity distribution and generation	Peru	61.8	61.8
ENGIE Green	Electricity distribution and generation	France	100.0	100.0
ENGIE Renouvelables	Electricity distribution and generation	France	100.0	100.0
ENGIE Romania* (1)	Natural gas distribution	Romania	51.0	51.0
ENGIE Solar	Solar EPC	France	100.0	100.0
Groupe ENGIE Brasil Energia*	Electricity distribution and generation	Brazil	68.7	68.7
Groupe ENGIE Energía Chile*	Electricity distribution and generation	Chile	60.0	60.0
Jupiter Equity Holding LLC	Electricity distribution and generation	United States	51.0	51.0
Mercury Equity Holding LLC	Electricity distribution and generation	United States	51.0	51.0
Saturn Equity Holding LLC	Electricity distribution and generation	United States	100.0	100.0
Kathu Solar Park (2)	Electricity distribution and generation	South Africa	57.7	48.5

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.
(2) Following the acquisition of an additional stake in 2023, the Group now fully consolidates Kathu Solar Park (see Note 4.2).

Networks

			% interest	
Company name	**Activity**	**Country**	**Dec. 31, 2023**	**Dec. 31, 2022**
Elengy	Natural gas, LNG	France	60.8	60.8
ENGIE Romania* (1)	Natural gas distribution, Energy sales	Romania	51.0	51.0
Fosmax LNG	Natural gas, LNG	France	60.8	60.8
GRDF	Natural gas distribution	France	100.0	100.0
ENGIE Brazil Energia Group*	Electricity distribution and generation	Brazil	68.7	68.7
ENGIE Energía Chile Group*	Electricity distribution and generation	Chile	60.0	60.0
GRTgaz Group (excluding Elengy)	Natural gas transportation	France, Germany	60.8	60.8
Storengy Deutschland GmbH	Underground natural gas storage	Germany	100.0	100.0
Storengy SAS	Underground natural gas storage	France	100.0	100.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

Energy Solutions

			% interest	
Company name	**Activity**	**Country**	**Dec. 31, 2023**	**Dec. 31, 2022**
Cofely Besix	Systems, facilities and maintenance services	UAE	100.0	100.0
CPCU	Urban heating networks	France	66.5	66.5
Energie SaarLorLux AG	Energy services	Germany	51.0	51.0
ENGIE Deutschland GmbH	Energy services	Germany	100.0	100.0
ENGIE Energie Services SA*	Energy services, Networks	France	100.0	100.0
ENGIE Servizi S.p.A	Energy services	Italy	100.0	100.0
Tractebel Engineering	Engineering	Belgium	100.0	100.0

FlexGen

			% interest	
Company name	**Activity**	**Country**	**Dec. 31, 2023**	**Dec. 31, 2022**
Group Broad Reach Power	Battery storage	United States	100.0	-
Electrabel SA*	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Energía Perú*	Electricity distribution and generation	Peru	61.8	61.8
ENGIE Energie Nederland NV*	Electricity generation, Energy sales	Netherlands	100.0	100.0
ENGIE Italia S.p.A*	Electricity generation, Energy sales	Italy	100.0	100.0
ENGIE SA*	Electricity generation, Energy sales	France	100.0	100.0
ENGIE Thermique France	Electricity generation	France	100.0	100.0
First Hydro Holdings Company	Electricity generation	United Kingdom	75.0	75.0
ENGIE Energía Chile Group*	Electricity distribution and generation	Chile	60.0	60.0
Pelican Point Power Limited	Electricity generation	Australia	100.0	72.0
UCH Power Limited	Electricity generation	Pakistan	100.0	100.0

Retail

Company name	Activity	Country	% interest Dec. 31, 2023	Dec. 31, 2022
Electrabel SA*	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE Italia S.p.A*	Electricity generation, Energy sales	Italy	100.0	100.0
ENGIE Romania* (1)	Natural gas distribution, Energy sales	Romania	51.0	51.0
ENGIE SA*	Electricity generation, Energy sales	France	100.0	100.0
Simply Energy	Energy sales	Australia	100.0	72.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

Nuclear

Company name	Activity	Country	% interest Dec. 31, 2022	Dec. 31, 2022
Electrabel SA*	Electricity generation, Energy sales	Belgium	100.0	100.0
Synatom	Managing provisions relating to power plants and nuclear fuel	Belgium	100.0	100.0

Others

Company name	Activity	Country	% interest Dec. 31, 2023	Dec. 31, 2022
Cogac	Holding	France	100.0	100.0
Electrabel SA*	Electricity generation, Energy sales	Belgium	100.0	100.0
ENGIE CC	Financial subsidiaries, Central functions	Belgium	100.0	100.0
ENGIE Deutschland AG*	Holding, Energy management trading	Germany	100.0	100.0
ENGIE Energie Nederland Holding BV*	Holding, Energy management trading	Netherlands	100.0	100.0
ENGIE Energie Nederland NV	Electricity generation, Energy sales	Netherlands	100.0	100.0
ENGIE Energy Services International SA	Holding	Belgium	100.0	100.0
ENGIE Energie Services SA*	Energy services, Networks	France	100.0	100.0
ENGIE Energy Management*	Energy management trading	France, Belgium, Italy, United Kingdom	100.0	100.0
ENGIE Finance SA	Financial subsidiaries	France	100.0	100.0
ENGIE Global Markets	Energy management trading	France, Belgium, Singapore	100.0	100.0
ENGIE Holding Inc.	Holding – parent company	United States	100.0	100.0
ENGIE Italia a.A*	Holding, Energy management trading	Italy	100.0	100.0
ENGIE North America	Electricity distribution and generation, Natural gaz, LNG, Energy services	United States	100.0	100.0
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0
ENGIE Romania* (1)	Natural gas distribution, Energy sales	Romania	51.0	51.0
ENGIE SA*	Holding – parent company, Energy management trading, energy sales	France	100.0	100.0
GDF International	Holding	France	100.0	100.0
Genfina	Holding	Belgium	100.0	100.0
ENGIE Energía Chile Group*	Electricity distribution and generation	Chile	60.0	60.0
International Power Limited	Holding	United Kingdom	100.0	100.0

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.

2.2 Significant judgments exercised when assessing control

The Group primarily considers the following information and criteria when determining whether it has control over an entity:

- governance arrangements: voting rights and whether the Group is represented in the governing bodies, majority rules and veto rights;
- the nature of substantive or protective rights granted to shareholders, relating to the entity's relevant activities;
- deadlock resolution mechanisms;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

The Group exercised its judgment regarding the entities and sub-groups described below:

Entities in which the Group has the majority of the voting rights

GRTgaz (France Infrastructures): 60.8%

The analysis of the shareholders' agreement concluded with Société d'Infrastructures Gazières, a subsidiary of Caisse des Dépôts et Consignations (CDC), which holds 38.6% of the share capital of GRTgaz, was completed by an assessment of the rights granted to the French Energy Regulatory Commission (Commission de Régulation de l'Énergie – CRE). As a regulated activity, GRTgaz has a dominant position on the gas transportation market in France. Accordingly, since the transposition of the Third European Directive of July 13, 2009 into French law (*Code de l'énergie* – Energy Code) on May 9, 2011, GRTgaz has been subject to independence rules as regards its directors and senior management team. The French Energy Code confers certain powers on the CRE in the context of its duties to control the proper functioning of the gas markets in France, including verifying the independence of the members of the Board of Directors and senior management and assessing the choice of investments. The Group considers that it exercises control over GRTgaz and its subsidiaries (including Elengy) based on the Group's ability to appoint the majority of the members of the Board of Directors and take decisions about the relevant activities, especially in terms of the level of investment and planned financing.

Entities in which the Group does not have the majority of the voting rights

For entities in which the Group does not have the majority of the voting rights, judgment is exercised with regard to the following items, in order to assess whether there is a situation of *de facto* control:

- dispersion of the shareholding structure: number of voting rights held by the Group relative to the number of rights held respectively by the other holders of voting rights and their dispersion;
- voting patterns at Shareholders' Meetings: the percentages of voting rights exercised by the Group at Shareholders' Meetings in recent years;
- governance arrangements: representation in the governing body with strategic and operational decision-making power over the relevant activities;
- rules for appointing key management personnel;
- contractual relationships and material transactions.

The main fully consolidated entity in which the Group does not have the majority of the voting rights at December 31, 2023 is Compagnie Nationale du Rhône (49.98%).

Compagnie Nationale du Rhône ("CNR" – Renewables France): 49.98%

The Group holds 49.98% of the share capital of CNR, with CDC holding 33.2%, and the balance of 16.82% being dispersed among around 200 local authorities. In view of the current provisions of the French "Murcef" law, under which a majority of CNR's share capital must remain under public ownership, the Group is unable to hold more than 50% of the share capital. However, the Group considers that it exercises *de facto* control as it holds the majority of the voting rights exercised at Shareholders' Meetings due to the widely dispersed shareholding structure and the absence of evidence of the minority shareholders acting in concert.

2.3 Main subsidiaries with non-controlling interests

The following table shows the subsidiaries with non-controlling interests that are deemed to be material, the respective contributions to equity and to net income at December 31, 2023 and December 31, 2022, as well as the dividends paid to non-controlling interests:

In millions of euros		Percentage interest of non-controlling interests		Net income/(loss) of non-controlling interests		Equity of non-controlling interests		Dividends paid to non-controlling interests	
Company name	**Activity**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**
GRTgaz Group (France Infrastructures, France)	Regulated gas transportation activities and management of LNG terminals	39.2	39.2	158	190	1,611	1,614	194	168
ENGIE Energía Chile Group (Latin America, Chile) (1)	Electricity distribution and generation – thermal power plants	40.0	40.0	(147)	(158)	504	680	-	-
ENGIE Romania Group (Rest of Europe, Romania) (2)	Distribution of natural gas, Energy sales	49.0	49.0	70	31	671	607	-	-
ENGIE Brasil Energia Group (Latin America, Brazil) (1)	Electricity distribution and generation	31.3	31.3	145	116	569	296	58	112
ENGIE Energía Perú (Latin America, Peru) (1)	Electricity distribution and generation – thermal and hydroelectric power plants	38.2	38.2	5	21	412	433	12	12
Other subsidiaries with non-controlling interests (3)				464	(27)	1,900	1,401	258	190
TOTAL				**695**	**173**	**5,667**	**5,032**	**522**	**482**

(1) ENGIE Energia Chile, ENGIE Brasil Energia and ENGIE Energía Perú are listed in their respective countries.
(2) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.
(3) The net income/(loss) of other non-controlling interests is mainly impacted by the net income of the operating MtMs for an amount of €386 million in 2023 and a net loss of €158 million in 2022.

2.3.1 Condensed financial information on main subsidiaries with non-controlling interests

The condensed financial information concerning these subsidiaries presented in the table below is based on a 100% interest and is shown before intragroup eliminations.

	GRTgaz Group		ENGIE Energía Chile Group		ENGIE Romania Group (1)	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
Income statement						
Revenues	2,623	2,535	1,732	1,648	2,111	2,819
Net income/(loss)	403	485	(367)	(395)	142	63
Net income/(loss) Group share	245	295	(220)	(237)	72	32
Other comprehensive income/(loss) – Group share	56	54	(43)	85	(7)	(15)
TOTAL COMPREHENSIVE INCOME/(LOSS) – GROUP SHARE	**301**	**349**	**(264)**	**(152)**	**65**	**17**
Statement of financial position						
Current assets	1,189	1,319	1,170	1,108	796	1,091
Non-current assets	9,780	9,961	3,058	3,210	1,062	975
Current liabilities	(1,325)	(1,360)	(655)	(540)	(398)	(753)
Non-current liabilities	(5,532)	(5,803)	(2,325)	(2,091)	(102)	(86)
TOTAL EQUITY	**4,112**	**4,116**	**1,247**	**1,688**	**1,358**	**1,227**
TOTAL EQUITY OF NON-CONTROLLING INTERESTS	**1,611**	**1,614**	**504**	**680**	**671**	**607**
Statement of cash flows						
Cash flow from operating activities	1,090	1,117	482	(320)	412	(365)
Cash flow from (used in) investing activities	(486)	(450)	(424)	(384)	(148)	(121)
Cash flow from (used in) financing activities	(616)	(663)	86	635	(254)	317
TOTAL CASH FLOW FOR THE PERIOD (2)	**(13)**	**4**	**144**	**(68)**	**11**	**(169)**

(1) On February 20, 2024, ENGIE finalized the acquisition of an additional 12% stake in ENGIE Romania.
(2) Excluding effects of changes in exchange rates and other.

	ENGIE Brasil Energia Group		ENGIE Energía Perú	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
Income statement				
Revenues	1,979	2,164	704	525
Net income/(loss)	434	370	12	56
Net income/(loss) Group share	288	254	8	34
Other comprehensive income/(loss) – Group share	(73)	72	(24)	51
TOTAL COMPREHENSIVE INCOME/(LOSS) – GROUP SHARE	**216**	**326**	**(17)**	**85**
Statement of financial position				
Current assets	1,691	1,322	543	384
Non-current assets	5,571	4,731	1,778	1,923
Current liabilities	(1,081)	(1,019)	(372)	(257)
Non-current liabilities	(4,875)	(4,213)	(870)	(915)
TOTAL EQUITY	**1,306**	**822**	**1,079**	**1,135**
TOTAL EQUITY OF NON-CONTROLLING INTERESTS	**569**	**296**	**412**	**433**
Statement of cash flows				
Cash flow from operating activities	1,309	1,027	162	62
Cash flow from (used in) investing activities	(711)	(685)	(94)	(186)
Cash flow from (used in) financing activities	(39)	(1,010)	(72)	17
TOTAL CASH FLOW FOR THE PERIOD [1]	**559**	**(668)**	**(4)**	**(107)**

(1) Excluding effects of changes in exchange rates and other.

NOTE 3 Investments in equity method entities

ACCOUNTING STANDARDS

The Group accounts for its investments in associates and joint ventures using the equity method. Under IFRS 11 – Joint Arrangements, a joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. An associate is an entity over which the Group has significant influence.

The respective contributions of associates and joint ventures in the statement of financial position, the income statement and the statement of comprehensive income at December 31, 2023 and December 31, 2022 are as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Statement of financial position		
Investments in associates	4,259	4,187
Investments in joint ventures	4,954	5,092
INVESTMENTS IN EQUITY METHOD ENTITIES	**9,213**	**9,279**
Income statement		
Share in net income/(loss) of associates	486	400
Share in net income/(loss) of joint ventures	580	659
SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**1,066**	**1,059**
Statement of comprehensive income		
Share of associates in “Other comprehensive income/(loss)”	11	510
Share of joint ventures in “Other comprehensive income/(loss)”	26	366
SHARE OF EQUITY METHOD ENTITIES IN “OTHER COMPREHENSIVE INCOME/(LOSS)”	**37**	**876**

Significant judgments

The Group primarily considers the following information and criteria in determining whether it has joint control or significant influence over an entity:

- governance arrangements: whether the Group is represented in the governing bodies, majority rules and veto rights;
- the nature of substantive or protective rights granted to shareholders, relating to the entity’s relevant activities.

  This can be difficult to determine in the case of “project management” or “one-asset” entities, as certain decisions concerning the relevant activities are made upon the creation of the joint arrangement and remain valid throughout the project. Accordingly, the analysis of rights relates to the relevant residual activities of the entity (those that significantly affect the variable returns of the entity);
- deadlock resolution mechanisms;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

This can also involve analyzing the Group’s contractual relations with the entity, in particular the conditions in which these contracts are entered into, their duration as well as the management of conflicts of interest that may arise when the entity’s governing body casts votes.

The Group exercised its judgment regarding the following entities and sub-groups:

Project management entities in the Middle East and in Africa

The significant judgments made in determining the consolidation method to be applied to these project management entities related to the risks and rewards relating to contracts between ENGIE and the entity concerned, as well as an analysis of the residual relevant activities over which the entity retains control after its creation. The Group considers that it exercises significant influence or joint control over these entities, since the decisions taken throughout the term of the project about the relevant activities such as refinancing, or the renewal or amendment of significant contracts (sales, purchases, operating and maintenance services) require, depending on the case, the unanimous consent of two or more parties sharing control.

Joint ventures in which the Group holds an interest of more than 50%

Tihama (60%)

ENGIE holds a 60% stake in the Tihama cogeneration plant in Saudi Arabia and its partner Saudi Oger holds 40%. The Group considers that it has joint control over Tihama since decisions about its relevant activities, including for example the approval of the budget and amendments to major contracts, etc., require the unanimous consent of the parties sharing control.

Transportadora Associada de Gás SA ("TAG" – Latin America): 65.0% holding interest representing a net interest in TAG of 54.8% (1)

The Group exercises joint control over TAG since decisions about its relevant activities, including, for example, the preparation of the budget and medium-term plan, investments, operations and maintenance, etc., are taken by a majority vote requiring the agreement of ENGIE and Caisse de Dépôt et Placement du Québec (CDPQ).

Joint control – difference between joint ventures and joint operations

Classifying a joint arrangement requires the Group to use its judgment to determine whether the entity in question is a joint venture or a joint operation. IFRS 11 requires an analysis of "other facts and circumstances" when determining the classification of jointly controlled entities.

The IFRS Interpretations Committee (IFRS IC) (November 2014) decided that for an entity to be classified as a joint operation, other facts and circumstances must give rise to direct enforceable rights to the assets, and obligations for the liabilities, of the joint arrangement.

In view of this position and its application to our analyses, the Group has no material joint operations at December 31, 2023.

3.1 Investments in associates

3.1.1 Contribution of material associates and of associates that do not have a material impact on the Group's financial statements taken individually

The table below shows the contribution of each material associate along with the aggregate contribution of associates deemed not material taken individually, in the consolidated statement of financial position, income statement, statement of comprehensive income, and the "Dividends received from equity method entities" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material associates. These criteria include the contribution to the consolidated line items "Share in net income/(loss) of associates" and "Investments in associates", the total assets of associates in Group share, and associates carrying major projects in the study or construction phase for which the related investment commitments are material.

In millions of euros			Consolidation percentage of investments in associates		Carrying amount of investments in associates		Share in net income/(loss) of associates		Other comprehensive income/(loss) of associates		Dividends received from associates	
Company name	**Activity**	**Capacity**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**	**Dec. 31, 2023**	**Dec. 31, 2022**
Project management entities in the Middle East (Middle-East, Asia & Africa, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman, Kuwait) (1)	Gas-fired power plants and seawater desalination facilities		-	-	1,346	1,378	176	181	24	411	143	145
Movhera	Hydro power plant	1,688 MW	40.00	40.00	556	521	31	(13)	11	41	8	-
Energia Sustentável do Brasil (Brazil)	Hydro power plant	3,750 MW	40.00	40.00	596	567	10	(3)	-	-	-	-
GASAG (Germany)	Gas and heat networks		31.57	31.58	255	279	26	26	(36)	(62)	15	17
Eolia Renovables	Wind power plant	943 MW	40.00	40.00	343	359	14	33	(3)	2	28	-
Other investments in associates that are not material taken individually					1,163	1,082	227	176	15	118	123	109
INVESTMENTS IN ASSOCIATES					**4,259**	**4,187**	**486**	**400**	**11**	**510**	**316**	**271**

(1) *Investments in associates operating gas-fired power plants and seawater desalination facilities in the Arabian Peninsula have been grouped together under "Project management entities in the Middle East". This mainly includes around 40 associates operating thermal power plants with a total installed capacity of 26,388 MW (at 100%).*

These associates have fairly similar business models and joint arrangements: the project management entities selected as a result of a competitive bidding process develop, build and operate power generation plants and seawater desalination facilities. The entire output of these facilities is sold to government-owned companies under power and water purchase agreements, over periods generally spanning 20 to 30 years.

In accordance with their contractual arrangements, the corresponding plants are recognized in accordance with IFRIC 12, IFRS 16 or IAS 16 as property, plant and equipment or as financial receivables. The shareholding structure of these entities systematically includes a government-owned company based in the same country as the project management entity. The Group's percentage interest and percentage voting rights in each of these entities varies between 20% and 50%.

(1) *In January 2024, the Group completed the sale of a 15% stake in TAG to CDPQ (current partner). On completion of this transaction the Group no longer holds any potential voting rights. The Group's holding in TAG amounts to 50%, resulting in a net interest of 44.5% (the impact of this partial disposal on net financial debt 2024 amounts to €0.5 billion).*

The share in net income/(loss) of associates includes a net non-recurring income of €18 million in 2023 (compared to a net non-recurring loss of €18 million in 2022), mainly including changes in the fair value of derivative instruments, impairment losses and disposal gains and losses, net of tax (see Note 5.3 "Net recurring income Group share (NriGs)").

3.1.2 Financial information regarding material associates

The tables below provide condensed financial information for the Group's main associates. The amounts shown have been determined in accordance with IFRS, before the elimination of intragroup transactions and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the associate performed at the acquisition date at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE".

In millions of euros	Revenues	Net income/ (loss)	Other compre-hensive income	Total compre-hensive income/ (loss)	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Total equity	Consoli-dation % of Group	Total equity attribut-able to ENGIE
AT DECEMBER 31, 2023											
Project management entities in the Middle East	4,886	714	88	802	2,635	18,229	2,856	12,785	5,223	-	1,346
Energia Sustentável do Brasil	625	24	-	24	286	3,276	2,077	(5)	1,489	40.00	596
Movhera	434	78	28	106	249	2,055	85	829	1,390	40.00	556
GASAG	2,283	84	(112)	(28)	1,640	2,058	2,643	247	809	31.57	255
Eolia Renovables	177	36	(7)	29	138	2,165	226	1,219	858	40.00	343
AT DECEMBER 31, 2022											
Project management entities in the Middle East	5,067	764	1,695	2,459	2,824	19,711	3,343	13,781	5,411	-	1,378
Energia Sustentável do Brasil	581	(7)	-	(7)	239	3,275	2,098	-	1,416	40.00	567
Movhera	384	(33)	103	70	147	2,124	699	269	1,303	40.00	521
GASAG	1,606	82	(196)	(114)	1,491	2,140	2,462	284	885	31,57	279
Eolia Renovables	216	82	4	86	297	2,097	340	1,155	900	40.00	359

3.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2023 consolidated financial statements.

In millions of euros	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
Project management entities in the Middle East	-	200	10	28	147	-	-
Contassur (1)	-	-	-	242	2	-	-
Energia Sustentável do Brasil	133	-	-	-	-	14	-
Movhera	-	42	11	7	119	1	3
Other	116	30	-	34	126	47	(36)
AT DECEMBER 31, 2023	**248**	**271**	**22**	**311**	**395**	**62**	**(33)**

(1) Contassur is a life insurance company accounted for using the equity method. Contassur offers insurance contracts, chiefly with pension funds that cover post-employment benefit obligations for Group employees and also employees of other companies mainly engaged in regulated activities in the electricity and gas sector in Belgium. Insurance contracts entered into by Contassur represent reimbursement rights recorded within "Other assets" in the statement of financial position. These reimbursement rights totaled €242 million at December 31, 2023 (€208 million at December 31, 2022).

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3.2 Investments in joint ventures

3.2.1 Contribution of joint ventures to the Group

The table below shows the contribution of each material joint venture along with the aggregate contribution of joint ventures deemed not material taken individually to the consolidated statement of financial position, income statement, statement of comprehensive income, and the "Dividends received from equity method entities" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material joint ventures. These criteria include the contribution to the line items "Share in net income/(loss) of joint ventures" and "Investments in joint ventures", the Group's share in the total assets of joint ventures, and joint ventures conducting major projects in the study or construction phase for which the related investment commitments are material.

In millions of euros			Consolidation percentage of investments in joint ventures		Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures		Other comprehensive income/(loss) of joint ventures		Dividends received from joint ventures	
Company name	**Activity**	**Capacity**	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
Transportadora Associada de Gás SA (TAG) (Brazil) (1)	Gas transmission network		65.00	65.00	1,059	1,129	368	267	29	153	387	184
National Central Cooling Company "Tabreed" (Middle-East, Asia & Africa, Abu Dhabi)	District cooling networks		40.00	40.00	872	874	34	53	35	-	39	18
EcoÉlectrica (Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	534 MW	50.00	50.00	293	314	52	42	-	-	61	60
Portfolio of power generation assets	Electricity generation	2,396 MW	50.00	50.00	218	240	34	33	(2)	15	40	61
WSW Energie und Wasser AG (Germany)	Electricity distribution and generation		33.10	33.10	197	249	(33)	19	-	1	19	11
Iowa University partnership (United States)	Energy services		39.10	39.10	222	229	6	6	(1)	2	4	1
Ocean Winds	Electricity generation	1,462 MW	50.00	50.00	415	431	6	80	(47)	124	-	-
Georgetown University partnership (United States)	Energy services		50.00	50.00	200	203	7	6	-	3	-	-
Tihama Power Generation Co (Saudi Arabia)	Electricity generation	1,544 MW	60.00	60.00	91	94	24	21	(2)	5	21	29
Ohio State Energy Partners (United States)	Energy services		50.00	50.00	50	82	(25)	4	9	8	17	16
Megal GmbH (Germany)	Gas transmission network		49.00	49.00	55	61	-	2	-	-	6	9
Transmisora Eléctrica del Norte (Chile) (2)	Electricity transmission line		50.00	50.00	114	116	3	5	(3)	19	-	-
Other investments in joint ventures that are not material taken individually					1,169	1,071	104	120	7	37	121	53
INVESTMENTS IN JOINT VENTURES					**4,954**	**5,092**	**580**	**659**	**26**	**366**	**715**	**442**

(1) *The Group's interest in Transportadora Associada de Gás SA (TAG) is 54.83%. In January 2024, the Group completed the sale of a 15% stake in TAG to CDPQ (current partner). On completion of this transaction, the Group's holding stands at 50%, resulting in a net interest of 44.5% (the impact of this partial disposal on net financial debt in 2024 amounts to €0.5 billion).*

(2) *The Group's interest inTransmisora Eléctrica del Norte is 30%.*

The share in net income/(loss) of joint ventures includes a non-recurring loss of €39 million in 2023 (non-recurring gain of €1 million in 2022), resulting chiefly from changes in the fair value of derivatives, impairment losses and disposal gains and losses, net of tax (see Note 5.3 "Net recurring income Group share (NriGs)").

3.2.2 Financial information regarding material joint ventures

The amounts shown have been determined in accordance with IFRS before the elimination of intragroup items and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the joint venture performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE" in the statement of financial position.

3.2.2.1 Information on the income statement and statement of comprehensive income

In millions of euros	Revenues	Depreciation and amortization of intangible assets and property, plant and equipment	Net financial income/ (loss)	Income tax benefit/ (expense)	Net income/ (loss)	Other comprehensive income	Total comprehensive income/(loss)
AT DECEMBER 31, 2023							
Transportadora Associada de Gás SA (TAG)	1,672	(234)	(308)	(295)	566	45	610
National Central Cooling Company "Tabreed"	-	(8)	(5)	39	84	89	173
EcoÉlectrica	185	(31)	2	(6)	104	-	104
Portfolio of power generation assets in Portugal	456	(48)	(19)	(28)	97	(7)	90
WSW Energie und Wasser AG	2,338	(19)	(4)	8	(118)	-	(118)
Iowa University partnership	89	-	(21)	-	15	5	20
Ocean Winds	39	(7)	124	(5)	13	(94)	(81)
Georgetown University partnership	81	(2)	(21)	(1)	13	5	18
Tihama Power Generation Co	114	(5)	(8)	(6)	40	(4)	36
Ohio State Energy Partners	188	(1)	(66)	-	(50)	15	(35)
Megal GmbH	122	(70)	(4)	2	-	-	-
Transmisora Eléctrica del Norte	71	-	(32)	(5)	9	(4)	4
AT DECEMBER 31, 2022							
Transportadora Associada de Gás SA (TAG)	1,549	(292)	(386)	(215)	411	235	647
National Central Cooling Company "Tabreed"	167	-	(35)	-	133	-	133
EcoÉlectrica	166	(32)	1	(4)	85	-	85
Portfolio of power generation assets in Portugal	512	(50)	(14)	(27)	74	48	122
WSW Energie und Wasser AG	1,213	(14)	-	(28)	50	3	53
Iowa University partnership	87	-	(21)	-	16	6	22
Ocean Winds	40	(9)	(23)	(1)	160	247	407
Georgetown University partnership	60	(1)	(22)	-	12	5	17
Tihama Power Generation Co	119	(6)	(9)	(6)	35	9	45
Ohio State Energy Partners	180	(1)	(65)	(2)	7	15	22
Megal GmbH	122	(67)	(4)	1	5	-	5
Transmisora Eléctrica del Norte	70	-	(27)	(7)	13	19	32

3.2.2.2 Information on the statement of financial position

In millions of euros	Cash and cash equivalents	Other current assets	Non-current assets	Short-term borrowings	Other current liabilities	Long-term borrowings	Other non-current liabilities	Total equity	Consolidation % of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2023										
Transportadora Associada de Gás SA (TAG)	269	479	6,119	569	299	2,672	1,699	1,629	65.00	1,059
National Central Cooling Company "Tabreed"	450	254	3,713	-	233	1,737	94	2,352	40.00	872
EcoÉlectrica	4	76	543	3	17	-	17	587	50.00	293
Portfolio of power generation assets in Portugal	285	403	550	101	236	372	51	479	50.00	218
WSW Energie und Wasser AG	68	422	878	211	277	222	96	562	33.10	197
Iowa University partnership	1	17	1,146	4	7	586	-	568	39.10	222
Ocean Winds	313	-	3,786	1,670	514	773	314	830	50.00	415
Georgetown University partnership	-	6	964	-	-	569	2	399	50.00	200
Tihama Power Generation Co	54	62	206	72	42	46	11	152	60.00	91
Ohio State Energy Partners	12	71	1,452	-	64	1,353	19	99	50.00	50
Megal GmbH	48	15	644	170	39	341	46	112	49.00	55
Transmisora Eléctrica del Norte	75	12	625	36	7	585	-	83	50.00	42
AT DECEMBER 31, 2022										
Transportadora Associada de Gás SA (TAG)	124	367	6,216	668	71	2,771	1,460	1,737	65.00	1,129
National Central Cooling Company "Tabreed"	402	150	2,631	-	194	805	-	2,184	40.00	874
EcoÉlectrica	6	79	580	3	15	-	18	629	50.00	314
Portfolio of power generation assets in Portugal	247	514	733	99	278	500	60	557	50.00	240
WSW Energie und Wasser AG	82	518	950	263	260	147	150	731	33.10	249
Iowa University partnership	2	17	1,162	7	7	581	-	586	39.10	229
Ocean Winds	337	-	2,425	1,149	189	137	424	863	50.00	431
Georgetown University partnership	5	3	954	-	-	555	3	404	50.00	203
Tihama Power Generation Co	49	145	221	78	51	119	11	156	60.00	94
Ohio State Energy Partners	14	65	1,441	-	10	1,331	17	162	50.00	82
Megal GmbH	18	14	696	-	44	511	49	125	49.00	61
Transmisora Eléctrica del Norte	41	34	770	35	3	574	-	233	50.00	116

3.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2023 consolidated financial statements.

In millions of euros	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
EcoÉlectrica	-	-	-	-	-	-	22
WSW Energie und Wasser AG	(3)	17	-	3	-	-	-
Megal GmbH	65	-	-	-	-	6	-
Futures Energies Investissements Holding	69	25	11	4	182	8	-
Ocean Winds	-	-	28	3	535	-	-
Other	96	140	10	55	141	11	7
AT DECEMBER 31, 2023	**226**	**182**	**48**	**65**	**857**	**27**	**29**

3.3 Other information on investments accounted for using the equity method

3.3.1 Unrecognized share of losses of associates and joint ventures

Cumulative unrecognized losses of associates (corresponding to the cumulative amount of losses exceeding the carrying amount of investments in the associates concerned) including other comprehensive income/(loss), amounted to €37 million in 2023 (*versus* €6 million in 2022).

These unrecognized losses correspond to the negative fair value of derivative instruments designated as interest rate and commodity hedges ("Other comprehensive income/(loss)") contracted by associates in the Middle-East, Africa and Asia in connection with the financing of construction projects for power generation plants.

3.3.2 Commitments and guarantees given by the Group in respect of equity method entities

At December 31, 2023, the main commitments and guarantees given by the Group in respect of equity method entities concern:

- Energia Sustentável do Brasil ("Jirau"), for an aggregate amount of BRL 4,008 million (€742 million);

  At December 31, 2023, the loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 10,021 million (€1,855 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium;
- TAG, mainly for bank guarantees for an amount of €143 million;
- The project management entities for an aggregate amount of €1,695 million. Commitments and guarantees given by the Group in respect of these project management entities chiefly correspond to:
  - equity contribution commitments for projects in the construction phase for an amount of € 1,088 million,
  - letters of credit to guarantee debt service reserve accounts for an aggregate amount of €167 million.

    The project financing set up in certain entities can require those entities to maintain a certain level of cash within the Company (usually enough to service its debt for six months). This is particularly the case when the financing is without recourse. However, this level of cash may be replaced by letters of credit,
  - collateral given to lenders in the form of pledged shares in the project management entities, for an aggregate amount of €270 million,
  - performance bonds and other guarantees for an amount of €135 million.

NOTE 4 Main changes in group structure

ACCOUNTING STANDARDS

In accordance with IFRS 5 – Non-Current Assets Held for Sale and Discontinued Operations, assets or groups of assets held for sale are presented separately on the face of the statement of financial position and are measured and accounted for at the lower of their carrying amount and fair value less costs to sell.

An asset is classified as "held for sale" when its sale is highly probable within twelve months from the date of classification, when it is available for immediate sale under its present condition and when management is committed to a plan to sell the asset and an active program to locate a buyer and complete the plan has been initiated. To assess whether a sale is highly probable, the Group takes into consideration among other things indications of interest and offers received from potential buyers as well as specific execution risks attached to certain transactions.

If an asset classified as "held for sale" no longer meets the above conditions it will be reclassified in accordance with the standard.

Furthermore, assets or groups of assets are presented as discontinued operations in the Group's consolidated financial statements when they are classified as "held for sale" and represent a separate major line of business under IFRS 5.

4.1 Disposals carried out in 2023

The table below shows the impact of the main disposals and sale agreements of 2023 on the Group's net financial debt, excluding partial disposals with respect to DBSO[(1)] activities:

In millions of euros	Disposal price	Reduction in net debt
Disposal of a thermal plant – Brazil	75	-
Other disposals that are not material taken individually	192	246
TOTAL	**267**	**246**

On May 31, 2023, ENGIE finalized the sale of its entire stake in the Pampa Sul thermal power plant to Grafito Fundo de Investimento em Participações Infraestrutura and Perfin Space X Fundo de Investimento em Participações em Infraestrutura.

Given the classification of this investment within "Assets held for sale" in 2022 and the deferral to 2025 of the payment of the contractual sale price, this transaction has no material impact on the Group's net financial debt at December 31, 2023. The disposal loss before tax amounted to €47 million in 2023.

No Group assets are classified within "Assets held for sale" at December 31, 2023.

4.2 Acquisitions carried out in 2023

In total, acquisitions carried out in 2023 (including financial investments in entities accounted for under the equity method) had an impact of €3,348 million on net financial debt. The main acquisitions carried out in 2023 are as follows:

- in October 2023, ENGIE finalized the acquisition of 100% of Broad Reach Power, a Houston-based company specialized in battery storage, from private equity funds EnCap and Apollo. The transaction involves 350 MW of operating assets, 880 MW of under-construction assets with a commissioning expected before the end of 2024, 1.7 GW of advanced stage projects and a significant pipeline of early stage projects. The projects are located in Texas, California and the central states of the United States. This investment is fully consolidated. This transaction had an impact of €1.4 billion on the Group's net financial debt (of which €0.1 billion in January 2024).

  The Group carried out a preliminary purchase price allocation, which will be finalized in the first half of 2024;
- in September 2023, ENGIE purchased an additional stake in Kathu Solar Park (RF) Proprietary Trading from Lereko Metier REIPPP Fund Trust, increasing its holding from 48.5% to 57.725%. Following this transaction, Kathu Solar Park (RF) Proprietary Trading is now fully consolidated by ENGIE (previously accounted for under the equity method). This transaction had an impact of approximately €0.6 billion on the Group's net financial debt, taking into account the consolidation of external debt;
- in December 2023, ENGIE and Meridiam purchased from ACTIS the full scope of BTE Renewables, a developer, owner and operator of renewable assets on the African continent, with an operating presence in South Africa and Kenya. The deal also included a carve-out of the Kenyan assets by ENGIE to Meridiam at closing. Following this transaction, BTE Renewables (South-African assets) has been fully consolidated by ENGIE. This transaction had an impact of approximately €0.4 billion on the Group's net financial debt;
- in December 2023, ENGIE finalized the acquisition of the minority stake (28%) held by Mitsui & Co, Ltd ("Mitsui") in International Power (Australia) Holdings Pty Limited ("IPAH"), a fully consolidated company in which the Group had a 72% stake. On completion of the transaction, the Group holds 100% of IPAH. The impact of this transaction on the Group's net financial debt amounted to around €0.2 billion;
- in September 2023, ENGIE also purchased the biomethane producer Ixora Energy Ltd. This investment is fully consolidated. This transaction had an impact of approximately €0.1 billion on the Group's net financial debt.

(1) *Develop, Build, Share and Operate, a model used in renewable energies based on continuous rotation of capital employed.*

NOTE 5 Financial indicators used in financial communication

The purpose of this note is to present the main non-GAAP financial indicators used by the Group as well as their reconciliation with the indicators of the IFRS consolidated financial statements.

5.1 EBITDA

The reconciliation between EBITDA and current operating income including operating MtM and share in net income of equity method entities is as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Current operating income including operating MtM and share in net income of equity method entities	**12,493**	**5,367**
Mark-to-market on commodity contracts other than trading instruments	(2,430)	3,661
Net depreciation and amortization/Other	4,886	4,576
Share-based payments (IFRS 2)	47	92
Non-recurring share in net income of equity method entities	22	17
EBITDA	**15,017**	**13,713**
Nuclear	1,285	1,510
EBITDA EXCLUDING NUCLEAR	**13,732**	**12,204**

5.2 EBIT

The reconciliation between EBIT and current operating income including operating MtM and share in net income of equity method entities is as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Current operating income including operating MtM and share in net income of equity method entities	**12,493**	**5,367**
Mark-to-market on commodity contracts other than trading instruments	(2,430)	3,661
Non-recurring share in net income of equity method entities	22	17
EBIT	**10,084**	**9,045**
Nuclear	605	1,026
EBIT EXCLUDING NUCLEAR	**9,479**	**8,019**

5.3 Net recurring income Group share (NriGs)

Net recurring income Group share is a financial indicator used by the Group in its financial reporting to present net income Group share adjusted for unusual, abnormal or non-recurring items.

The reconciliation of net income/(loss) with net recurring income Group share is as follows:

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
NET INCOME/(LOSS) GROUP SHARE		**2,208**	**216**
Net income/(loss) relating to discontinued operations, Group share		-	2,182
Net income/(loss) relating to continuing operations, Group share		**2,208**	**(1,965)**
Net income attributable to non-controlling interests relating to continuing operations		695	172
Net income/(loss) relating to continuing operations		**2,903**	**(1,793)**
Reconciliation items between "Current operating income including operating MtM and share in net income of equity method entities" and "Net income/(loss) from operating activities"		**6,395**	**4,241**
Impairment losses	*9.1*	*1,318*	*2,774*
Restructuring costs	*9.2*	*47*	*230*
Changes in scope of consolidation	*9.3*	*85*	*(91)*
Other non-recurring items	*9.4*	*4,945*	*1,328*
Other adjusted items		**(3,092)**	**3,389**
Mark-to-market on commodity contracts other than trading instruments	*8*	*(2,430)*	*3,661*
Ineffective portion of derivatives qualified as fair value hedges	*10*	*-*	*(7)*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	*10*	*(8)*	*(46)*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*10*	*13*	*(16)*
Non-recurring income/(loss) from debt instruments and equity instruments	*10*	*183*	*1,254*
Other adjusted tax impacts		*(872)*	*(1,474)*
Non-recurring income/(loss) included in share in net income of equity method entities		*22*	*17*
Net recurring income/(loss) relating to continuing operations		**6,206**	**5,836**
Net recurring income/(loss) attributable to non-controlling interests		839	614
NET RECURRING INCOME/(LOSS) RELATING TO CONTINUING OPERATIONS, GROUP SHARE		**5,366**	**5,223**
Net recurring income/(loss) relating to discontinued operations, Group share		-	287
NET RECURRING INCOME/(LOSS) GROUP SHARE		**5,366**	**5,510**

5.4 Industrial capital employed

The reconciliation of industrial capital employed with items in the statement of financial position is as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
(+) Property, plant and equipment and intangible assets, net	66,399	62,853
(+) Goodwill	12,864	12,854
(-) Goodwill Gaz de France – SUEZ and International Power (1)	*(7,229)*	*(7,241)*
(+) IFRS 16 and IFRIC 12 receivables	3,348	2,521
(+) Investments in equity method entities	9,213	9,279
(-) Goodwill arising on the International Power combination (1)	*(39)*	*(40)*
(+) Financial assets covering nuclear provisions (2)	9,984	6,626
(+) Initial Margins (2)	1,276	1,741
(+) Trade and other receivables, net	20,092	31,310
(-) Margin calls (1) (3)	*(3,207)*	*(5,405)*
(+) Inventories	5,343	8,145
(+) Assets from contracts with customers	9,531	12,584
(+) Other current and non-current assets	14,414	19,060
(+) Deferred tax	(3,658)	(4,379)
(+) Cancellation of deferred tax on other recyclable items (1) (2) (3)	*(745)*	*(14)*
(-) Provisions	(32,593)	(27,027)
(+) Actuarial gains and losses in shareholders' equity (net of deferred tax) (1)	*1,500*	*1,058*
(-) Trade and other payables	(22,976)	(39,801)
(+) Margin calls (1) (3)	*3,269*	*6,351*
(-) Liabilities from contracts with customers	(4,053)	(3,412)
(-) Other current and non-current liabilities	(21,777)	(27,279)
INDUSTRIAL CAPITAL EMPLOYED	**60,957**	**59,782**

(1) For the purpose of calculating industrial capital employed, the amounts recorded in respect of these items have been adjusted from those appearing in the statement of financial position.

(2) The Group changed the definition of industrial capital employed from January 1, 2023 to include financial assets hedging nuclear provisions and Initial Margins required by certain market activities.

(3) Margin calls included in "Trade and other receivables, net" and "Trade and other payables" correspond to advances received or paid as part of collateralization agreements set up by the Group to manage counterparty risk on commodity transactions.

5.5 Cash flow from operations (CFFO)

The reconciliation of cash flow from operations (CFFO) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Cash generated from operations before income tax and working capital requirements	14,407	12,415
Tax paid	(1,687)	(1,504)
Change in working capital requirements	397	(2,424)
Interest received on financial assets	118	(37)
Dividends received on equity investments	9	18
Interest paid	(1,058)	(822)
Interest received on cash and cash equivalents	569	194
Nuclear – expenditure on power plant dismantling and reprocessing, fuel storage	321	163
Change in financial assets held for investment or financing purposes	15	188
(+) Change in financial assets held for investment or financing purposes recorded in the statement of financial position and other	*(15)*	*(176)*
CASH FLOW FROM OPERATIONS (CFFO)	**13,075**	**8,016**

5.6 Capital expenditure (CAPEX) and growth CAPEX

The reconciliation of capital expenditure (CAPEX) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Acquisitions of property, plant and equipment and intangible assets	7,328	6,379
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	1,392	289
(+) Cash and cash equivalents acquired	*204*	*14*
Acquisitions of investments in equity method entities and joint operations	237	407
Acquisitions of equity and debt instruments	1,675	(175)
Change in loans and receivables originated by the Group and other	1,585	2,877
(+) Other	-	*(10)*
(-) Disposal impacts relating to DBSO [(1)] activities	(62)	(472)
(-) Financial investments Synatom/Disposal of financial assets Synatom	(3,082)	(1,822)
(+) Change in scope – Acquisitions	1,338	371
TOTAL CAPITAL EXPENDITURE (CAPEX)	**10,614**	**7,858**
(-) Maintenance CAPEX	(2,524)	(2,373)
TOTAL GROWTH CAPEX	**8,090**	**5,485**

(1) Develop, Build, Share & Operate; including Tax equity financing received (See Note 22 "Working capital requirements, inventories, other assets and other liabilities").

5.7 Net financial debt

The reconciliation of net financial debt with items in the statement of financial position is as follows:

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
(+) Long-term borrowings	14.2 & 14.3	37,920	28,083
(+) Short-term borrowings	14.2 & 14.3	9,367	12,508
(+) Derivative instruments – carried in liabilities	14.4	24,561	51,276
(-) Derivative instruments hedging commodities and other items		*(23,973)*	*(50,542)*
(-) Other financial assets	14.1	(16,987)	(12,992)
(+) Loans and receivables at amortized cost not included in net financial debt		*8,891*	*6,720*
(+) Equity instruments at fair value		*2,124*	*1,495*
(+) Debt instruments at fair value not included in net financial debt		*4,558*	*3,394*
(-) Cash and cash equivalents	14.1	(16,578)	(15,570)
(-) Derivative instruments – carried in assets	14.4	(21,245)	(48,386)
(+) Derivative instruments hedging commodities and other items		*20,854*	*48,067*
NET FINANCIAL DEBT		**29,493**	**24,054**

5.8 Economic net debt

Economic net debt is as follows:

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
NET FINANCIAL DEBT	**14.3**	**29,493**	**24,054**
Provisions for back-end of the nuclear fuel cycle and dismantling of nuclear facilities	17	23,887	19,017
Other nuclear liabilities [(1)]	17	816	-
Provisions for dismantling of non-nuclear facilities	17	1,384	1,330
Post-employment benefits – Pensions	18	957	452
(-) Infrastructures regulated companies		*253*	*272*
Post-employment benefits – Reimbursement rights	18	(242)	(208)
Post-employment benefits – Other benefits	18	3,962	3,704
(-) Infrastructures regulated companies		*(2,578)*	*(2,392)*
Deferred tax assets for pensions and related obligations	11	(1,013)	(812)
(-) Infrastructures regulated companies		*541*	*490*
Plan assets relating to nuclear provisions, inventories of uranium and receivables of Electrabel towards EDF [(1)]	17 & 22	(10,944)	(7,098)
ECONOMIC NET DEBT		**46,517**	**38,808**

(1) Following the agreements with the Belgian government on the extension of the Tihange 3 and Doel 4 nuclear reactors and on all obligations related to nuclear waste, economic net debt now includes all existing nuclear liabilities, including payables and receivables previously recognized under working capital. The impact on the indicator at December 31, 2022 would have been an increase in economic net debt of around € 556 million.

NOTE 6 Segment information

6.1 Operating segment and reportable segment

ENGIE is organized around:

- four Global Business Units (GBU) representing the Group's four strategic activities: Renewables GBU, Networks GBU, Energy Solutions GBU, and FlexGen & Retail GBU;
- two operating entities: Nuclear and Global Energy Management & Sales ("GEMS");
- an Other group mainly comprising the Corporate functions and certain Holdings.

The reportable segments are identical to the operating segments and correspond to the activities of the GBU.

- **Renewables**: comprises all centralized renewable energy generation activities, including financing, construction, operation and maintenance of renewable energy facilities, using various energy sources such as hydroelectric, onshore wind, photovoltaic solar, offshore wind, and battery storage combined with a renewable asset. The energy produced is fed into the grid and sold either on the open or regulated market or to third parties through electricity sale agreements;
- **Networks**: comprises the Group's electricity and gas infrastructure activities and projects. These activities include the management and development of (i) gas and electricity transportation networks and natural gas distribution networks in and outside of Europe, (ii) underground natural gas storage in Europe, and (iii) regasification infrastructure in France and Chile. Apart from the historical infrastructure management activities, its asset portfolio also contributes to energy decarbonization and network greening (gradual integration of green gas, hydrogen-based projects, etc.);
- **Energy Solutions**: encompasses the construction and management of decentralized energy networks to produce energy (heating and cooling networks, distributed power generation plants, distributed solar power parks, low-carbon mobility, low-carbon cities and public lighting, etc.) and related services (energy efficiency, technical maintenance, sustainable development consulting);
- **FlexGen**: includes activities to compensate for the intermittent nature of renewable energy by providing upstream flexibility (flexible thermal generation and electricity, pumping or battery storage) and downstream flexibility (shaving or shifting consumption for BtoC customers). They also provide solutions for decarbonizing industry with low-carbon hydrogen. The GBU plays a key role in the energy transition. It also includes the financing, construction and operation of desalination plants, whether or not coupled with power generation plants;
- **Retail**: encompasses all the Group's activities relating to the sale of gas and electricity to end customers, whether professional or individual. It also includes all the Group's activities in services for residential clients;
- **Nuclear**: encompasses all of the Group's nuclear activities, with seven reactors in Belgium (four in Doel and three in Tihange) among which five in operation and drawing rights in France;
- **Others**: encompasses the activities of GEMS as well as Corporate and holding companies. The GEMS operating entity is responsible, at the global level, for the supply of energy and the management of risk and optimization of assets on the markets. It sells energy to companies and offers energy management services and solutions to support the decarbonization of the Group and its customers.

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6.2 Key indicators by reportable segment

Revenues

	Dec. 31, 2023			Dec. 31, 2022 [1]		
In millions of euros	External revenues	Intra-Group Revenues	Total	External revenues	Intra-Group Revenues	Total
Renewables	5,512	172	5,684	6,216	136	6,352
Networks	6,873	1,032	7,905	6,961	961	7,922
Energy Solutions	11,033	381	11,414	11,441	262	11,703
FlexGen	5,264	2,508	7,772	7,126	1,144	8,271
Retail	16,443	367	16,810	16,810	534	17,344
Nuclear	118	2,325	2,444	35	2,653	2,688
Others	37,322	6,808	44,129	45,277	2,007	47,283
Of which GEMS [2]	*37,221*	*6,776*	*43,997*	*45,137*	*1,979*	*47,115*
Elimination of internal transactions	-	(13,593)	(13,593)	-	(7,697)	(7,697)
TOTAL REVENUES	**82,565**	**-**	**82,565**	**93,865**	**-**	**93,865**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions to Others.

(2) Of which a negative price effect of around €6.3 billion compared to 2022.

EBITDA

In millions of euros	Dec. 31, 2023	Dec. 31, 2022 [1]
Renewables	2,665	2,202
Networks	4,151	4,212
Energy Solutions	868	985
FlexGen	1,929	2,235
Retail	821	259
Others	3,297	2,310
Of which GEMS	*3,829*	*2,837*
TOTAL EBITDA EXCLUDING NUCLEAR	**13,732**	**12,204**
Nuclear	1,285	1,510
TOTAL EBITDA	**15,017**	**13,713**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions to Others.

EBIT

In millions of euros	Dec. 31, 2023	Dec. 31, 2022 [1]
Renewables	2,005	1,627
Networks	2,265	2,371
Energy Solutions	386	523
FlexGen	1,513	1,768
Retail	569	(6)
Others	2,741	1,736
Of which GEMS	*3,551*	*2,618*
TOTAL EBIT EXCLUDING NUCLEAR	**9,479**	**8,019**
Nuclear	605	1,026
TOTAL EBIT	**10,084**	**9,045**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions to Others.

Share in net income/(loss) of equity method entities

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Renewables	203	217
Networks	446	323
Energy Solutions	22	118
FlexGen	355	397
Retail	-	-
Nuclear	-	-
Others	40	4
Of which GEMS	*32*	*(1)*
TOTAL SHARE IN NET INCOME/(LOSS) OF EQUITY METHOD ENTITIES	**1,066**	**1,059**

Associates and joint ventures accounted for €486 million and €580 million respectively of share in net income of equity method entities at December 31, 2023 (compared to €400 million and €659 million at December 31, 2022).

Industrial capital employed

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Renewables	20,001	16,588
Networks	25,198	25,221
Energy Solutions	7,593	7,575
FlexGen	9,289	8,091
Retail	390	1,023
Nuclear	(11,210)	(9,855)
Others	9,696	11,139
Of which GEMS	*6,596*	*9,060*
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**60,957**	**59,782**

Capital expenditure

In millions of euros	Dec. 31, 2023	Dec. 31, 2022 (1)
Renewables	4,130	3,333
Networks	2,173	2,322
Energy Solutions	1,102	864
FlexGen	2,135	481
Retail	247	270
Nuclear	174	229
Others	652	360
Of which GEMS	*182*	*149*
TOTAL CAPEX	**10,614**	**7,858**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions to Others.

Growth CAPEX

In millions of euros	Dec. 31, 2023	Dec. 31, 2022 (1)
Renewables	3,966	3,202
Networks	839	1,087
Energy Solutions	897	694
FlexGen	1,843	220
Retail	160	173
Nuclear	19	1
Others	368	108
Of which GEMS	*82*	*63*
TOTAL GROWTH CAPEX	**8,091**	**5,485**

(1) Certain internal reclassifications, which have no impact on the total, have been made between the business lines at January 1, 2023. The main internal reclassifications concern the transfer of EV Box from Energy Solutions to Others.

6.3 Key indicators by geographic area

The amounts set out below are analyzed by:

- destination of products and services sold for revenues;
- geographic location of consolidated companies for industrial capital employed.

	Revenues		Industrial capital employed	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
France	36,676	34,248	32,802	33,912
Belgium	8,408	12,705	(9,259)	(7,575)
Other EU countries	18,303	22,687	9,713	9,261
Other European countries	4,480	4,202	1,991	1,610
North America	5,329	6,133	8,989	7,264
Asia, Middle East & Oceania	4,366	8,875	3,830	3,667
South America	4,715	4,778	11,212	11,095
Africa	289	237	1,679	548
TOTAL	**82,565**	**93,865**	**60,957**	**59,782**

Due to the variety of its businesses and their geographical location, the Group operates in a very diverse range of situations and for a variety of customer types (industry, local authorities and individual customers). Accordingly, no external customer represents individually 10% or more of the Group's consolidated revenues.

NOTE 7 Revenues

7.1 Revenues

ACCOUNTING STANDARDS

Revenues from contracts with customers concern revenues from contracts that fall within the scope of IFRS 15 – Revenue from Contracts with Customers. Revenues are recognized when the customer obtains control of goods or services promised in the contract, for the amount of consideration to which an entity expects to be entitled in exchange for said promised goods or services.

A contractual analysis of the Group's sale contracts has led to the application of the following revenue recognition principles:

- **Gas, electricity and other energies**

  Revenues from sales of gas, electricity and other energies are recognized upon delivery of the power to the retail, business or industrial customer.

  Power deliveries are monitored in real time or on a deferred basis for those customers whose energy consumption is metered during the accounting period, in which case the portion of not yet metered revenues "in the meter" is estimated on the closing date.

- **Gas, electrical and other energy infrastructures**

  Revenues derived by gas and electricity infrastructure operators upon providing transportation or distribution or storage capacities, are recognized on a straight-line basis over the contract term.

  In the countries where the Group acts as an energy provider (supplier) without being in charge of its distribution or transportation, mainly in France and Belgium, an analysis of the energy sales contracts and of the related regulatory framework is carried out to determine whether the distribution or transportation services invoiced to the customers have to be excluded from the revenues recognized under IFRS 15.

  Judgment may be exercised by the Group for this analysis in order to determine whether the energy provider acts as an agent or a principal for the gas or electricity distribution or transportation services re-invoiced to the customers. The main criteria used by the Group to exercise its judgment and conclude, in certain countries, that the energy provider acts as an agent of the infrastructure operator are as follows: who is primarily responsible for fulfillment of the distribution or transportation services? Does the energy provider have the ability to commit to capacity reservation contracts towards the infrastructure operator? To what extent does the energy provider have discretion in establishing the price for the distribution or transportation services?

- **Constructions, installations, Operations and Maintenance (O&M)**

  Construction and installation contracts mainly concern assets built on the premises of customers such as cogeneration units, heaters or other energy-efficiency assets. The related revenues are usually recognized according to the percentage of completion on the basis of the costs incurred where the contracts fall within the scope of IFRS 15.

  O&M contracts generally require the Group to perform services ensuring the availability of power generating facilities. These services are performed over time and the related revenues are recognized according to the percentage of completion on the basis of the costs incurred.

If it is not possible to conclude from the contractual analysis that the contract falls within the scope of IFRS 15, the revenues are accounted for as non-IFRS 15 revenues.

Revenues from other contracts, corresponding to revenues from operations that do not fall within the scope of IFRS 15, presented in the "Others" column include trading, lease and concession income, as well as any financial component of operating services, and the effects of the tariff shield mechanisms

The table below shows a breakdown of revenues by type:

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, and O&M	Others	Dec. 31, 2023
Renewables	-	5,010	106	261	135	5,512
Networks	138	5	6,068	434	228	6,873
Energy Solutions	268	4,163	88	6,434	80	11,033
FlexGen	92	4,332	274	400	166	5,264
Retail	7,631	6,229	82	1,003	1,497	16,443
Nuclear	-	4	7	28	79	118
Others	13,943	19,619	246	142	3,372	37,322
Of which GEMS	*13,943*	*19,619*	*241*	*46*	*3,372*	*37,221*
TOTAL REVENUES	**22,072**	**39,362**	**6,872**	**8,703**	**5,557**	**82,565**

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The significant change in natural gas and electricity prices has led some governments to introduce a "tariff shield" for natural gas and electricity, particularly in France and Romania.

The measures having the most significant impact on the Group's consolidated financial statements are those introduced by the French government for natural gas and electricity. The Finance Act for 2023 (Law no. 2022-1726 of December 30, 2022) extended and modified the tariff shield arrangements for gas (until June 30, 2023) and electricity (until January 31, 2024). The loss of revenue borne by ENGIE constitutes an expense attributable to public service obligations, and is subject to State-guaranteed compensation calculated in accordance with the application procedures published by the French Energy Regulatory Commission (Commission de Régulation de l'Énergie).

These effects are mainly included in the "Others" column ("Revenues excluding IFRS 15") of the "Retail" business.

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, and O&M	Others	Dec. 31, 2022
Renewables	-	5,797	88	242	89	6,216
Networks	232	1	6,021	478	230	6,961
Energy Solutions	246	4,713	96	6,424	73	11,552
FlexGen	22	4,522	1,601	396	588	7,129
Retail	7,793	5,372	153	958	2,534	16,810
Nuclear	-	5	8	24	(3)	35
Others	21,405	19,595	170	70	3,923	45,163
Of which GEMS	*21,405*	*19,595*	*170*	*45*	*3,923*	*45,137*
TOTAL REVENUES	**29,697**	**40,004**	**8,135**	**8,593**	**7,435**	**93,865**

7.2 Trade and other receivables, assets and liabilities from contracts with customers

ACCOUNTING STANDARDS

On initial recognition, trade and other receivables are recorded at their transaction price as defined in IFRS 15.

A contract asset is an entity's right to consideration in exchange for goods or services that have been transferred to a customer but for which payment is not yet due or is contingent on the satisfaction of a specific condition stipulated in the contract. When an amount becomes due, it is transferred to receivables.

A receivable is recorded when the entity has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration.

A contract liability is an entity's obligation to transfer goods or services to a customer for which the entity has already received consideration from the customer. The liability is derecognized upon recognition of the corresponding revenue.

Trade and other receivables and assets from contracts with customers are tested for impairment in accordance with the provisions of IFRS 9 on expected credit losses.

The impairment model for financial assets is based on the expected credit loss model. To calculate expected losses, the Group uses a matrix for trade receivables and assets from contracts with customers, for which the change in credit risk is monitored on a portfolio basis. The change in credit risk of for large customers and other large counterparties is monitored on an individual basis.

See Note 15 "Risks arising from financial instruments" for the Group's assessment of counterparty risk.

7.2.1 Trade and other receivables and assets from contracts with customers

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Trade and other receivables, net	20,092	31,310
Of which IFRS 15	*8,083*	*7,587*
Of which non-IFRS 15	*12,009*	*23,723*
Assets from contracts with customers	9,531	12,584
Accrued income and unbilled revenues	*6,989*	*9,513*
Energy in the meter (1)	*2,542*	*3,071*

(1) Net of advance payments.

In 2023, the most significant assets from contracts mainly concerned GEMS (€3,766 million), Energy Solutions (€2,516 million) and Retail (€1,922 million).

	Dec. 31, 2023			Dec. 31, 2022		
In millions of euros	Gross	Allowances and expected credit losses	Net	Gross	Allowances and expected credit losses	Net
Trade and other receivables, net	22,160	(2,068)	20,092	33,282	(1,973)	31,310
Assets from contracts with customers	9,558	(27)	9,531	12,632	(48)	12,584
TOTAL	**31,718**	**(2,095)**	**29,623**	**45,914**	**(2,020)**	**43,894**

Gas and electricity in the meter

For customers whose energy consumption is metered during the accounting period, the gas supplied but not yet metered at the reporting date is estimated based on historical data, consumption statistics and estimated selling prices.

For sales on networks used by a large number of grid operators, the Group is allocated a certain volume of energy transiting through the networks by the grid managers. As the final allocations are sometimes only known several months down the line, revenue figures cannot be determined with absolute certainty. However, the Group has developed measuring and modeling tools allowing it to estimate revenues with a reasonable degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the related revenues can be considered as immaterial.

In France and Belgium, un-metered revenues ("gas in the meter") are calculated using a direct method taking into account customers' estimated consumption based on the last invoice or metering not yet billed. These estimates are in line with the volume of energy allocated by the grid managers over the same period. The average price is used to measure "gas in the meter" and takes account of the category of customer and the age of the delivered unbilled "gas in the meter". The portion of unbilled revenues at the reporting date varies according to the assumptions about volume and average price.

"Electricity in the meter" is also determined using a direct allocation method similar to that used for gas, but taking into account specific factors related to electricity consumption. It is also measured on a customer-by-customer basis or by customer type.

Realized but not yet metered revenues ("un-metered revenues") mainly related to France and Belgium for an amount of €5,279 million at December 31, 2023 (€5,883 million at December 31, 2022).

7.2.2 Liabilities from contracts with customers

	Dec. 31, 2023			Dec. 31, 2022		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Liabilities from contracts with customers	93	3,960	4,053	121	3,292	3,412
Advances and downpayments received	*23*	*2,998*	*3,020*	*53*	*2,201*	*2,253*
Deferred revenues	*71*	*963*	*1,033*	*68*	*1,091*	*1,159*

In 2023, the Global Business Units reporting the greatest amounts of liabilities from contracts with customers were Retail (€1,563 million) and Energy Solutions (€1,638 million).

7.3 Revenues relating to performance obligations not yet satisfied

Revenues relating to performance obligations only partially satisfied at December 31, 2023 amounted to €867 million. They mainly concern Energy Solutions (€849 million) which handle a large number of construction, installation, and maintenance contracts under which revenues are recognized over time.

NOTE 8 Operating expenses

ACCOUNTING STANDARDS

Operating expenses include:

- purchases and operating derivatives including:
  - the purchase of commodities and associated costs (infrastructure, transport, storage, etc.),
  - the realized impact, as well as the change in fair value (MtM), of commodity transactions, with or without physical delivery, that fall within the scope of IFRS 9 – Financial Instruments and that do not qualify as trading or hedging. These contracts are set up as part of economic hedges of operating transactions in the energy sector;
- purchases of services and other items such as subcontracting and interim expenses, lease expenses (short-term lease contracts, leases with a low underlying asset value or leases with variable expenses), concession expenses, etc.;
- personnel costs;
- depreciation, amortization, and provisions; and
- taxes.

8.1 Purchases and operating derivatives

In millions of euros	Dec 31, 2023	Dec 31, 2022
Purchases and other income and expenses on operating derivatives other than trading [(1)]	(49,650)	(67,676)
Service and other purchases [(2)]	(7,342)	(6,860)
PURCHASES AND OPERATING DERIVATIVES	**(56,992)**	**(74,535)**

(1) Of which net income of €2,430 million in 2023 relating to MtM on commodity contracts other than trading (compared to a net expense of €3,661 million in 2022), notably on certain economic gas and electricity hedging positions not documented as cash flow hedges.

(2) Of which €75 million in lease expenses not included in the IFRS 16 lease liability (compared to €56 million in lease expenses in 2022).

The decrease in purchases and operating derivatives is mainly due to changes in commodity prices over the period.

8.2 Personnel costs

In millions of euros	Notes	Dec 31, 2023	Dec 31, 2022
Short-term benefits		(7,688)	(7,623)
Share-based payments	19	(47)	(104)
Costs related to defined benefit plans	18.3.4	(322)	(261)
Costs related to defined contribution plans	18.4	(92)	(91)
PERSONNEL COSTS		**(8,149)**	**(8,078)**

8.3 Depreciation, amortization and provisions

In millions of euros	Notes	Dec 31, 2023	Dec 31, 2022
Depreciation and amortization	13	(4,886)	(4,576)
Net change in write-downs of inventories, trade receivables and other assets		(203)	(768)
Net change in provisions	17	178	157
DEPRECIATION, AMORTIZATION AND PROVISIONS		**(4,911)**	**(5,187)**

At December 31, 2023, depreciation and amortization mainly break down as €1,124 million for intangible assets and €3,762 million for property, plant and equipment.

8.4 Taxes

In millions of euros	Dec 31, 2023	Dec 31, 2022
TAXES	**(2,627)**	**(3,380)**

Taxes at December 31, 2023 include the Belgian nuclear tax and the inframarginal rent caps from electricity generation for a total of €969 million, including €329 million for the nuclear tax (compared with approximately €1,348 million and €917 million respectively at December 31, 2022). In addition, in 2022, the Group recognized an expense of €308 million corresponding to the exceptional tax on the energy sector introduced by the Italian authorities (the temporary Italian solidarity contribution was recognized in income tax and amounted to €132 million).

NOTE 9 Other items of net income/(loss) from operating activities

ACCOUNTING STANDARDS

Other items of Net income/(loss) from operating activities include:

- "Impairment losses": this line includes impairment losses on goodwill, other intangible assets, property, plant and equipment and investments in entities consolidated using the equity method;
- "Restructuring costs": this line concerns costs corresponding to a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by the entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- "Changes in the scope of consolidation". This line includes:
  - direct costs related to acquisitions of controlling interests,
  - in a business combination achieved in stages, remeasurement at fair value at the acquisition date of the previously held interest,
  - subsequent changes in the fair value of contingent consideration,
  - gains or losses from disposals of investments which result in a change of consolidation method, as well as any impact from the remeasurement of retained interests with the exception of gains and losses arising from transactions realized in the framework of "Develop, Build, Share & Operate" (DBSO) or "Develop, Share, Build & Operate" (DSBO) business models. As they are part of the recurring rotation of the Group's capital employed, these transactions are recognized in current operating income subject to certain criteria being met (notably their recurrence).
- "Other non-recurring items": this line includes other elements of an unusual, abnormal or infrequent nature.

9.1 Impairment losses

In millions of euros	Notes	Dec. 31, 2023	Dec. 31, 2022
Impairment losses:			
Goodwill	13.1	(94)	-
Property, plant and equipment and other intangible assets	13.2 & 13.3	(1,587)	(2,306)
Investments in equity method entities and related provisions		(72)	(536)
TOTAL IMPAIRMENT LOSSES		**(1,753)**	**(2,841)**
Reversal of impairment losses:			
Property, plant and equipment and other intangible assets		435	67
Total reversals of impairment losses		435	67
TOTAL		**(1,318)**	**(2,774)**

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9.1.1 Impairment losses recognized in 2023

Net impairment losses recognized at December 31, 2023 amounted to €1,318 million and relate notably to:

- renewable energy production assets in North America (€714 million), due to very specific operational difficulties linked to turbine performance on a wind asset, and the fall in long-term market prices affecting certain projects exposed to the SPP market in particular. It should be noted that for these projects, the fall in market prices had a positive impact on the fair value of VPPA (Virtual Power Purchase Agreement) contracts of around €+0.3 billion, with these mark-to-market changes, over the period covered by these contracts, recognized in operating expenses (see Note 8.1 "Operating expenses");
- coal-fired generation assets in South America, for which the Group has decided to accelerate decommissioning from end 2025, in line with the Group's decarbonization plan (€515 million);
- other production or support assets for less significant amounts taken individually.

In addition, following the review procedure initiated by the Commission for Nuclear Provisions (CNP) in September 2022, the industrial scenario and all the technical and financial assumptions were approved on July 7, 2023. This resulted in a €646 million decrease in the dismantling asset provision (see Note 17 "Provisions"), against a reduction in dismantling assets. Given the impairment losses recognized on some of these assets at the end of the last year, an impairment reversal of €400 million was recorded in 2023.

These impairment losses mainly concern property, plant and equipment and intangible assets. Considering the effects of deferred taxes and the portion of impairment losses attributable to non-controlling interests, the impact of the impairment losses on net income Group share amounted to €642 million.

With the exception of the effects of decisions to dispose of non-strategic assets, no impairment losses were recognized on non-financial assets as a result of measures to prevent or mitigate climate risks or to achieve the 2045 net zero-carbon objective.

Impairment tests are carried out in accordance with the procedures described in Note 13.4.

9.1.2 Impairment losses recognized in 2022

Net impairment losses recognized at December 31, 2022 amounted to €2,774 million and related mainly to:

- the effects of the triennial revision of nuclear provisions on assets to be recognized against nuclear power plant dismantling provisions;
- the effects of the ongoing program to exit coal activities;
- the consequences of negotiations initiated or finalized during the year in connection with the renegotiation of PPA contracts or the disposal of non-strategic assets.

9.2 Restructuring costs

In 2023, restructuring costs totaled € 47 million (*versus* €230 million in 2022). Restructuring costs in both years mainly included costs related to staff reduction plans and measures to adapt to the economic situation in 2023 and 2022, as well as the shutdown or sale of operations, the closure or restructuring of certain facilities as well as other miscellaneous restructuring costs.

9.3 Changes in scope of consolidation

At December 31, 2023, the impact of changes in the scope of consolidation was a negative €85 million and mainly comprised the disposal of a coal-fired generation unit in Brazil (a negative €47 million).

At December 31, 2022, the impact of changes in the scope of consolidation was a positive €91 million and mainly comprised:

- a positive impact of €280 million relating to the disposal of shares held in Gaztransport et Technigaz (GTT) for a total representing approximately 24.6% of its share capital. This result includes the effects of the almost full conversion of the exchangeable bond issued by the Group in June 2021;
- a positive impact of €111 million relating to the disposal of geothermal assets in Indonesia;
- a negative impact of €127 million relating to the disposal of the Energy Solutions activities in Africa and France;
- a negative impact of €110 million relating to the purchase of shares in renewable assets in India with refinancing obligations carried out in 2023;
- a negative impact of €63 million relating to miscellaneous disposals that are not individually significant.

9.4 Other non-recurring items

Other non-recurring items amounted to a negative €4,945 million at December 31, 2023 and include the -€4,750 million impact of the revision of nuclear provisions to take account of the agreement reached with the Belgian government on June 29, 2023, which became binding following the signature of the supplements to the initial agreements on July 21, 2023 and whose implementation was specified in the transaction documents signed on December 13, 2023 (see Note 17 "Provisions"). This amount includes the additional provisions set aside under the agreement (-€5.1 billion), diminished by the effects of recognizing the receivable relating to Electrabel's partners' share in certain power plants (€0.4 billion).

Other non-recurring items also include the impact of the revision of the dismantling provision of the Hazelwood site in Australia for around €90 million.

Other non-recurring items at December 31, 2022 totaled a negative €1,328 million and mainly comprised:

- a negative impact of €979 million related to the triennial review of provisions for the management of the back-end nuclear cycle;
- a negative impact of €205 million related to provisions set up to cover clean-up obligations in France;
- a negative impact of €161 million related to the write-off of intangible assets and property, plant and equipment, mainly in France.

NOTE 10 Net financial income/(loss)

In millions of euros	Expense	Income	Dec. 31, 2023	Expense	Income	Dec. 31, 2022
Interest expense on gross debt and hedges	(1,708)	-	(1,708)	(1,104)	-	(1,104)
Cost of lease liabilities	(105)	-	(105)	(73)	-	(73)
Foreign exchange gains/losses on borrowings and hedges	(10)	-	(10)	(28)	-	(28)
Ineffective portion of derivatives qualified as fair value hedges	-	-	-	-	7	7
Gains and losses on cash and cash equivalents and liquid debt instruments held for cash investment purposes	-	596	596	-	197	197
Capitalized borrowing costs	268	-	268	109	-	109
Cost of net debt	**(1,557)**	**596**	**(961)**	**(1,097)**	**205**	**(893)**
Cash payments made on the unwinding of swaps	-	-	-	(9)	-	(9)
Reversal of the negative fair value of these early unwound derivative financial instruments	-	-	-	-	-	-
Gains/(losses) on debt restructuring transactions	-	8	8	-	55	55
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	**-**	**8**	**8**	**(9)**	**55**	**46**
Net interest expense on post-employment benefits and other long-term benefits	(161)	-	(161)	(92)	-	(92)
Unwinding of discounting adjustments to other long-term provisions	(772)	-	(772)	(617)	-	(617)
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	(15)	-	(15)	(5)	-	(5)
Income/(loss) from debt instruments and equity instruments	(238)	-	(239)	(1,295)	36	(1,258)
Interest income on loans and receivables at amortized cost	-	106	106	-	69	69
Other	(596)	467	(130)	(585)	332	(253)
Other financial income and expenses	**(1,783)**	**573**	**(1,210)**	**(2,594)**	**438**	**(2,156)**
NET FINANCIAL INCOME/(LOSS)	**(3,340)**	**1,177**	**(2,163)**	**(3,700)**	**697**	**(3,003)**

In 2023, the average cost of debt after hedging came out at 4.31% compared to 2.73% at December 31, 2022.

Net income/(loss) from debt and equity instruments amounted to a loss of €239 million and mainly included the loss on bonds and money market funds held by Synatom for -€149 million (see Note 17.2.4 "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material").

NOTE 11 Income tax expense

ACCOUNTING STANDARDS

The Group calculates taxes in accordance with prevailing tax legislation in the countries where income is taxable.

In accordance with IAS 12, deferred taxes are recognized according to the liability method on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax bases, using tax rates that have been enacted or substantively enacted by the reporting date. However, under the provisions of IAS 12, no deferred tax is recognized for temporary differences arising from goodwill for which impairment losses are not deductible for tax purposes, or from the initial recognition of an asset or liability in a transaction which (i) is not a business combination and (ii) at the time of the transaction, affects neither accounting income nor taxable income. In addition, deferred tax assets are only recognized to the extent that it is probable that taxable income will be available against which the deductible temporary differences can be utilized.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, associates, joint ventures and branches, except if the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Net balances of deferred taxes are calculated based on the tax position of each company or on the total income of companies included within the relevant consolidated tax group, and are presented in assets or liabilities for their net amount per tax entity.

Deferred taxes are reviewed at each reporting date to take into account factors including the impact of changes in tax laws and the prospects of recovering deferred tax assets arising from deductible temporary differences.

Deferred tax assets and liabilities are not discounted.

Tax effects relating to coupon payments on deeply-subordinated perpetual notes are recognized in profit or loss.

11.1 Actual income tax expense recognized in the income statement

11.1.1 Breakdown of actual income tax expense recognized in the income statement

The income tax expense recognized in the income statement for 2023 amounted to €1,031 million (€83 million income tax benefit in 2022). It breaks down as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Current income taxes	(833)	(1,762)
Deferred taxes	(198)	1,845
TOTAL INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(1,031)**	**83**

11.1.2 Reconciliation of theoretical income tax expense with actual income tax expense

A reconciliation of theoretical income tax expense with the Group's actual income tax expense is presented below:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Net income/(loss)	**2,903**	**390**
Share in net income of equity method entities	993	523
Net income/(loss) from discontinued operations	-	2,183
Income tax expense	(1,031)	83
Income/(loss) before income tax of consolidated companies (A)	**2,941**	**(2,400)**
Of which French companies	1,532	(2,130)
Of which companies outside France	1,409	(270)
Statutory income tax rate of the parent company (B)	25.8%	25.8%
Theoretical income tax benefit/(expense) (C) = (A) X (B)	**(759)**	**620**
Reconciling items between theoretical and actual income tax expense		
Difference between statutory tax rate applicable to the parent and statutory tax rate in force in jurisdictions in France and abroad	(14)	(8)
Permanent differences (1)	(120)	(313)
Income taxed at a reduced rate or tax-exempt (2)	(22)	427
Additional tax expense (3)	(60)	(327)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences (4)	(430)	(940)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences (5)	93	643
Impact of changes in tax rates (6)	8	(37)
Tax credits and other tax reductions (7)	360	20
Other (8)	(86)	(1)
INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(1,031)**	**83**

(1) Mainly includes disallowable impairment losses on goodwill, disallowed operating expenses and the deduction of interest expenses arising from hybrid debt.

(2) Mainly includes capital gains on disposals of securities exempt from tax or taxed at a reduced rate in some tax jurisdictions, the impact of the specific tax regimes used by some entities, disallowable impairment losses and capital losses on securities, and the impact of untaxed income from remeasuring previously-held (or retained) equity interests in connection with acquisitions and changes in consolidation methods.

(3) Mainly includes tax on dividends resulting from the parent company tax regime, withholding tax on dividends and interest levied in several tax jurisdictions, allocations to provisions for income tax, and regional and flat-rate corporate taxes. In 2022, this line also included the temporary Italian solidarity contribution (€132 million).

(4) Includes (i) the cancellation of the net deferred tax asset position for some tax entities in the absence of sufficient profit being forecast and (ii) the impact of disallowable impairment losses on fixed assets.

(5) Includes the impact of the recognition of net deferred tax asset positions for some tax entities.

(6) Mainly includes the impact of tax rate changes on deferred tax balances in the United Kingdom for 2023 and for 2022.

(7) Mainly includes reversals of provisions for tax litigation in Luxembourg, tax credits in France and in Singapore and other tax reductions.

(8) Mainly includes the correction of previous tax charges.

With regard to the future implementation of the OECD Pillar 2 rules, the Group does not have significant operations in countries where a minimum tax may be due, and therefore does not expect from this reform any material impacts on its income tax expense.

11.1.3 Analysis of the deferred tax income/(expense) recognized in the income statement, by type of temporary difference

	Impact in the income statement	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Deferred tax assets:		
Tax loss carry-forwards and tax credits	(103)	1,051
Pension and related obligations	(3)	(1)
Non-deductible provisions	976	55
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(84)	454
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	(2,373)	(1,260)
Other	265	(135)
Total	**(1,322)**	**164**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	61	(545)
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	1,326	1,781
Other	(263)	398
Total	**1,124**	**1,634**
DEFERRED TAX INCOME/(EXPENSE)	**(198)**	**1,798**
Of which continuing activities	*(198)*	*1,845*

11.2 Deferred tax income/(expense) recognized in "Other comprehensive income"

Net deferred tax income/(expense) recognized in "Other comprehensive income" is broken down by component as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Equity and debt instruments	(6)	33
Actuarial gains and losses	141	(646)
Net investment hedges	(41)	11
Cash flow hedges on other items	802	943
Cash flow hedges on net debt	4	(3)
Total excluding share of equity method entities and discontinued operations	**900**	**338**
Share of equity method entities	(28)	(132)
Discontinued operations	-	(21)
TOTAL	**872**	**185**

11.3 Deferred taxes presented in the statement of financial position

11.3.1 Change in deferred taxes

Changes in deferred taxes recognized in the statement of financial position, after netting deferred tax assets and liabilities by tax entity, break down as follows:

In millions of euros	Assets	Liabilities	Net position
AT DECEMBER 31, 2022	**2,029**	**(6,408)**	**(4,379)**
Impact on net income for the year	(1,322)	1,124	(198)
Impact on other comprehensive income items	1,559	(665)	894
Impact of changes in scope of consolidation	215	(214)	-
Impact of translation adjustments	(13)	5	(8)
Transfers to assets and liabilities classified as held for sale	(4)	4	-
Other	(210)	243	33
Impact of netting by tax entity	(279)	279	-
AT DECEMBER 31, 2023	**1,974**	**(5,632)**	**(3,658)**

11.3.2 Analysis of the net deferred tax position recognized in the statement of financial position (before netting deferred tax assets and liabilities by tax entity), by type of temporary difference

ACCOUNTING STANDARDS

Measurement of recognized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that taxable profit will be available against which the tax loss carry-forwards can be utilized. The probability that taxable profit will be available against which the unused tax losses can be utilized, is based on taxable temporary differences relating to the same taxation authority and the same taxable entity and estimates of future taxable profits. These estimates and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts over a six-year tax projection period as included in the medium-term business plan approved by Management, subject to exceptions justified by a particular context and, if necessary, on the basis of additional forecasts.

	Statement of financial position at	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Deferred tax assets:		
Tax loss carry-forwards and tax credits	2,121	2,202
Pension obligations	1,013	812
Non-deductible provisions	1,485	518
Difference between the carrying amount of PP&E and intangible assets and their tax bases	1,659	1,830
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	7,649	8,346
Other	626	620
TOTAL	**14,553**	**14,328**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(9,893)	(9,873)
Measurement of assets and liabilities at fair value (IAS 32/IFRS 9)	(7,419)	(8,141)
Other	(897)	(693)
TOTAL	**(18,210)**	**(18,707)**
NET DEFERRED TAX ASSETS/(LIABILITIES)	**(3,658)**	**(4,378)**

In accordance with the amendment to IAS 12, no deferred tax is recognized in respect of the future implementation of the OECD Pillar 2 rules.

11.4 Unrecognized deferred taxes

At December 31, 2023, the tax effect of tax losses and tax credits eligible for carry-forward but not utilized and not recognized in the statement of financial position amounted to €4,563 million (€4,165 million at December 31, 2022). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium, the Netherlands, Australia, and the United States). These tax losses carried forward did not give rise to the full or partial recognition of a deferred tax asset due to the absence of sufficient profit forecasts in the medium term.

The tax effect of other tax-deductible temporary differences not recorded in the statement of financial position was €1,778 million at end-December 2023 *versus* €1,590 million at end-December 2022.

NOTE 12 Earnings per share

ACCOUNTING STANDARDS

Basic earnings per share is calculated by dividing net income Group share for the year by the weighted average number of ordinary shares outstanding during the year. The average number of ordinary shares outstanding during the year is the number of ordinary shares outstanding at the beginning of the year, adjusted by the number of ordinary shares bought back or issued during the year.

For the diluted earnings per share calculation, the weighted average number of shares and basic earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (options, warrants and convertible bonds, etc.).

In compliance with IAS 33 – Earnings per Share, earnings per share and diluted earnings per share are based on net income/(loss) Group share after deduction of payments to bearers of deeply-subordinated perpetual notes (see Note 16.2.1 "Issuance of deeply-subordinated perpetual notes").

The Group's dilutive instruments included in the calculation of diluted earnings per share include bonus shares and performance shares granted in the form of ENGIE securities.

	Dec. 31, 2023	Dec. 31, 2022
Numerator *(in millions of euros)*		
Net income/(loss) Group share	**2,208**	**216**
Of which Net income/(loss) relating to continuing operations, Group share	*2,208*	*(1,965)*
Interest from deeply-subordinated perpetual notes	(80)	(77)
Net income/(loss)used to calculate earnings per share	**2,129**	**140**
Of which Net income/(loss) relating to continuing operations, Group share, used to calculate earnings per share	*2,129*	*(2,042)*
Net recurring income/(loss) Group share	**5,366**	**5,510**
Of which Net recurring income/(loss) relating to continuing operations, Group share	*5,366*	*5,223*
Interest from deeply-subordinated perpetual notes	(80)	(77)
Net recurring income/(loss)used to calculate earnings per share	**5,287**	**5,433**
Of which Net recurring income/(loss) relating to continuing operations, Group share, used to calculate earnings per share	*5,287*	*5,146*
Denominator *(in millions of shares)*		
Average number of outstanding shares	**2,422**	**2,420**
Impact of dilutive instruments:		
Bonus share plans reserved for employees	11	-
Diluted average number of outstanding shares	**2,433**	**2,420**
Earnings per share *(in euros)*		
Basic earnings/(loss) per share	**0.88**	**0.06**
Of which Basic earnings/(loss) Group share relating to continuing operations per share	0.88	(0.84)
Diluted earnings/(loss) per share	**0.87**	**0.06**
Of which Diluted earnings/(loss) Group share relating to continuing operations per share	*0.88*	*(0.84)*
Basic recurring earnings/(loss) per share	**2.18**	**2.24**
Of which Basic recurring earnings/(loss) Group share relating to continuing operations per share	*2.18*	*2.13*
Diluted recurring earnings/(loss) per share (1)	**2.17**	**2.23**
Of which Diluted recurring earnings/(loss) Group share relating to continuing operations per share (1)	*2.17*	*2.12*

(1) In 2022, the calculation of the denominator included 11 million potential ENGIE shares that had a dilutive effect on the NRIgs and NRIgs relating to continuing operations per share. This effect was not taken into account in the calculation of the NIgs and the NIgs relating to continuing operations per share due to the antidilutive effect on the latter.

NOTE 13 Fixed assets

13.1 Goodwill

ACCOUNTING STANDARDS

Upon a business combination, goodwill is measured as the difference between:

- on the one hand the sum of:
  - the consideration transferred,
  - the amount of non-controlling interests in the acquiree, and
  - in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree;
- on the other hand the net fair value of the identifiable assets acquired and liabilities assumed. The key assumptions and estimates used to determine the fair value of assets acquired and liabilities assumed include the market outlook for the measurement of future cash flows as well as applicable discount rates. These assumptions reflect management's best estimates at the acquisition date.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the 12-month measurement period.

Goodwill relating to interests in associates is included in the carrying amount of the investment consolidated under the equity method entities.

13.1.1 Movements in the carrying amount of goodwill

In millions of euros	Net amount
AT DECEMBER 31, 2022	**12,855**
Impairment losses	(95)
Changes in scope of consolidation and Other	134
Translation adjustments	(29)
AT DECEMBER 31, 2023	**12,864**

13.1.2 Information on goodwill

For the purposes of impairment testing, goodwill is allocated to operating segments, which represent the lowest level at which it is monitored for internal management purposes.

The table below shows the amount of goodwill at December 31, 2023:

In millions of euros	Dec. 31, 2023
Networks	5,366
Renewables	2,185
Retail	1,838
Energy Solutions	1,209
FlexGen	1,123
Nuclear	797
Other	346
TOTAL	**12,864**

13.2 Intangible assets

ACCOUNTING STANDARDS

Initial measurement

Intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Amortization

Intangible assets are amortized on the basis of the expected pattern of consumption of the estimated future economic benefits embodied in the asset. Amortization is calculated mainly on a straight-line basis over the following useful lives:

	Useful life	
Main depreciation periods (years)	**Minimum**	**Maximum**
Concession rights	10	30
Customer portfolio	3	20
Other intangible assets	1	50

Intangible assets with an indefinite useful life are not amortized but are tested for impairment annually.

Intangible rights arising on concession contracts

IFRIC 12 – Service Concession Arrangements deals with the treatment to be applied by the concession operator in respect of certain concession arrangements.

For a concession arrangement to fall within the scope of IFRIC 12, usage of the infrastructure must be controlled by the concession grantor. This requirement is satisfied when the following two conditions are met:

- the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls any residual interest in the infrastructure at the end of the term of the arrangement, for example it retains the right to take back the infrastructure at the end of the concession.

The intangible asset model according to paragraph 17 of IFRIC 12 applies if the operator receives a right (a license) to charge the users, or the grantor, depending on the use made of the public service. There is no unconditional right to receive cash, as the amounts depend on the extent to which the public uses the service.

Concession infrastructures that do not meet the requirements of IFRIC 12 are presented as property, plant and equipment. This is the case of gas distribution infrastructures in France. The related assets are recognized in accordance with IAS 16, given that GRDF operates its network under long-term concession arrangements, most of which are mandatorily renewed upon expiration pursuant to French law No. 46-628 of April 8, 1946.

Research and development costs

Research costs are expensed as incurred.

Development costs are capitalized when the asset recognition criteria set out in IAS 38 are met. Capitalized development costs are amortized over the useful life of the intangible asset.

13.2.1 Movements in intangible assets

In millions of euros	Intangible rights arising on concession contracts	Capacity entitlements	Others	Total
Gross amount				
AT DECEMBER 31, 2022	**3,630**	**3,282**	**13,498**	**20,410**
Acquisitions	269	-	1,143	1,412
Disposals	(43)	-	(271)	(315)
Translation adjustments	5	-	(52)	(46)
Changes in scope of consolidation	-	-	965	965
Transfer to “Assets classified as held for sale and discontinued operations”	-	-	-	-
Other	44	11	(59)	(4)
AT DECEMBER 31, 2023	**3,906**	**3,293**	**15,223**	**22,422**
Accumulated amortization and impairment				
AT DECEMBER 31, 2022	**(1,706)**	**(2,208)**	**(9,131)**	**(13,046)**
Amortization	(151)	(106)	(867)	(1,124)
Impairment	(8)	-	(42)	(51)
Disposals	37	-	180	217
Translation adjustments	(1)	-	22	21
Changes in scope of consolidation	-	-	(19)	(19)
Other	(9)	-	37	29
AT DECEMBER 31, 2023	**(1,838)**	**(2,314)**	**(9,821)**	**(13,973)**
Carrying amount				
AT DECEMBER 31, 2022	**1,924**	**1,074**	**4,366**	**7,364**
AT DECEMBER 31, 2023	**2,067**	**979**	**5,403**	**8,449**

In 2023, the net increase in “Intangible assets” was mainly attributable to:

- investments during the period (€1,412 million) relating mainly to intangible assets in progress (€863 million) notably capitalized costs in connection with the renewable business in the United States (€207 million), as information technology projects (€141 million) mainly at corporate ENGIE group level in France, and as investments in the extension and maintenance of transmission and distribution networks (€215 million) mainly in France, and relating to concession contracts in the business of Energy Solutions in France (€269 million);
- a net positive impact of changes in the scope of consolidation of €946 million, relating mainly to preliminary purchase price allocation carried out for the acquisition of Broad Reach Power, a US-based company specializing in battery storage (€760 million) and to the acquisition of the group BTE Renewables, a renewable energy producer with wind and solar PV projects in South Africa (€134 million) (see Note 4 “Main changes in the Group structure”);

partially offset by:

- amortization (negative €1,124 million);
- impairment losses (negative €51 million).

13.2.2 Capacity entitlements

The Group has acquired capacity entitlements from power stations operated by third parties. These power station capacity rights were acquired in connection with transactions or within the scope of the Group’s involvement in financing the construction of certain power stations. In consideration, the Group received the right to purchase a share of the production over the useful life of the underlying assets. These rights are amortized over the useful life of the underlying assets, not exceeding 50 years. The Group currently holds rights in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy (2028 maturity).

13.2.3 Other

At December 31, 2023, this caption mainly relates to software and licenses for €1,436 million, as well as intangible assets in progress for €1,576 million and intangible assets (client portfolio) acquired for €2,097 million as a result of business combinations and capitalized acquisition costs for customer contracts.

13.2.4 Information regarding research and development costs

Research and development activities primarily relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection, service quality, and the use of energy resources. Research and development priorities are focused on climate change adaptation and mitigation, including renewable energy systems (photovoltaic solar, onshore and offshore wind), the production and use of green gases (hydrogen, biomethane) or the development of decentralized energy infrastructure (district heating and cooling, decentralized solar energy, low carbon cities and mobility).

Capitalized development costs, related to projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38, totaled €21 million in 2023.

13.3 Property, plant and equipment

ACCOUNTING STANDARDS

Initial recognition and subsequent measurement

Items of property, plant and equipment are recognized at historical cost less any accumulated depreciation and any accumulated impairment losses.

The carrying amount of these items is not revalued as the Group has elected not to apply the allowed alternative method, which consists of regularly revaluing one or more categories of property, plant and equipment.

Investment subsidies are deducted from the gross value of the assets concerned.

In accordance with IAS 16, the initial cost of the item of property, plant and equipment includes an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, when the entity has a present, legal or constructive obligation to dismantle the item or restore the site. A corresponding provision for this obligation is recorded for the amount of the asset component.

Borrowing costs that are directly attributable to the construction of the qualifying asset are capitalized as part of the cost of that asset.

Leases

In accordance with IFRS 16, the Group recognizes a right-of-use asset and a corresponding lease liability with respect to contracts considered as a lease in which the Group acts as lessee, except for leases with a term of 12 months or less ("short-term leases"), and leases for which the underlying asset is of a low value ("low-value asset"). Payments associated with these leases are recognized on a straight-line basis as expenses in profit and loss. The lease contracts in the Group mainly concern real estate, vehicles, LNG vessels, an hydroelectric concession contract and other equipment.

The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The lease liability is initially measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate. This rate is calculated based on the Group's incremental borrowing rate adjusted in accordance with IFRS 16, taking into account (i) the economic environment of the subsidiaries, and in particular their credit risk, (ii) the currency in which the contract is concluded and (iii) the duration of the contract at inception (or the remaining duration for contracts existing upon the initial application of IFRS 16). The methodology applied to determine the incremental borrowing rate reflects the profile of the lease payments (duration method).

The lease term is assessed, including whether a renewal option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised, on a case-by-case basis. The lease term is reassessed if a significant event or a significant change in circumstances that is within the control of the lessee occurs and may affect the assessment made. In determining the enforceable period of a lease, the Group applies a broad interpretation of the term penalty and takes into consideration not only contractual penalties arising from termination, but also ancillary costs that could arise in case of an early termination of the lease.

Cushion gas

"Cushion" gas stored in underground storage facilities is essential for ensuring that reservoirs can be operated effectively, and is therefore inseparable from these reservoirs. Unlike "working" gas which is included in inventories (see Note 22.2 "Inventories"), cushion gas is reported in other property, plant and equipment.

Depreciation

In accordance with the components approach, each significant component of an item of property, plant and equipment with a different useful life from that of the main asset to which it relates is depreciated separately over its own useful life.

Property, plant and equipment is depreciated mainly using the straight-line method over the following useful lives:

Main depreciation periods (years)	Useful life Minimum	Useful life Maximum
Plant and equipment		
• Storage – Production – Transport – Distribution	5	60*
• Installation – Maintenance	3	10
• Hydraulic plant and equipment	20	65
Solar and wind farms	25	30
Other property, plant and equipment	2	33

* *Excluding cushion gas.*

The range of useful lives is due to the diversity of the assets in each category. The minimum periods relate to smaller equipment and furniture, while the maximum periods concern network infrastructures and storage facilities.

Fixtures and fittings relating to hydro plants operated by the Group are depreciated over the shorter of the contract term and the useful life of the assets, taking into account the renewal of the concession period if such renewal is considered to be reasonably certain.

The right-of-use asset related to leases is depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term. In that case the right-of-use asset is depreciated over the useful life of the underlying asset, which is determined on the same basis as that used for property, plant and equipment mentioned above.

13.3.1 Movements in property, plant and equipment

In millions of euros	Land	Buildings	Plant and equipment	Vehicles	Dismantling costs	Assets in progress	Right of use	Other	Total
Gross amount									
AT DECEMBER 31, 2022	**649**	**2,762**	**96,016**	**304**	**6,038**	**5,649**	**5,094**	**1,319**	**117,831**
Acquisitions/Increases	10	12	711	32	-	5,921	700	38	7,425
Disposals	(2)	(18)	(821)	(20)	(8)	(23)	(280)	(166)	(1,338)
Translation adjustments	(3)	(12)	(290)	(1)	(13)	(86)	(72)	(13)	(490)
Changes in scope of consolidation	3	-	971	2	2	186	8	2	1,176
Transfer to “Assets classified as held for sale and discontinued operations”	-	-	(2)	-	-	-	-	-	(3)
Other	16	20	4,715	11	(624)	(4,930)	3	18	(771)
AT DECEMBER 31, 2023	**673**	**2,765**	**101,300**	**328**	**5,395**	**6,716**	**5,454**	**1,198**	**123,829**
Accumulated depreciation and impairment									
AT DECEMBER 31, 2022	**(153)**	**(1,772)**	**(52,709)**	**(226)**	**(4,155)**	**(724)**	**(1,710)**	**(895)**	**(62,343)**
Depreciation	(4)	(69)	(2,727)	(28)	(364)	-	(489)	(82)	(3,762)
Impairment	-	(1)	(1,474)	-	403	(50)	(10)	(1)	(1,133)
Disposals	-	18	763	18	4	6	299	165	1,272
Translation adjustments	-	5	161	1	7	4	20	7	204
Changes in scope of consolidation	-	-	(172)	(2)	-	-	2	(1)	(173)
Transfer to “Assets classified as held for sale and discontinued operations”	-	-	-	-	-	-	-	-	-
Other	(1)	26	(148)	(3)	(362)	535	(5)	14	56
AT DECEMBER 31, 2023	**(158)**	**(1,793)**	**(56,306)**	**(239)**	**(4,467)**	**(229)**	**(1,893)**	**(794)**	**(65,879)**
Carrying amount									
AT DECEMBER 31, 2022	**497**	**991**	**43,307**	**78**	**1,883**	**4,925**	**3,384**	**424**	**55,488**
AT DECEMBER 31, 2023	**516**	**971**	**44,993**	**90**	**928**	**6,487**	**3,561**	**404**	**57,950**

In 2023, the net increase in "Property, plant and equipment" essentially takes into account:

- maintenance and development investments for a total amount of €6,724 million mainly related to the construction and the development of wind and solar farms primarily in France, the United States, Latin America and Poland (€3,450 million), as well as to the extension of the transportation and distribution networks in France, Romania and Latin America (€1,765 million), to FlexGen operating segment assets (€868 million) and to Energy Solutions operating activities (€437 million);
- a net positive impact of changes in the scope of consolidation of €1,003 million, relating mainly to the acquisition of Broad Reach Power, a US-based company specialized in battery storage (€531 million), the acquisition of BTE Renewables, one of Africa's leading renewable energy companies based in South Africa (€311 million) and the acquisition of Ixora in the UK (€22 million) in the Networks operating segment;

offset by:

- depreciation for a total amount of €3,762 million;
- a €646 million decrease in dismantling assets following the adoption of the industrial scenario and of all the technical and financial assumptions which were approved by the Commission for Nuclear Provisions (CNP) on July 7, 2023 at the end of the review procedure initiated in September 2022. This decrease was partially offset by a €403 million reversal of impairment on some of these assets (see Note 13.4 "Impairment testing of goodwill, intangible assets and property, plant and equipment");
- negative foreign exchange effects of €286 million, mainly resulting from the depreciation of the US dollar (negative €445 million), partially offset by the appreciation the Brazilian real (positive €88 million), the Mexican peso (positive €47 million) and the pound sterling (positive €33 million) against euro.

13.3.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €1,625 million at December 31, 2023 compared to €1,120 million at December 31, 2022.

The net increase primarily relates to the renewable assets pledged in Brazil for €392 million.

13.3.3 Contractual commitments to purchase property, plant and equipment

In the ordinary course of their operations, some Group companies have entered into commitments to purchase, and the related third parties to deliver plant and equipment. These commitments relate mainly to orders for equipment and material related to the construction of energy production units and to service agreements.

Contractual investment commitments made by the Group to purchase property, plant and equipment totaled €2,859 million at December 31, 2023 compared to €3,548 million at December 31, 2022.

The net reduction in contractual commitments relates mainly to renewable assets in the United States for €585 million.

13.3.4 Other information

Borrowing costs included in the cost of property, plant and equipment amounted to €268 million at December 31, 2023 compared to €109 million at December 31, 2022.

13.4 Impairment testing of goodwill, intangible assets and property, plant and equipment

ACCOUNTING STANDARDS

Risk of impairment

Goodwill

Goodwill is not amortized but is tested for impairment each year in accordance with IAS 36, or more frequently where an indication of impairment is identified. All goodwill is tested for impairment based on data at the end of June, supplemented by a review of events in the second half.

Impairment tests are carried out at the level of cash-generating units (CGUs) or groups of CGUs, which constitute groups of assets which generate cash flows that are largely independent from cash flows generated by other CGUs.

Goodwill is impaired if the net carrying amount of the CGU (or group of CGUs) to which the goodwill is allocated is greater than the recoverable amount of that CGU.

Impairment losses in relation to goodwill cannot be reversed and are shown as "Impairment losses" in the income statement.

Intangible assets and property, plant and equipment

In accordance with IAS 36, impairment tests are carried out on items of property, plant and equipment and intangible assets where there is an indication that the assets may be impaired. Such indications may be based on events or changes in the market environment, or on internal sources of information. Intangible assets that are not amortized are tested for impairment annually.

Property, plant and equipment and intangible assets with finite useful lives are only tested for impairment when there is an indication that they may be impaired. This is generally the result of significant changes in the environment in which the assets are operated or when economic performance is lower than expected.

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the cash-generating unit (CGU), as appropriate and determined in accordance with IAS 36. If the recoverable amount of an asset is lower than its carrying amount, the carrying amount is written down to the recoverable amount by recording an impairment loss. Upon recognition of an impairment loss, the depreciable amount and possibly the useful life of the asset concerned is revised.

Impairment losses recorded in relation to property, plant and equipment or intangible assets may be subsequently reversed if the recoverable amount of the asset increases to exceed the carrying amount. The increased carrying amount of an item of property, plant or equipment following the reversal of an impairment loss may not exceed the carrying amount that would have been determined (net of depreciation/amortization) had no impairment loss been recognized in prior periods.

Indicators of impairment

The main indicators of impairment used by the Group are:

- using external sources of information:
  - a decline in an asset's value over the period that is significantly more than would be expected from the passage of time or normal use,
  - significant adverse changes that have taken place over the period, or will take place in the near future, in the technological market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated,
  - an increase over the period in market interest rates or other market rates of return on investments if such increase is likely to affect the discount rate used in calculating an asset's value in use and decrease its recoverable amount materially,
  - the carrying amount of the net assets of the entity exceeds its market capitalization;
- using internal sources of information:
  - evidence of obsolescence or physical damage to an asset;
  - significant changes in the extent to which, or manner in which, an asset is used or is expected to be used, that have taken place in the period or soon thereafter and that will adversely affect it. These changes include the asset becoming idle, plans to dispose of an asset sooner than expected, reassessing its useful life as finite rather than indefinite or plans to restructure the operations to which the asset belongs,
  - internal reports that indicate that the economic performance of an asset is, or will be, worse than expected.

Measurement of recoverable amount

For operating entities which the Group intends to hold on a long-term and going concern basis, the recoverable amount of a CGU corresponds to the higher of its fair value less costs to sell and its value in use. Value in use is primarily determined based on the present value of future operating cash flows including a terminal value. Standard valuation techniques are used based on the following main economic assumptions:

- market perspectives and developments in the regulatory framework;
- discount rates based on the specific characteristics of the operating entities concerned;
- terminal values in line with available market data specific to the operating segments concerned and growth rates associated with these terminal values, not exceeding the inflation rate.

Discount rates are determined on a post-tax basis and applied to post-tax cash flows. The recoverable amounts calculated on the basis of these discount rates are the same as the amounts obtained by applying the pre-tax discount rates to cash flows estimated on a pre-tax basis, as required by IAS 36.

For operating entities which the Group has decided to sell, the related recoverable amount of the assets concerned is based on market value less disposal costs. Where negotiations are ongoing, this value is determined based on the best estimate of their outcome as of the reporting date.

13.4.1 General assumptions

The impairment tests were performed in the context of a highly volatile economic environment, as described in Note 1.3 "Use of estimates and judgments".

In most cases, the recoverable amounts are determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2024 budget and the 2025-2026 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on the basis of extrapolated cash flows beyond that time frame.

Cash flow projections are determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates), and price forecasts resulting from the Group's reference scenario for 2027-2050 as revised and validated by the Executive Committee in July 2023. The forecasts and projections included in the reference scenario were determined on the basis of the following inputs:

- forward market prices over the liquidity period for fuel (coal, oil and gas), CO_2 and electricity on each context in a of highly volatile energy prices;

- beyond this period, medium- and long-term energy prices were determined by the Group based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO_2 prices are in line with the 2030 emissions reduction target of 55% and the 2050 climate neutrality objectives set by the European Commission as part of the "European Green Deal" presented in December 2019 and July 2021. Among the external scenarios, the Group's scenario is similar to that of the International Energy Agency, with its APS (Announced Pledges Scenario) model, and that of ADEME ("green technology");
- more specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO_2 prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system. ENGIE has opted for a balanced mix, integrating renewable gas and carbon dioxide capture and storage in order to guarantee an energy system with the best levels of efficiency and resilience. This trajectory has been included in the Group's report as part of the "Task Force on Climate Related Financial Disclosures" (TCFD) initiative. The risk factors arising from climate and environmental issues are also detailed in the Group's Universal Registration Document.

Finally, as part of the Group's efforts to take climate issues into account (*see Note 1.3.3 "Consideration of climate issues in the preparation of the Group's financial statements"*), the Group has taken into account, in the valuation of non-financial assets, its commitment to completely withdraw from coal activities by 2027 (*see Note 13.4.5*).

13.4.2 Renewables

At December 31, 2023, goodwill amounted to €2,185 million, intangible assets to €1,756 million and property, plant and equipment to €17,124 million. Renewables comprises all centralized renewable energy generation activities, including financing, construction, operation and maintenance of renewable energy facilities, using various energy sources such as hydropower, onshore wind, photovoltaic solar, biomass, offshore wind, and battery storage linked to a renewable asset. The energy produced is fed into the grid and sold either on the open or regulated market or to third parties through electricity sale agreements.

The main assumptions and key estimates relate primarily to discount rates, assumptions as to the renewal of the hydropower concession agreements and changes in electricity prices beyond the liquidity period.

The value in use of the Compagnie Nationale du Rhône and SHEM was calculated based on assumptions including the extension or renewal through a tender process for the concession agreements.

The cash flows for the periods covered by the renewal of the concession agreements are based on a number of assumptions relating to the economic and regulatory conditions for operating these assets (royalty rates, required level of investment, etc.) during this period.

In 2023, the discount rates applied to these activities ranged between 5.3% and 10.3%. In 2022, they ranged between 4.5% and 10.2%.

Results of the impairment tests

At December 31, 2023, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

However, impairment losses on property, plant and equipment totaling €784 million were nevertheless recognized over the year, notably on renewable energy production assets in North America (€714 million), due to very specific operational difficulties linked to turbine performance on a wind power asset, and the fall in long-term market prices affecting certain projects exposed to the SPP market in particular. It should be noted that for these projects, the fall in market prices had a positive impact on the fair value of VPPA (Virtual Power Purchase Agreement) contracts of around €+0.3 billion, with these mark-to-market changes, on the period covered by these contracts, recognized in operating expenses (see Note 8.1 "Operating expenses").

Sensitivity analyses

The sensitivity of the hydropower generation business in France and the renewable power generation business in North America to changes in electricity prices and changes in discount rates (impact on the recoverable amount) is shown in the table below:

	Dec. 31, 2023			
	Electricity prices		Discount rates	
In billion of euros	+10€/MWh	-10€/MWh	+50 bp	-50 bp
Hydropower generation in France	0,2	(0,4)	(0,2)	0,2
Renewables assets in North America	0,4	(0,4)	(0,1)	0,1

Non-linear increase or decrease due to the method of calculation of the hydro tax.

An increase of 50 basis points in the discount rates and a decrease of €10/MWh in the electricity price have a negative impact on the recoverable amount. However, the recoverable amount of goodwill would remain above the carrying amount.

13.4.3 Networks

Networks comprises the Group's electricity and gas infrastructure activities and projects. These activities include the management and development of (i) gas and electricity transportation networks and natural gas distribution networks in and outside of Europe, (ii) underground natural gas storage in Europe, and (iii) regasification infrastructure in France and Chile.

Apart from the historical infrastructure management activities, its asset portfolio also contributes to the challenges of the energy transition and network greening (biomethane, hydrogen, etc.).

At December 31, 2023, goodwill amounted to €5,366 million, intangible assets to €1,090 million and property, plant and equipment to €29,975 million. Regulated infrastructure assets in France amounted to €928 million for intangible assets and €27,220 million for property, plant and equipment.

The valuation of activities in France is mainly based on cash flow projections determined on the basis of tariffs negotiated with the French energy regulator (CRE) and terminal values corresponding to the expected value of the Regulated Asset Base (RAB). The RAB is the value assigned by the CRE to the assets operated by distributors. It is the sum of the future pre-tax cash flows, discounted at the pre-tax rate of return guaranteed by the regulator.

In respect of the valuation of activities in France, the energy mix scenario for 2050, adopted by the Group and detailed in Note 17.3.1 "Dismantling obligations arising on non-nuclear plant and equipment", will not lead to any significant change in RAB. Given the vital role of gas, a reliable energy source able to supplement renewable energy sources that are intermittent by nature, non-controllable and difficult to store, the Group is planning to maintain or convert its gas network infrastructures to allow for the transportation of green gases (biomethane, hydrogen, etc.), which will progressively replace natural gas. This strategic role will be further strengthened by the new opportunities offered in terms of CO_2 storage and transportation.

To achieve this, the Group plans to maintain its current level of investment. This approach is largely supported by a rapidly developing regulatory framework supporting the rise in the use of hydrogen and biomethane in the European Union, which will result in concrete European targets. This legal framework should be in place within the next two years.

France's political and social strategy concerning the energy transition aims to achieve carbon neutrality by 2050. The priorities of the French climate and energy policy are being updated with France's future roadmap *Stratégie Française sur l'Énergie et le Climat* (SFEC), in particular with the document published on November 22, 2023 by the Ministry of Ecological Transition ahead of the consultation that was launched in December 2023. In addition, the scenario adopted by the Group is largely supported by the main conclusions of the CRE report of April 2023 on the future of gas infrastructures, as well as those of the public consultation on "decarbonizing the building industry" held during the summer of 2023, which highlighted the difficulties associated with a potential ban on the installation of new gas boilers in existing homes.

In 2023, the discount rates applied to all these activities ranged between 4.9% and 9.4%. In 2022, they ranged between 4.7% and 8.5%.

Results of the impairment tests

At December 31, 2023, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

However, impairment losses totaling €82 million were recognized during the year on certain biomethane production assets.

Sensitivity analysis

Given the regulated nature of the Networks business in France, as well as the progressive transition from natural gas to green gas, a reasonable change in any of the valuation inputs (discount rate, inflation rate and rate of return on assets) would not result in any impairment losses. A very substantial change in the regulatory framework and political orientations could have a significant impact on the valuation of gas infrastructure assets in France. In this respect, the 2023 RAB of Networks assets in France, as well as the related depreciation and amortization charges, are as follows:

In millions of euros	**2023 RAB**	**Depreciation and amortization**
GRDF	16,941	(1,083)
GRTgaz	9,362	(546)
Storengy	4,120	(153)
Elengy	930	(61)

13.4.4 Energy Solutions

At December 31, 2023, goodwill amounted to €1,209 million, intangible assets to €2,351 million and property, plant and equipment to €2,646 million.

Energy Solutions encompasses the construction and management of decentralized energy networks to produce energy (heating and cooling networks, distributed power generation plants, distributed solar power parks, low carbon mobility, low-carbon cities and public lighting, etc.) and related services (energy efficiency, technical maintenance, sustainable development consulting).

The terminal value used to calculate the value in use of the services and energy sales businesses in France was determined by extrapolating the cash flows beyond the medium-term business plan period using a long-term growth rate of 2% per year.

The main assumptions and key estimates relate primarily to discount rates and changes in price beyond the liquidity period.

In 2023, the discount rates applied to these activities ranged between 5.3% and 9%. In 2022, they ranged between 4.9% and 8.9%.

Results of the impairment tests

At December 31, 2023, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

However, impairment losses totaling €137 million were recognized during the year on property, plant and equipment, mainly in connection with renegotiations of contracts due to expire shortly in France, as well as assets that were subject to revisions to their medium- and long-term forecasts or that encountered operational difficulties in Germany and North America.

Sensitivity analyses

Given the essentially contractual nature of Energy Solutions activities, a reasonable change in any of the valuation inputs would not result in impairment losses on goodwill.

13.4.5 FlexGen

At December 31, 2023, goodwill amounted to €1,123 million, intangible assets to €894 million and property, plant and equipment to €5,883 million.

FlexGen encompasses all the Group's the activities involved in compensating the intermittent nature of renewable energies by providing upstream flexibility (flexible generation as well as pump- or battery- operated storage plants) and downstream flexibility (shaving or shifting the consumption of BtoC customers). They also provide solutions to decarbonize the industry with low-carbon hydrogen. The GBU plays a key role in the energy transition. It also includes the financing, construction, and operation of desalination plants, whether or not connected to power plants.

The main assumptions and key estimates relate primarily to discount rates, estimated demand for electricity and changes in the price of CO_2, fuel and electricity beyond the liquidity period. These assumptions also concern the duration of tax measures involving inframarginal rent caps in France and Italy.

In 2023, the discount rates applied to these activities ranged between 6.4% and 10.4%. In 2022, they ranged between 6% and 10.3%.

Results of the impairment tests

At December 31, 2023, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs. However, impairment losses totaling €624 million were recognized during the year on property, plant and equipment, notably on coal-fired power generation assets in South America, for which the Group has decided to accelerate the end of operations by the end of 2025, in line with the Group's decarbonization plan.

Sensitivity analyses

An increase of 50 basis points in the discount rates used would have a negative 1% impact on the recoverable amount of thermal power plants in France, Belgium, the Netherlands and Spain. However, the recoverable amount of goodwill would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 1% impact on the calculation.

A 10% decrease in the margin captured by thermal power plants in France, Belgium, the Netherlands and Spain would have a negative impact of 6% on the recoverable amount of goodwill over the carrying amount. An increase of 10% in the margin captured would have a positive 6% impact on this calculation.

13.4.6 Retail

At December 31, 2023, goodwill amounted to €1,838 million, intangible assets to €610 million and property, plant and equipment to €136 million.

Retail encompasses all the Group's activities relating to the sale of gas and electricity to end customers. It also includes all the Group's activities in services for residential clients. The terminal value used to calculate the value in use of the main services and energy sales businesses in Europe was determined by extrapolating cash flows beyond the medium-term business plan period using a long-term growth rate of approximately 2% per year.

In 2023, the discount rates applied to these activities ranged between 8% and 10.6%. In 2022, these rates ranged between 7.8% and 10%.

Results of the impairment tests

At December 31, 2023, no impairment losses were recognized on goodwill in consideration of the recoverable amount of the cash generating unit to which it belongs.

Sensitivity analyses

Given the capital-light nature of Retail activities, a reasonable change in any of the valuation inputs would not result in any impairment losses on goodwill.

13.4.7 Nuclear

At December 31, 2023, goodwill amounted to €797 million, intangible assets to €979 million and property, plant and equipment to €1,045 million.

Nuclear encompasses the power generation activities from the Group's nuclear power plants in Belgium and drawing rights on the Chooz B and Tricastin power plants in France.

Key assumptions used for the impairment test

On June 29, 2023, ENGIE and the Belgian government signed an intermediate agreement defining the terms of the extension of the Doel 4 and Tihange 3 nuclear units only. This agreement became binding on July 21, 2023, following the signature of the supplements to the initial agreements. Transaction documents signed on December 13, 2023 have clarified the implementation of the first agreements of June and July (see Note 17.2 "Obligations relating to nuclear power generation activities"). This agreement also provides for the establishment of a legal structure dedicated to the two extended nuclear units, equally owned by the Belgian State and ENGIE, aligning the interests of the two parties and ensuring the sustainability of their commitments. The business model of the extension is based on a balanced allocation of risks, notably through a Contract for Difference mechanism guaranteeing the value of extension investments, with a limited incentive for the industrial operator to achieve a favorable technical and economic performance at the plants.

In addition, for the period up to the extension of the two Belgian nuclear units, and for the period covering drawing rights on nuclear power plants in France, the cash flow projections are based on a large number of key assumptions, such as prices of fuel and CO_2, expected trends in electricity prices, availability of power plants, market outlook, and changes in the regulatory environment (especially concerning the extension of drawing rights agreements for French nuclear plants and the tax measures involving inframarginal rent caps). Lastly, the key assumptions also include the discount rate used to calculate the value in use of these activities, which amounted to 7% for 2023, unchanged from 2022.

Cash flow projections beyond the medium-term business plan for drawing rights on the Chooz B and Tricastin power plants have been determined on the basis of the residual term of the contracts and the assumption of a 10-year extension.

In France, the Nuclear Safety Authority authorized the start-up of Tricastin 1 on December 20, 2019 after its shutdown for its fourth 10-yearly inspection and, on December 3, 2020, published a draft decision setting out the conditions for the 900 MW reactors to continue operating beyond 40 years. Confirmation of a 10-year extension of the operating life of the 900 MW series reactors is therefore expected to be formalized in the next few years, once the conditions for continued operation have been determined by the Nuclear Safety Authority and a public inquiry has been held. The Group has therefore considered the 10-year extension of the nuclear units, and the corresponding drawing rights, beyond their fourth 10-yearly outage. The last 10-yearly inspection took place in 2021 for Tricastin (VD4) and in 2019 for Chooz B (VD3). The assumption of an extension was already considered in the impairment tests of previous years.

Results of the impairment test

The recoverable amount of the Nuclear assets remains above the value of goodwill, particularly due to the excess value attached to the plants in France.

Following the review procedure initiated by the Commission for Nuclear Provisions (CNP) in September 2022, the industrial scenario and all the technical and financial assumptions were approved on July 7, 2023. This resulted in a €646 million decrease in the plant dismantling provision (see Note 17.2 "Obligations relating to nuclear power generation activities"), against a reduction in the dismantling assets. Given the impairment losses recognized on some of these assets at the end of the previous year, an impairment reversal of €400 million was recorded.

Sensitivity analyses

A decrease of €10/MWh in electricity prices for nuclear power generation in France beyond the liquidity period would lead to a decrease of €0.5 billion in the recoverable amount, but without any impairment of goodwill.

Given the hedging of energy prices for electricity generated by Belgian power plants, and the implementation of the Contract for Difference mechanism as part of the extension of the Doel 4 and Tihange 3 nuclear units, the recoverable amount is not very sensitive to changes in electricity prices for nuclear-generated electricity in Belgium.

An increase of 50 basis points in the discount rates would lead to a non-material decrease in the recoverable amount on the Belgian plants.

A 5% decrease in availability of all Belgian nuclear power plants would lead to a decrease in value of around €0.3 billion on the Belgian plants. A similar decrease for the French plants would lead to a decrease of €0.2 billion in the recoverable amount, but without any impairment.

13.4.8 Other

Goodwill amounted to €346 million at December 31, 2023. The Other segment encompasses energy management and optimization activities, the BtoB supply activities in France of *Entreprises & Collectivités* (E&C), and the Corporate and holding activities. These entities present a significant difference between recoverable amount and the carrying amount of the segment's operating activities carrying goodwill at December 31, 2023.

NOTE 14 Financial instruments

14.1 Financial assets

ACCOUNTING STANDARDS

In accordance with the principles of IFRS 9 – Financial Instruments, financial assets are recognized and measured either at amortized cost, at fair value through equity or at fair value through profit or loss based on the following two criteria:

- a first criterion relating to the contractual cash flow characteristics of the financial asset. The analysis of contractual cash flow characteristics makes it possible to determine whether these cash flows are "only payments of principal and interest on the outstanding amounts" (known as the "SPPI" test or Solely Payments of Principal and Interest);
- a second criterion relating to the business model used by the Group to manage its financial assets. IFRS 9 defines three different business models: a first business model whose objective is to hold assets in order to collect contractual cash flows (hold to collect), a second model whose objective is achieved by both collecting contractual cash flows and selling financial assets (hold to collect and sell), and other business models.

The identification of the business model and the analysis of the contractual cash flow characteristics require judgment to ensure that the financial assets are classified in the appropriate category.

Where the financial asset is an investment in an equity instrument and is not held for trading, the Group may irrevocably elect to present the gains and losses on that investment in other comprehensive income.

Except for trade receivables, which are measured at their transaction price in accordance with IFRS 15, financial assets are measured, on initial recognition, at fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to their acquisition.

At the end of each reporting period, financial assets measured using the amortized cost method or at fair value through other comprehensive income (with a recycling mechanism) are subject to an impairment test based on the expected credit losses method.

Financial assets also include derivatives that are measured at fair value in accordance with IFRS 9.

In accordance with IAS 1, the Group presents current and non-current assets and current and non-current liabilities separately in the statement of financial position. In view of the majority of the Group's activities, it was considered that the criterion to be used to classify assets is the expected time to realize the asset or settle the liability: the asset is classified as current if this period is less than 12 months and as non-current if it is more than 12 months after the reporting period.

The following table presents the Group's different categories of financial assets, broken down into current and non-current items:

		Dec. 31, 2023			Dec. 31, 2022		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Other financial assets	14.1	14,817	2,170	16,987	10,599	2,394	12,992
Equity instruments at fair value through other comprehensive income		*1,902*	*-*	*1,902*	*1,217*	*-*	*1,217*
Equity instruments at fair value through income		*222*	*-*	*222*	*278*	*-*	*278*
Debt instruments at fair value through other comprehensive income		*1,753*	*119*	*1,873*	*2,128*	*290*	*2,418*
Debt instruments at fair value through income		*2,915*	*654*	*3,569*	*1,178*	*568*	*1,745*
Loans and receivables at amortized cost		*8,024*	*1,397*	*9,421*	*5,798*	*1,537*	*7,334*
Trade and other receivables	7.2	-	20,092	20,092	-	31,310	31,310
Assets from contracts with customers	7.2	1	9,530	9,531	9	12,575	12,584
Cash and cash equivalents		-	16,578	16,578	-	15,570	15,570
Derivative instruments	14.4	12,764	8,481	21,245	33,134	15,252	48,386
TOTAL		**27,582**	**56,850**	**84,433**	**43,741**	**77,101**	**120,843**

14.1.1 Other financial assets

14.1.1.1 Equity instruments at fair value

ACCOUNTING STANDARDS

Equity instruments at fair value through other comprehensive income (OCI)

Under IFRS 9 an irrevocable election can be made to present subsequent changes in the fair value of an investment in an equity instrument that is not held for trading in other comprehensive income. This choice is made on an instrument by instrument basis. Amounts presented in other comprehensive income should not be transferred to profit or loss including proceeds of disposals. However, IFRS 9 authorizes the transfer of the accumulated profits and losses to another component of equity. Dividends from such investments are recognized in profit or loss unless the dividend clearly represents the recovery of a portion of the cost of the investment.

The equity instruments recognized under this line item mainly concern investments in companies that are not controlled by the Group and for which OCI measurement has been selected given their strategic and long-term nature.

Upon initial recognition, these equity instruments are recognized at fair value, which is generally their acquisition cost, plus transaction costs.

At each reporting date, for listed securities, fair value is determined based on the quoted market price at the reporting date. For unlisted securities, fair value is measured using valuation models based primarily on the latest market transactions, the discounting of dividends or cash flows and the net asset value.

Equity instruments at fair value through profit or loss

Equity instruments that are held for trading or for which the Group has not elected for measurement at fair value through other comprehensive income are measured at fair value through profit or loss.

This category mainly includes investments in companies not controlled by the Group.

Upon initial recognition, these equity instruments are recognized at fair value, which is generally their acquisition cost.

At each reporting date, for listed and unlisted securities, the same measurement method as described above should be applied.

In millions of euros	Equity instruments at fair value through other comprehensive income	Equity instruments at fair value through income	Total
AT DECEMBER 31, 2022	**1,217**	**278**	**1,495**
Increase	666	84	749
Decrease	(105)	(4)	(109)
Changes in fair value	136	(49)	87
Changes in scope of consolidation, translation adjustments and other	(11)	(87)	(98)
AT DECEMBER 31, 2023	**1,902**	**222**	**2,124**
Dividends	2	7	8

Equity instruments break down as €1,653 million of listed equity instruments (€875 million at December 31, 2022) and €473 million of unlisted equity instruments (€620 million at December 31, 2022). Changes in fair value include in particular the impairment of the minority interest held by the Group in Nord Stream AG, now valued at zero (€90 million at December 31, 2022). This change in fair value does not affect the income statement, as it is recorded as a reduction in other items of comprehensive income.

14.1.1.2 Debt instruments at fair value

ACCOUNTING STANDARDS

Debt instruments at fair value through other comprehensive income

Financial assets that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and for which the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the outstanding amount (SPPI), are measured at fair value through OCI (with a recycling mechanism). This involves a measurement through profit or loss for interest (at amortized cost using the effective interest method), impairment and foreign exchange gains and losses, and through OCI (with a recycling mechanism) for other gains or losses.

This category mainly includes bonds.

Fair value gains and losses on these instruments are recognized in other comprehensive income, except for the following items which are recognized in profit or loss:

- expected credit losses and reversals;
- foreign exchange gains and losses.

When the financial asset is derecognized, the cumulative gain or loss that was previously recognized in other comprehensive income is reclassified from equity to profit or loss.

Debt instruments at fair value through profit or loss

Financial assets whose contractual cash flows do not consist solely of payments of principal and interest on the amount outstanding (SPPI) or that are held in view of an “other” business model are measured at fair value through profit or loss.

The Group’s investments in UCITS are accounted for in this caption. They are considered as debt instruments, according to IAS 32 – Financial Instruments: Presentation, given the existence of an obligation for the issuer to redeem units, at the request of the holder. They are measured at fair value through profit or loss because the contractual cash flow characteristics do not meet the SPPI test.

In millions of euros	Debt instruments at fair value through other comprehensive income	Liquid debt instruments held for cash investment purposes at fair value through other comprehensive income	Debt instruments at fair value through income	Liquid debt instruments held for cash investment purposes at fair value through income	Total
AT DECEMBER 31, 2022	**2,418**	**-**	**977**	**769**	**4,163**
Increase	2,147	-	2,942	228	5,317
Decrease	(2,717)	(24)	(1,375)	(139)	(4,255)
Changes in fair value	25	-	141	26	192
Changes in scope of consolidation, translation adjustments and other	-	24	-	-	24
AT DECEMBER 31, 2023	**1,873**	**-**	**2,685**	**884**	**5,441**

Debt instruments at fair value at December 31, 2023 primarily included bonds and money market funds held by Synatom for €4,536 million (see Note 17.2.4 “Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material”) and liquid instruments deducted from net financial debt for €884 million (respectively €3,350 million and €769 million at December 31, 2022).

14.1.1.3 Loans and receivables at amortized cost

ACCOUNTING STANDARDS

Loans and receivables held by the Group under a business model consisting in holding the instrument in order to collect the contractual cash flows, and whose contractual cash flows consist solely of payments of principal and interest on the principal amount outstanding (SPPI test) are measured at amortized cost. Interest is calculated using the effective interest method.

The following items are recognized in profit or loss:

- interest income using the effective interest method;
- expected credit losses and reversals;
- foreign exchange gains and losses.

The Group has entered into concession agreements with certain public authorities under which the construction, extension or improvement of infrastructure is carried out in return for an unconditional right to receive payment from the concession holder in cash or other financial assets. In this case, the Group recognizes a financial receivable from the concession holders.

The Group has entered into services or take-or-pay contracts that are, or contain, a lease and under which the Group acts as lessor and its customers as lessees. Leases are analyzed in accordance with IFRS 16 in order to determine whether they constitute an operating lease or a finance lease. Whenever the terms of the lease transfer substantially all the risk and rewards of ownership of the related asset, the contract is classified as a finance lease and a finance receivable is recognized to reflect the financing deemed to be granted by the Group to the customer.

Leasing security deposits are presented in this caption and recognized at their nominal value.

Please refer to Note 15 "Risks arising from financial instruments" regarding the assessment of counterparty risk.

	Dec. 31, 2023			Dec. 31, 2022		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Loans granted to affiliated companies and other debt instruments at amortized cost	5,021	350	5,371	3,583	427	4,010
Other receivables at amortized cost	219	648	867	261	734	995
Amounts receivable under concession contracts	2,349	211	2,559	1,564	187	1,751
Amounts receivable under finance leases	435	188	624	390	189	579
TOTAL	**8,024**	**1,397**	**9,421**	**5,798**	**1,537**	**7,334**

Loans granted to affiliated companies and other debt instruments at amortized cost include the cash of the debt instruments held by Synatom, awaiting investment for €3,777 million (€2,270 million at December 31, 2022) (see Note 17.2.4. "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material").

Amounts receivable under concession contracts amounted to €2,559 million at December 31, 2023 (€1,751 million at December 31, 2022). They are mainly related to the Novo Estado and Gralha Azul electric power transmission networks in Brazil, as well as Kathu's Solar Park (RF) Proprietary Trading concession in South-Africa.

Other net gains and losses recognized in the income statement relating to loans and receivables at amortized cost break down as follows:

		Post-acquisition measurement	
In millions of euros	Interest income	Foreign currency translation	Expected credit loss
AT DECEMBER 31, 2023	280	(35)	(6)
AT DECEMBER 31, 2022	211	(64)	(6)

Amounts receivable under finance leases

These contracts refer to lease contracts in which ENGIE acts as lessor, classified as finance leases in accordance with IFRS 16. They relate to energy purchase and sale contracts where the contract conveys an exclusive right to use a production asset, and certain contracts with industrial customers relating to assets held by the Group.

The Group has recognized finance lease receivables, notably for cogeneration plants for Wapda and NTDC (Uch – Pakistan) one of whose contracts has been extended into 2023.

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Undiscounted future minimum lease payments	1,006	758
Unguaranteed residual value accruing to the lessor	46	12
Total gross investment in the lease	**1,052**	**770**
Unearned financial income	**276**	**47**
NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)	**776**	**723**
Of which present value of future minimum lease payments	*733*	*718*
Of which present value of unguaranteed residual value	*43*	*5*

Undiscounted minimum lease payments receivable under finance leases can be analyzed as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Year 1	222	137
Years 2 to 5 inclusive	360	376
Beyond year 5	423	245
TOTAL	**1,006**	**758**

14.1.2 Trade and other receivables, assets from contracts with customers

Information on trade and other receivables and assets from contracts with customers are provided in Note 7.2 "Trade and other receivables, assets and liabilities from contracts with customers".

14.1.3 Cash and cash equivalents

ACCOUNTING STANDARDS

This item includes cash equivalents as well as short-term investments that are considered to be readily convertible into a known amount of cash and where the risk of a change in their value is deemed to be negligible based on the criteria set out in IAS 7.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under "Short-term borrowings".

Cash and cash equivalent items are subject to impairment tests in accordance with the expected credit losses model of IFRS 9.

"Cash and cash equivalents" totaled €16,578 million at December 31, 2023 (€15,570 million at December 31, 2022). This item comprises standard money market funds with daily liquidity (49%), term deposits with a maturity of less than one month (40%), and deposits with a maturity of less than three months and other products (11%).

This amount included funds related to the green bond issues, which remain unallocated to the funding of eligible projects (see Section 5 of the Universal Registration Document).

Gains recognized in respect of "Cash and cash equivalents" amounted to €596 million in 2022 compared to €196 million in 2022.

14.1.4 Transfer of financial assets

At December 31, 2023, the outstanding amount of disposals without recourse of financial assets as part of transactions leading to full derecognition, amounted to approximately €1,3 billion at December 31, 2023 (compared with €3.7 billion at December 31, 2022).

14.1.5 Financial assets and equity instruments pledged as collateral for borrowings and debt

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Financial assets and equity instruments pledged as collateral	3,685	3,532

This item mainly includes the carrying amount of equity instruments pledged as collateral for borrowings and debt.

14.2 Financial liabilities

ACCOUNTING STANDARDS

Borrowings and other financial liabilities are measured at amortized cost using the effective interest rate method.

On initial recognition, any issue or redemption premiums and discounts and issuing costs are added to/deducted from the nominal value of the borrowings concerned. These items are taken into account when calculating the effective interest rate and are therefore recorded in the consolidated income statement over the life of the borrowings using the amortized cost method.

As regards structured debt instruments that do not have an equity component, the Group may be required to separate an "embedded" derivative instrument from its host contract. When an embedded derivative is separated from its host contract, the initial carrying amount of the structured instrument is broken down into an embedded derivative component, corresponding to the fair value of the embedded derivative, and a financial liability component, corresponding to the difference between the amount of the issue and the fair value of the embedded derivative. The separation of components upon initial recognition does not give rise to any gains or losses.

The debt is subsequently recorded at amortized cost using the effective interest method while the derivative is measured at fair value, with changes in fair value recognized in profit or loss.

Financial liabilities are recognized either:

- as "Amortized cost liabilities" for borrowings, trade payables and other creditors, and other financial liabilities;
- as "Liabilities measured at fair value through profit or loss" for derivative financial instruments and for financial liabilities designated as such.

The following table presents the Group's different financial liabilities at December 31, 2023, broken down into current and non-current items:

		Dec. 31, 2023			Dec. 31, 2022		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	14.3	37,920	9,367	47,287	28,083	12,508	40,591
Trade and other payables	14.2	-	22,955	22,955	-	39,801	39,801
Liabilities from contracts with customers	7.2	93	3,960	4,053	121	3,292	3,412
Derivative instruments	14.4	16,755	7,806	24,561	39,417	11,859	51,276
Other financial liabilities		82	-	82	90	-	90
TOTAL		**54,851**	**44,087**	**98,938**	**67,711**	**67,460**	**135,171**

14.2.1 Trade and other payables

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Trade payables	22,188	39,165
Payable on fixed assets	787	636
TOTAL	**22,976**	**39,801**

The carrying amount of these financial liabilities represents a reasonable estimate of their fair value.

The decrease in trade payables is mainly due to a decrease in commodity prices over the period.

14.2.2 Liabilities from contracts with customers

Information on liabilities from contracts with customers are provided in Note 7.2. "Trade and other receivables, assets and liabilities from contracts with customers".

14.3 Net financial debt

14.3.1 Net financial debt by type

		Dec. 31, 2023			Dec. 31, 2022		
In millions of euros		Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	Bond issues	29,217	1,039	30,256	21,007	2,550	23,557
	Bank borrowings	5,985	763	6,748	4,679	797	5,476
	Negotiable commercial paper	-	5,606	5,606	-	7,386	7,386
	Lease liabilities	2,677	470	3,147	2,482	393	2,875
	Other borrowings (1)	41	1,034	1,074	(85)	768	682
	Bank overdrafts and current account	-	455	455	-	615	615
	Borrowings and debt	**37,920**	**9,367**	**47,287**	**28,083**	**12,508**	**40,591**
Other financial assets	Other financial assets deducted from net financial debt (2)	(303)	(1,111)	(1,414)	(249)	(1,133)	(1,383)
Cash and cash equivalents	Cash and cash equivalents	-	(16,578)	(16,578)	-	(15,570)	(15,570)
Derivative instruments	Derivatives hedging borrowings (3)	177	20	198	394	22	416
NET FINANCIAL DEBT		**37,795**	**(8,302)**	**29,493**	**28,228**	**(4,174)**	**24,054**

(1) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship for a negative -€41 million, margin calls on debt hedging derivatives carried in liabilities for €481 million and the impact of amortized cost for €268 million (compared to, respectively, a negative €200 million, a positive €364 million and a positive €144 million at December 31, 2022).

(2) This item notably corresponds to assets related to financing for €105 million, liquid debt instruments held for cash investment purposes for €884 million and margin calls (assets) on derivatives hedging borrowings for €425 million (compared to, respectively, €67 million, €769 million and €547 million at December 31, 2022).

(3) This item represents the interest rate component of the fair value of derivatives hedging borrowings in a designated fair value hedging relationship. It also represents the exchange rate and outstanding accrued interest rate components of the fair value of all debt-related derivatives irrespective of whether or not they qualify as hedges.

The fair value of gross borrowings and debt (excluding lease liabilities) amounted to €42,994 million at December 31, 2023, compared with a carrying amount of €44,111 million.

Financial income and expenses related to borrowings and debt are presented in Note 10 "Net financial income/(loss)".

14.3.2 Reconciliation between net financial debt and cash flow from (used in) financing activities

In millions of euros		Dec. 31, 2022	Cash flow from financing activities	Cash flow from operating and investing activities and change in cash and cash equivalents	Change in fair value	Translation adjustments	Change in scope of consolidation and others	Dec. 31, 2023
Borrowings and debt	Bond issues	23,557	6,628	-	-	24	48	30,256
	Bank borrowings (1)	5,476	(216)	-	-	5	1,483	6,748
	Negotiable commercial paper	7,386	(1,761)	-	-	(18)	-	5,606
	Lease liabilities (2) (3)	2,875	(418)	-	-	(31)	721	3,147
	Other borrowings	682	(129)	-	570	16	(65)	1,074
	Bank overdrafts and current account	615	(173)	-	-	(14)	27	455
	Borrowings and debt	**40,591**	**3,930**	**-**	**570**	**(18)**	**2,214**	**47,287**
Other financial assets	Other financial assets deducted from net financial debt	(1,383)	15	-	(50)	5	(1)	(1,414)
Cash and cash equivalents	Cash and cash equivalents	(15,570)	-	(887)	-	188	(309)	(16,578)
Derivative instruments	Derivatives hedging borrowings	416	118	-	(104)	(232)	-	198
NET FINANCIAL DEBT		**24,054**	**4,063**	**(887)**	**417**	**(57)**	**1,904**	**29,493**

(1) Bank borrowings: the amount of €1,483 million in the "Change in scope of consolidation and others" column corresponds mainly to the full consolidation of Kathu Solar Park for €475 million, as well as the effect of recognizing Broad Reach Power (€436 million) and BTE Renewables (€301 million) bank borrowings following their acquisition.

(2) Lease liabilities: the negative amount of €418 million included in the "Cash flow from financing activities" column corresponds to lease payments, excluding interest (total cash outflow for leases amounted to a negative €480 million, of which €62 million relating to interest).

(3) Lease liabilities: the amount of €721 million in the "Change in scope of consolidation and others" column corresponds mainly to the recognition of right-of-use assets for €324 million relating to new LNG vessels leasing contract.

14.3.3 Main events of the period

14.3.3.1 Impact of changes in the scope of consolidation and in exchange rates on net financial debt

In 2023, changes in exchange rates resulted in a -€57 million decrease in net financial debt, including a -€179 million decrease in relation to the US dollar and a +€94 million increase in relation to the Brazilian real.

Disposals and acquisitions during 2023 (including the effects of changes in the scope of consolidation) impacted net debt by €3,102 million. This change mainly reflects:

- asset disposals during the period, resulting in a -€246 million decrease in net financial debt (see Note 4.1 "Disposals carried out in 2023"), none of which was individually significant;
- acquisitions carried out in 2023 which increased net financial debt by €3,348 million (see Note 4.2 "Acquisitions carried out in 2023"). They include:
  - the acquisition of Broad Reach Power in the USA, specialized in battery storage,
  - the full consolidation of Kathu Solar Park (RF) Proprietary Trading in South-Africa following the purchase of an additional stake,
  - the acquisition of the activities of BTE Renewables, operating in South Africa,
  - the acquisition of the biomethane producer Ixora Energy ltd in the United Kingdom.

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14.3.3.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2023:

ENGIE SA

- on January 11, 2023 ENGIE SA issued a green bond for a total amount of €3,025 million, as follows:
  - a €1,000 million tranche, with a 3.625% coupon, maturing on January 11, 2030, plus an additional €100 million on August 14, 2023,
  - a €1,000 million tranche, with a 4% coupon, maturing on January 11, 2035, plus an additional €75 million on June 2, 2023, and €100 million on June 6, 2023,
  - a €750 million tranche, with a 4.25% coupon, maturing on January 11, 2043;
- on February 1, 2023 ENGIE SA redeemed at maturity €742 million worth of bonds, with a 3% coupon;
- on February 28, 2023 ENGIE SA redeemed at maturity €500 million worth of green bonds, with a 0.375% coupon;
- on April 3, 2023 ENGIE SA issued GBP650 million worth of green bonds (€752 million), maturing on April 3, 2053, with a 5.625% coupon;
- on July 3, 2023, ENGIE SA issued CHF190 million worth of green bonds (€197 million), maturing on January 4, 2027, with a 2.34% coupon, as well as a CHF225 million green bond (€233 million), maturing on July 4, 2031, with a 2.49% coupon;
- on September 6, 2023, ENGIE SA issued €3,000 million worth of bonds, as follows:
  - a €500 million tranche, with a 3.75% coupon, maturing on September 6, 2027,
  - a €800 million tranche, with a 3.875% coupon, maturing on January 6, 2031,
  - a €800 million tranche, with a 4.25% coupon, maturing on September 6, 2034,
  - a €900 million tranche green bond, with a 4.5% coupon, maturing on September 6, 2042;
- on December 6, 2023, ENGIE SA issued €1,500 million worth of bonds, as follows:
  - a €600 million tranche, with a 3.625% coupon, maturing on December 6, 2026,
  - a €900 million tranche green bond, with a 3.875% coupon, maturing on December 6, 2033.

Other Group entities

- on June 24, 2023 ENGIE Alliance redeemed at maturity €1,000 million worth of bonds, with a 5.75% coupon;
- in December 2023, EBE issued a BRL 2.5 bn worth of bonds (€464 million), with a floating coupon.

14.4 Derivative instruments

ACCOUNTING STANDARDS

Derivative financial instruments are measured at fair value. This fair value is determined on the basis of market data, available from external contributors. In the absence of an external benchmark, a valuation based on internal models recognized by market participants and favoring data directly derived from observable data such as OTC quotations is used.

The change in fair value of derivative financial instruments is recorded in the income statement except when they are designated as hedging instruments in a cash flow hedge or net investment hedge. In this case, changes in the value of the hedging instruments are recognized directly in equity, excluding the ineffective portion of the hedges.

The Group uses derivative financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices, mainly for gas and electricity. The use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks (see Note 15 – Risks arising from financial instruments).

Derivative financial instruments are contracts (i) whose value changes in response to the change in one or more observable variables, (ii) that do not require any material initial net investment, and (iii) that are settled at a future date.

Derivative instruments include swaps, options, futures and swaptions, as well as forward commitments to purchase or sell listed and unlisted securities, and firm commitments or options to purchase or sell non-financial assets that involve physical delivery of the underlying.

For purchases and sales of electricity and natural gas, the Group systematically analyzes whether the contract was entered into in the “normal” course of operations and therefore falls outside the scope of IFRS 9. This analysis consists firstly in demonstrating that the contract is entered into and continues to be held for the purpose of physical delivery or receipt of the commodity in accordance with the Group’s expected purchase, sale or usage requirements for volumes intended to be used or sold by the Group within a reasonable time frame, as part of its operations.

The second step is to demonstrate that the Group has no practice of settling similar contracts on a net basis and that these contracts are not equivalent to written options. In particular, in the case of electricity and gas sales allowing the buyer a certain degree of flexibility concerning the volumes delivered, the Group distinguishes between contracts that are equivalent to capacity sales considered as transactions falling within the scope of ordinary operations and those that are equivalent to written financial options, which are accounted for as derivative financial instruments.

Only contracts that meet all of the above conditions are considered as falling outside the scope of IFRS 9. Adequate specific documentation is compiled to support this analysis.

Embedded derivatives

The main Group contracts that may contain embedded derivatives are contracts with clauses or options potentially affecting the contract price, volume or maturity. This is the case primarily with contracts for the purchase or sale of non-financial assets, whose price is revised based on an index, the exchange rate of a foreign currency or the price of an asset other than the contract's underlying.

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

If a hybrid contract contains a host that is an asset within the scope of IFRS 9, the Group applies the presentation and measurement requirements described in Note 18.1 to the entire hybrid contract.

Conversely, when a hybrid contract contains a host that is not an asset within the scope of IFRS 9, an embedded derivative shall be separated from the host and accounted for as a derivative if, and only if:

- the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the hybrid contract is not measured at fair value with changes in fair value recognized in profit or loss (*i.e.*, a derivative that is embedded in a financial liability at fair value through profit or loss is not separated).

Where an embedded derivative is separate from the host contract, it is measured at fair value and fair value changes are recognized in profit or loss (except if the embedded derivative is documented in a hedge relationship).

Hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the consolidated statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as (i) a fair value hedge of an asset or liability; (ii) a cash flow hedge, or (iii) a hedge of a net investment in a foreign operation.

Fair value hedges

A fair value hedge is defined as a hedge of the exposure to changes in fair value of a recognized asset or liability such as a fixed-rate loan or borrowing, or of assets, liabilities or an unrecognized firm commitment denominated in a foreign currency.

The gain or loss from remeasuring the hedging instrument at fair value is recognized in profit or loss. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is also recognized in profit or loss even if the hedged item is in a category in respect of which changes in fair value are recognized through other comprehensive income. These two adjustments are presented net in the consolidated income statement, with the net effect corresponding to the ineffective portion of the hedge.

Cash flow hedges

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect the Group's income. The hedged cash flows may be attributable to a particular risk associated with a recognized financial or non-financial asset or a highly probable forecast transaction.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in profit or loss. The gains or losses accumulated in equity are reclassified to the consolidated income statement under the same caption as the loss or gain on the hedged item – *i.e.*, current operating income for operating cash flows and financial income or expenses for other cash flows – in the same periods in which the hedged cash flows affect income.

If the hedging relationship is discontinued, in particular because the hedge is no longer considered effective, the cumulative gain or loss on the hedging instrument remains recognized in equity until the forecast transaction occurs. However, if a forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument is immediately recognized in profit or loss.

Hedge of a net investment in a foreign operation

In the same way as for a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge of the currency risk is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in profit or loss. The gains or losses accumulated in other comprehensive income are transferred to the consolidated income statement when the investment is liquidated or sold.

Hedging instruments: identification and documentation of hedging relationships

The hedging instruments and hedged items are designated at the inception of the hedging relationship. The hedging relationship is formally documented in each case, specifying the hedging strategy, the hedged risk and the method used to assess hedge effectiveness. Only derivative contracts entered into with external counterparties are considered as being eligible for hedge accounting.

Hedge effectiveness is assessed and documented at the inception of the hedging relationship and on an ongoing basis throughout the periods for which the hedge was designated.

Hedge effectiveness is demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or cash flows between the hedging instrument and the hedged item. Methods based on an analysis of statistical correlations between historical price data are also used.

Derivative instruments not qualifying for hedge accounting: recognition and presentation

These items mainly concern derivative financial instruments used in economic hedges that have not been – or are no longer – documented as hedging relationships for accounting purposes.

When a derivative financial instrument does not qualify or no longer qualifies for hedge accounting, changes in fair value are recognized directly in profit or loss under (i) current operating income for derivative instruments with non-financial assets as the underlying, and (ii) financial income or expenses for currency, interest rate and equity derivatives.

Derivative instruments not qualifying for hedge accounting used by the Group in connection with proprietary commodity trading activities and other derivatives expiring in less than 12 months are recognized in the consolidated statement of financial position in current assets and liabilities, while derivatives expiring after this period are classified as non-current items.

Fair value measurement

The fair value of instruments listed on an active market is determined by reference to the market price. In this case, these instruments are presented in level 1 of the fair value hierarchy.

The fair value of unlisted financial instruments for which there is no active market and for which observable market data exist is determined based on valuation techniques such as option pricing models or the discounted cash flow method.

The models used to evaluate these instruments take into account assumptions based on market inputs:

- the fair value of interest rate swaps is calculated based on the present value of future cash flows;
- the fair value of forward foreign exchange contracts and currency swaps is calculated by reference to current prices for contracts with similar maturities by discounting the future cash flow spread (difference between the forward exchange rate under the contract and the forward exchange rate recalculated in line with the new market conditions applicable to the nominal amount);
- the fair value of currency and interest rate options is calculated using option pricing models;
- commodity derivatives are valued by reference to listed market prices based on the present value of future cash flows (commodity swaps or commodity forwards) and option pricing models (options), for which market price volatility may be a factor. Contracts with maturities exceeding the depth of transactions for which prices are observable, or which are particularly complex, may be valued based on internal assumptions;
- exceptionally, for complex contracts negotiated with independent financial institutions, the Group uses the values established by its counterparties.

These instruments are presented in level 2 of the fair value hierarchy except when the evaluation is based mainly on data that are not observable, in which case they are presented in level 3 of the fair value hierarchy. Most often, this is the case for derivatives with a maturity that falls outside the observability period for market data relating to the underlying or when certain inputs such as the volatility of the underlying are not observable.

Except in case of enforceable master netting arrangements or similar agreements, counterparty risk is included in the fair value of financial derivative instrument assets and liabilities. It is calculated according to the “expected loss” method and takes into account the exposure at default, the probability of default and the loss given default. The probability of default is determined on the basis of credit ratings assigned to each counterparty (“historical probability of default” approach).

Offsetting of financial assets and liabilities in the statement of financial position

Financial assets and liabilities are presented net in the statement of financial position when the offsetting criteria of IAS 32 are met. Offsetting relates to instruments entered into with counterparties for which the contractual terms provide for a net settlement of transactions and a collateralization agreement (margin calls). In particular, commodity derivative assets and liabilities are offset for transactions with the same counterparty, in the same currency, by type of commodity and delivery point and with identical maturities.

Derivative instruments recognized in assets and liabilities are measured at fair value and broken down as follows:

	Dec. 31, 2023						Dec. 31, 2022					
	Assets			Liabilities			Assets			Liabilities		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total	Non-current	Current	Total
Derivatives hedging borrowings	279	111	390	457	131	588	226	92	319	620	114	735
Derivatives hedging commodities	10,984	8,344	19,328	15,132	7,516	22,648	30,932	15,076	46,008	37,210	11,698	48,907
Derivatives hedging other items [(1)]	1,501	26	1,526	1,167	159	1,325	1,975	84	2,059	1,587	47	1,634
TOTAL	**12,764**	**8,481**	**21,245**	**16,755**	**7,806**	**24,561**	**33,134**	**15,252**	**48,386**	**39,417**	**11,859**	**51,276**

(1) *Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges) that are excluded from net financial debt, as well as net investment hedge derivatives.*

The net amount of derivatives hedging commodities recognized in the statement of financial position is measured after taking into account offsetting agreements that meet the criteria set out in paragraph 42 of IAS 32. This offsetting generated balance sheet effects of around €9.2 billion in 2023 and mainly concerned OTC derivatives concluded with counterparties for which the contractual terms provide for a net settlement of the transactions as well as a collateralization agreement (margin calls).

The balance of derivative hedging commodities is lower than at December 31, 2022 due to the decrease in commodity prices in 2023. Most of these derivatives mature in 2024 and 2025. This fair value incorporates market parameters at December 31, 2023, in particular the "bid ask" reserve, which has been updated to reflect the volatility of commodity prices observed on the markets. In the main markets where the Group operates (Europe, United States, Singapore) a 10% increase or decrease in these market parameters (including the "bid ask" spread) would impact the fair value of the derivates concerned by a negative €85 million (increase) and a positive €85 million (decrease).

14.4.1 Offsetting of derivative instrument assets and liabilities

The net amount of derivative instruments after taking into account enforceable master netting arrangements or similar agreements, whether or not they are offset in accordance with paragraph 42 of IAS 32, are presented in the table below:

		Dec. 31, 2023				Dec. 31, 2022			
In millions of euros		Gross amount	Net amount recognized in the statement of financial position [(1)]	Other offsetting agreements [(2)]	Total net amount	Gross amount	Net amount recognized in the statement of financial position [(1)]	Other offsetting agreements [(2)]	Total net amount
Assets	Derivatives hedging commodities	28,522	19,328	(4,927)	14,401	72,322	46,008	(8,866)	37,142
	Derivatives hedging borrowings and other items	1,917	1,917	(469)	1,448	2,378	2,378	(364)	2,014
Liabilities	Derivatives hedging commodities	(31,843)	(22,648)	3,898	(18,750)	(75,221)	(48,907)	5,094	(43,813)
	Derivatives hedging borrowings and other items	(1,913)	(1,913)	415	(1,498)	(2,369)	(2,369)	547	(1,822)

(1) *Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in paragraph 42 of IAS 32. Due to the volatility of commodity prices, this offsetting had a significant impact on the statement of financial position at December 31, 2023 and mainly concerns OTC derivatives concluded with counterparties for which the contractual terms provide for a net settlement of the transactions as well as a collateralization agreement (margin calls).*

(2) *Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in paragraph 42 of IAS 32.*

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14.5 Fair value of financial instruments by level in the fair value hierarchy

14.5.1 Financial assets

The table below shows the allocation of financial instruments carried in assets to the different levels in the fair value hierarchy:

	Dec. 31, 2023				Dec. 31, 2022			
In millions of euros	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**
Other financial assets (excluding loans and receivables at amortized cost)	7,552	6,189	-	1,363	5,658	4,225	-	1,433
Equity instruments at fair value through other comprehensive income	*1,902*	*1,653*	-	*249*	*1,217*	*875*	-	*342*
Equity instruments at fair value through income	*222*	-	-	*222*	*278*	-	-	*278*
Debt instruments at fair value through other comprehensive income	*1,873*	*1,873*	-	-	*2,418*	*2,418*	-	-
Debt instruments at fair value through income	*3,555*	*2,663*	-	*891*	*1,745*	*933*	-	*813*
Derivative instruments	21,245	43	20,087	1,114	48,386	138	44,730	3,518
Derivatives hedging borrowings	*390*	-	*390*	-	*319*	-	*319*	-
Derivatives hedging commodities – relating to portfolio management activities (1)	*16,614*	-	*16,263*	*351*	*40,992*	-	*40,825*	*168*
Derivatives hedging commodities – relating to trading activities (1)	*2,714*	*43*	*1,907*	*764*	*5,016*	*138*	*1,528*	*3,350*
Derivatives hedging other items	*1,526*	-	*1,526*	-	*2,059*	-	*2,059*	-
TOTAL	**28,796**	**6,232**	**20,087**	**2,477**	**54,044**	**4,363**	**44,730**	**4,951**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and electricity contracts measured at fair value through profit or loss. Due to geopolitical uncertainties, the fair value of contracts with Russian suppliers takes into account contingencies related to natural gas supply cuts since 2022.

A definition of these three levels is presented in Note 14.4 "Derivative instruments".

Other financial assets (excluding loans and receivables at amortized cost)

Changes in level 3 equity and debt instruments at fair value can be analyzed as follows:

In millions of euros	**Equity instruments at fair value through other comprehensive income**	**Debt instruments at fair value through other comprehensive income**	**Equity instruments at fair value through income**	**Debt instruments at fair value through income**	**Other financial assets (excluding loans and receivables at amortized cost)**
AT DECEMBER 31, 2022	**342**	-	**278**	**813**	**1,433**
Acquisitions	14	-	84	228	326
Disposals	-	(24)	(4)	(139)	(167)
Changes in fair value (1)	(95)	-	(49)	(11)	(156)
Changes in scope of consolidation, foreign currency translation and other changes	(13)	24	(87)	1	(75)
AT DECEMBER 31, 2023	**249**	-	**222**	**891**	**1,363**
Gains/(losses) recorded in income relating to nstruments held at the end of the period					(50)

(1) Changes in fair value notably comprise the decrease in value of the Group's minority interest in Nord Stream AG for -€90 million (see Note 14.1.1.1 "Equity instruments at fair value").

Derivative instruments

Changes in level 3 commodity derivatives can be analyzed as follows:

In millions of euros	Net Asset/(Liability)
AT DECEMBER 31, 2022	**1,837**
Changes in fair value recorded in income	(3,697)
Settlements	644
Transfer from level 3 to levels 1 and 2	(40)
Net fair value recorded in income	**(1,256)**
Deferred Day-One gains/(losses)	(16)
AT DECEMBER 31, 2023	**(1,271)**

14.5.2 Financial liabilities

The table below shows the allocation of financial instruments carried in liabilities to the different levels in the fair value hierarchy:

In millions of euros	Dec. 31, 2023				Dec. 31, 2022			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings used in designated fair value hedges	5,755	-	5,755	-	3,679	-	3,679	-
Borrowings not used in designated fair value hedges	37,239	23,251	13,988	-	31,500	17,093	14,407	-
Derivative instruments	24,561	112	22,063	2,385	51,276	-	49,595	1,681
Derivatives hedging borrowings	*588*	-	*588*	-	*735*	-	*735*	-
Derivatives hedging commodities – relating to portfolio management activities (1)	*20,933*	-	*20,081*	*852*	*48,907*	-	*47,227*	*1,681*
Derivatives hedging commodities – relating to trading activities (1)	*1,715*	*112*	*70*	*1,533*	-	-	-	-
Derivatives hedging other items	*1,325*	-	*1,325*	-	*1,634*	-	*1,634*	-
TOTAL	**67,555**	**23,363**	**41,806**	**2,385**	**86,455**	**17,093**	**67,682**	**1,681**

(1) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and electricity contracts measured at fair value through profit and loss. Due to geopolitical uncertainties, the fair value of contracts with Russian suppliers takes into account contingencies related to natural gas supply cuts since 2022.

A definition of these three levels is presented in Note 14.4 “Derivative instruments”.

Borrowings used in designated fair value hedges

This caption includes bonds in a designated fair value hedging relationship, which are presented in level 2 in the above table. Only the interest rate component of the bonds is remeasured, with fair value determined by reference to observable inputs.

Borrowings not used in designated fair value hedges

Listed bond issues are included in level 1.

Other borrowings not used in a designated hedging relationship, are presented in level 2 in the above table. The fair value of these borrowings is determined on the basis of future discounted cash flows and relies on directly or indirectly observable data.

NOTE 15 Risks arising from financial instruments

The Group mainly uses derivative instruments to manage its exposure to market risks. Financial risk management procedures are set out in Chapter 2 "Risk factors" of the Universal Registration Document.

15.1 Market risks

15.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has primarily identified two types of commodity risks: price risk resulting from fluctuations in market prices, and volume risk inherent to the business.

In the ordinary course of its operations, the Group is exposed to commodity risks on natural gas, electricity, coal, oil and oil products, other fuels, CO_2 and other "green" products. The Group is active on these energy markets either for supply purposes, or to optimize and secure its energy production chain and its energy sales. The Group also uses derivatives to offer hedging instruments to its clients and to hedge its own positions.

15.1.1.1 Portfolio management activities

Portfolio management seeks to optimize the market value of assets (power plants, gas and coal supply contracts, energy sales and gas storage by pump and battery and transportation) over various timeframes (short-, medium- and long-term). Market value is optimized by:

- guaranteeing supply and ensuring the balance between physical needs and resources;
- managing market risks (price, volume) to unlock optimum value from portfolios within a specific risk framework.

The risk framework aims to safeguard the Group's financial resources over the budget period and smooth out medium-term earnings (over three or five years, depending on the maturity of each market). It encourages portfolio managers to take out economic hedges on their portfolio.

Sensitivities of the commodity-related derivatives portfolio used as part of the portfolio management activities at December 31, 2023 are detailed in the table below. Due to the volatility in commodity prices on the markets since 2022, particularly impacting the European zone, the price assumptions for natural gas and electricity in Europe were revised upwards last year. These sensitivities have been established in the current uncertain context.

These new assumptions do not constitute an estimate of future market prices and are not representative of future changes in consolidated earnings and equity, insofar as they do not include the sensitivities relating to the purchase and sale contracts for the underlying commodities, which are not recognized at fair value.

Sensitivity analysis [(1)]

		Dec. 31, 2023		Dec. 31, 2022	
In millions of euros	**Changes in price**	**Pre-tax impact on income**	**Pre-tax impact on equity**	**Pre-tax impact on income**	**Pre-tax impact on equity**
Oil-based products	+USD 10/bbl	-	64	-	81
Natural gas – Europe [(2)]	-€10/MWh	(411)	(1,288)	(700)	(1,237)
Natural gas – Europe [(2)]	+€10/MWh	398	1,288	700	1,237
Natural gas – Rest of the world [(2)]	+€3/MWh	37	138	29	206
Electricity – Europe [(2)]	-€20/MWh	(353)	338	(51)	245
Electricity – Europe [(2)]	+€20/MWh	353	(338)	51	(245)
Electricity – Rest of the world [(2)]	+€5/MWh	(166)	-	(122)	-
Greenhouse gas emission rights	+€2/ton	12	9	24	1
EUR/USD	+10%	(40)	(111)	36	(186)
EUR/GBP	+10%	66	-	(17)	(34)

(1) The sensitivities shown above apply solely to financial commodity derivatives used for hedging purposes as part of the portfolio management activities.

(2) For December 2023 and in relation to the sensitivities shown, more drastic upward price changes, although difficult to quantify, could occur depending how the economic or political situation evolves. For example, an increase of 50€/MWh for natural gas and 100€/MWh for electricity would impact sensitivities by a positive €8.4 billion and a positive €0.1 billion, respectively for natural gas and electricity.

The decrease in commodity prices in 2023 contributed to substantial changes in the fair value of financial instruments, impacting the income statement (see Note 8 "Operating expenses") as well as the other comprehensive income of the Group (see "Statement of comprehensive income").

The sensitivity of equity to European electricity price changes is due to the application, since 2023, of cash flow hedge accounting to certain supply activities in France, Belgium and the Netherlands, as well as the sales resulting from the production of some of our assets in the same areas. The expected extension of this practice to other hedging strategies should contribute to reducing the sensitivity in the future of the pre-tax profit.

15.1.1.2 Trading activities

Revenues from trading activities totaled €3,441 million in 2023 (€4,499 million in 2022).

The Group's trading activities are primarily conducted within:

- ENGIE Global Markets. Its role is to manage the risks of the physical and financial energy portfolio for the Group or external customers, providing them with access to the market and implementing customized hedging strategies;
- ENGIE SA for the optimization of part of its long-term gas supply contracts, of a power swap contract and of part of its gas sales contracts with retail entities in France and Benelux and of power generation facilities in France and Belgium.

These entities operate on organized or OTC markets in derivative instruments such as futures, forwards, swaps, or options. Exposure to trading activities is strictly controlled by daily monitoring of compliance with Value at Risk (VaR) limits.

The use of VaR to quantify market risk arising from trading activities provides a transversal measure of risk, taking all markets and products into account. VaR represents the maximum potential loss on a portfolio over a specified holding period based on a given confidence interval. It is not an indication of expected results but is back-tested on a regular basis.

The Group uses a one-day holding period and a 99% confidence interval to calculate VaR, as well as stress tests, in accordance with banking regulatory requirements.

The VaR shown below corresponds to the global VaR of the Group's entities with trading activities.

Value at Risk

In millions of euros	Dec. 31, 2023	2023 average (1)	2023 maximum (2)	2023 minimum (2)	2022 average (1)
Trading activities	14	15	39	4	33

(1) Average daily VaR.
(2) Maximum and minimum daily VaR observed in 2023.

VaR limits are set within the framework of Group governance, which was strengthened since the beginning of the crisis to take into account the more volatile market environment. The minimum and the maximum, in 2023, are to be compared respectively with €6 million and with €143 million in 2022.

The continuous monitoring of market risks and the strict application of these measures have enabled the Group to perform its trading activities in a supervised environment during the year.

15.1.2 Hedges of commodity risks

Hedging instruments and sources of hedge ineffectiveness

The Group enters into cash flow hedges, using derivative instruments (firm or option contracts) contracted over the counter or on organized markets, to reduce its commodity risks, which relate mainly to future cash flows from contracted or expected sales and purchases of commodities. These instruments may be settled net or involve physical delivery of the underlying.

Sources of hedge ineffectiveness are mainly related to uncertainty regarding the timing and potential mismatches in settlement dates, and, in a context of volatile commodity market prices, indices between the derivative instruments and the associated underlying exposures.

The fair values of commodity derivatives are indicated in the table below:

	Dec. 31, 2023				Dec. 31, 2022			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivative instruments relating to portfolio management activities	10,984	5,630	(15,132)	(5,801)	30,932	10,060	(37,210)	(11,698)
Cash flow hedges	*1,648*	*4,268*	*(2,321)*	*(5,782)*	*3,538*	*4,400*	*(2,483)*	*(4,140)*
Other derivative instruments	*9,336*	*1,362*	*(12,811)*	*(19)*	*27,394*	*5,660*	*(34,726)*	*(7,558)*
Derivative instruments relating to trading activities	-	2,714	-	(1,715)	-	5,016	-	-
TOTAL	**10,984**	**8,344**	**(15,132)**	**(7,516)**	**30,932**	**15,076**	**(37,210)**	**(11,698)**

6

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the reporting period. They are not representative of expected future cash flows insofar as positions (i) are sensitive to changes in prices, (ii) can be modified by subsequent transactions; and (iii) can be offset by future cash flows arising on the underlying transactions.

15.1.2.1 Cash flow hedges

The fair values of cash flow hedges by type of commodity are as follows:

	Dec. 31, 2023				Dec. 31, 2022			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	760	1,848	(1,052)	(2,733)	3,204	3,825	(1,825)	(3,149)
Electricity	660	2,081	(1,057)	(2,664)	114	324	(208)	(521)
Oil	227	338	(211)	(384)	219	248	(449)	(470)
Other (1)	1	1	(1)	(1)	1	3	(1)	1
TOTAL	**1,648**	**4,268**	**(2,321)**	**(5,782)**	**3,538**	**4,400**	**(2,483)**	**(4,140)**

(1) *Mainly includes foreign currency hedges on commodities.*

Notional amounts (net)[1]

Notional amounts and maturities of cash flow hedges are as follows:

	Unit	2024	2025	2026	2027	2028	Beyond 5 years	Total at Dec. 31, 2023
Natural gas	*GWh*	138,694	21,168	(8,934)	(1,392)	422	-	149,958
Electricity	*GWh*	88,624	50,082	16,065	8,515	871	(648)	163,509
Oil-based products	*Thousands of barrels*	(11,916)	(5,240)	-	-	-	-	(17,156)
Forex	*Millions of euros*	2	-	-	-	-	-	2
Greenhouse gas emission rights	*Thousands of tons*	(228)	(64)	(187)	20	20	-	(439)

(1) *Long/(short) position.*

Effects of hedge accounting on the Group's financial position and performance

	Dec. 31, 2023				Dec. 31, 2022	
	Fair Value			Nominal	Fair value	Nominal
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	5,916	(8,103)	(2,187)	10,553	1,315	39,983
TOTAL	**5,916**	**(8,103)**	**(2,187)**	**10,553**	**1,315**	**39,983**

The fair values represented above are positive for assets and negative for liabilities.

In millions of euros		Nominal amount	Fair Value	Change in fair value used for calculating hedge ineffectiveness	Change in the value of the hedging instrument recognized in equity (1)	Ineffective portion recognized in profit or loss (1)	Amount reclassified from the hedge reserve to profit or loss (1)	Line item of profit or loss
Cash flow hedges	Hedging instruments	10,553	(2,187)		(3,873)	120	711	Current operating income
	Hedged items			(4,944)				

(1) *Gains/(losses).*

The amount of hedge inefficiency is affected in 2023 by the volatility of commodity prices during the year and the partial decorrelation of the various markets particularly in Europe. It is calculated based on the change in fair value of the hedging instrument compared to the change in fair value of the hedged items since inception of the hedging relationship. The fair value of the hedging instruments at December 31, 2023 reflects the cumulative change in fair value of the hedging instruments since inception of the hedges.

Maturity of commodity derivatives designated as cash flow hedges

In millions of euros	2024	2025	2026	2027	2028	Beyond 5 years	Dec. 31, 2023	Dec. 31, 2022
Fair Value of derivatives by maturity	(1,459)	(692)	(7)	(14)	(5)	(10)	(2,187)	1,315

Amounts presented in the statement of changes in equity and the statement of comprehensive income

The following table provides a reconciliation of each component of equity and an analysis of other comprehensive income:

	Cash flow hedge
In millions of euros	Derivatives hedging commodities
AT DECEMBER 31, 2022	**(699)**
Effective portion recognized in equity	(3,873)
Amount reclassified from hedge reserve to profit or loss	711
Translation differences	-
Changes in scope of consolidation and other	9
AT DECEMBER 31, 2023	**(3,852)**

15.1.2.2 Other commodity derivatives

Other commodity derivatives include:

- commodity purchase and sale contracts that were not entered into or are no longer held for the purpose of the receipt or delivery of commodities in accordance with the Group's expected purchase, sale or usage requirements;
- embedded derivatives; and
- derivative financial instruments that are not eligible for hedge accounting in accordance with IFRS 9 or for which the Group has elected not to apply hedge accounting.

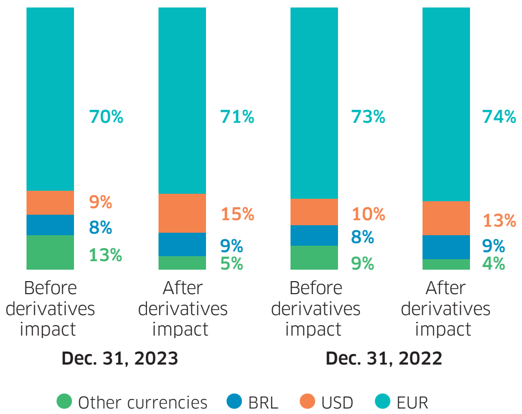
15.1.3 Currency risk

The Group is exposed to currency risk, defined as the impact on its statement of financial position and income statement of fluctuations in exchange rates affecting its operating and financing activities. Currency risk comprises (i) transaction risk arising in the ordinary course of business, (ii) specific transaction risk related to investments, mergers and acquisitions or disposal projects, and (iii) translation risk arising from the conversion into euros of income statement and statement of financial position items from subsidiaries with a functional currency other than the euro. The main translation risk exposures correspond to assets in US dollars, Brazilian real and pounds sterling.

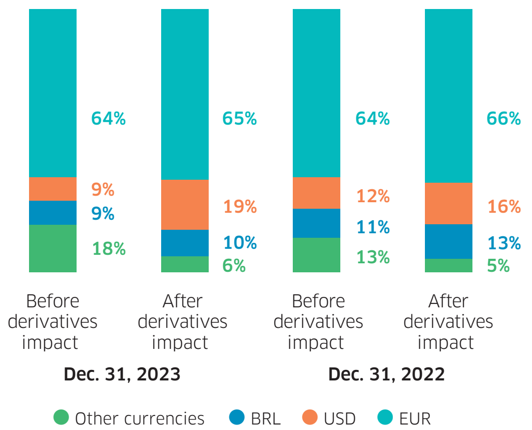
15.1.3.1 Financial instruments by currency

The following tables present a breakdown by currency of outstanding borrowings and debt and net financial debt, before and after hedging:

Outstanding borrowings and debt



Net financial debt



15.1.3.2 Currency risk sensitivity analysis

A sensitivity analysis to currency risk on financial income/(loss) – excluding the income statement translation impact of foreign subsidiaries – was performed based on all financial instruments managed by the Treasury Department and representing a currency risk (including derivative financial instruments).

A sensitivity analysis to currency risk on equity was performed based on all financial instruments qualified as net investment hedges at the reporting date.

For currency risk, sensitivity corresponds to a 10% rise or fall in exchange rates of foreign currencies against the euro compared to closing rates.

	Dec. 31, 2023			
	Impact on income		Impact on equity	
In millions of euros	+10% (1)	-10% (1)	+10% (1)	-10% (1)
Exposures denominated in a currency other than the functional currency of companies carrying the liabilities on their statements of financial position (2)	(32)	32	NA	NA
Financial instruments (debt and derivatives) qualified as net investment hedges (3)	NA	NA	410	(410)

(1) +(-)10%: depreciation (appreciation) of 10% of all foreign currencies against the euro.
(2) Excluding derivatives qualified as net investment hedges.
(3) This impact is offset by the change in the net investment hedged.

15.1.4 Interest rate risk

The Group seeks to manage its borrowing costs by limiting the impact of interest rate fluctuations on its income statement. The Group's policy is therefore to arbitrate between fixed rates, floating rates and capped floating rates for its net debt. The interest rate mix may shift within a range defined by Group Management in line with market trends.

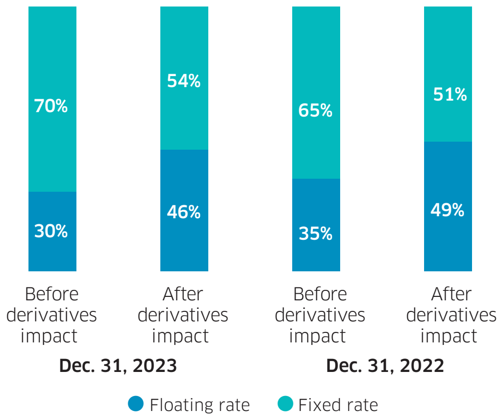
In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly interest rate swaps and options.

The Group also uses forward interest rate pre-hedges to protect the refinancing rate of part of its debt.

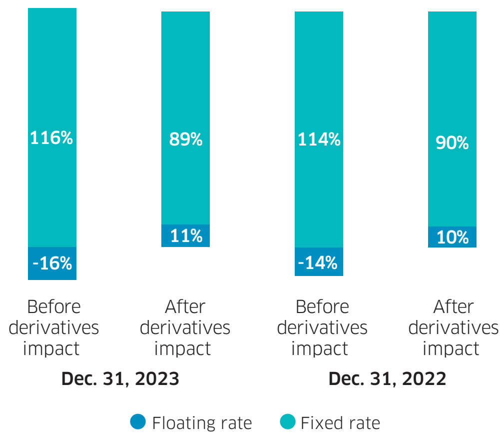
15.1.4.1 Analysis of financial instruments by type of interest rate

The following tables present a breakdown by type of interest rate of outstanding borrowings and debt and net financial debt before and after hedging:

Outstanding borrowings and debt



Net financial debt



15.1.4.2 Interest rate risk sensitivity analysis

Sensitivity was analyzed based on the Group's net debt position (including the impact of interest rate and foreign currency derivatives relating to net debt) at the reporting date.

For interest rate risk, sensitivity corresponds to a 100-basis-point rise or fall in the yield curve compared to year-end interest rates.

	Dec. 31, 2023			
	Impact on income		Impact on equity	
In millions of euros	+100 basis points	-100 basis points	+100 basis points	-100 basis points
Net interest expense on floating-rate net debt (nominal amount) and on floating-rate leg of derivatives	(29)	29	NA	NA
Change in fair value of derivatives not qualifying as hedges	(39)	43	NA	NA
Change in fair value of derivatives qualifying as cash flow hedges	NA	NA	280	(343)

15.1.5 Currency and interest rate hedges

15.1.5.1 Currency risk management

Foreign currency exchange risk (or "FX" risk) is reported and managed based on a Group-wide approach, reflected in a policy approved by Group Management. The policy distinguishes between the three following main sources of currency risk:

- **regular transaction risk**

  Regular transaction risk corresponds to the potential negative financial impact of currency fluctuations on business and financial operations denominated in a currency other than the functional currency.

  The management of regular transaction risk is fully delegated to the subsidiaries for their scope of activities, while the risks related to central activities are managed at corporate level.

FX risks related to operational activities are systematically hedged when the related cash flows are certain, with a hedging horizon that corresponds at least to the medium-term plan horizon. For cash flows that are not certain, in their entirety, the hedge is initially based on a "no regret" volume. Exposures are monitored and managed based on the sum of nominal cash flows in FX, including highly probable amounts and related hedges.

For FX risks related to financial activities, all significant exposures related to cash, financial debt, etc. are systematically hedged. Exposures are monitored based on the net sum of balance sheet items in FX.

- **project transaction risk**

  Specific project transaction risk corresponds to the potential negative financial impact of FX fluctuations on specific major operations such as investment projects, acquisitions, disposals and restructuring projects, involving multiple currencies.

  The management of these FX risks includes the definition and implementation of hedging transactions, taking into account the likelihood of the risk (including probability of project completion) and its evolution, the availability of hedging instruments and their associated cost. Management's aim is to ensure the viability and the profitability of the transactions.

- **translation risk**

  Translation risk corresponds to the potential negative financial impact of FX fluctuations concerning consolidated entities with a functional currency other than the euro. It relates to the translation of their income and expenses and their net assets.

  Translation risk is managed centrally, with a focus on securing the net asset value.

  The relevance of hedging this translation risk is assessed regularly for each currency (as a minimum) or set of assets in the same currency, taking into account notably the value of the assets and the hedging costs.

Hedging instruments and sources of hedge ineffectiveness

The Group principally uses the following risk management levers for mitigating currency risk:

- derivative instruments: these mostly correspond to over-the-counter contracts and include FX forward transactions, FX swaps, currency swaps, cross currency swaps, plain vanilla FX options or combinations (calls, puts or collars);
- monetary items such as debt, cash and loans.

Sources of hedge ineffectiveness are mainly related to uncertainty regarding the timing and in some cases the amount of the future cash flows in foreign currency that are being hedged.

15.1.5.2 Interest rate risk management

The Group is exposed to interest rate risk through its financing and investing activities. Interest rate risk is defined as a financial risk resulting from fluctuations in base interest rates that may increase the cost of debt and affect the viability of investments. Base interest rates are market interest rates, such as EURIBOR, SOFR, etc., that do not include the borrower's credit spread.

Reform of interbank benchmark rates

As part of the interest rate benchmark reform in 2022, the Group benchmarked all new USD denominated financing contracts to the SOFR index. It also aligned its existing financing and derivative contracts with the same index in first-half 2023, following the end of the publication of the US Libor at June 30, 2023.

No impact has been recognized by the Group as a result of this transition.

The two main sources of interest rate risk are as follows:

- **interest rate risk relating to Group net debt**

  Interest rate risk relating to Group net debt designates the financial impact of base rate movements on the debt and cash portfolio from recurring financing activities. This risk is mainly managed centrally.

  Risk management objectives are, by order of importance:

  - to protect the long-term viability of assets,
  - to optimize financing costs and ensure competitiveness, and
  - to minimize uncertainty on the cost of debt.

  Interest rate risk is actively managed by monitoring changes in market rates and their impact on the Group's gross and net debt;

- **project interest rate risk**

  Specific project interest rate risk corresponds to the potential negative financial impact of base rate movements on specific major operations such as investment projects, acquisitions, disposals and restructuring projects. Interest rate risk after the closing of an operation is considered as regular (see "Interest rate risk").

  Interest rate risk is managed for specific project transactions in order to protect the economic viability of projects, acquisitions, disposals and restructuring initiatives against adverse changes in interest rates. It may include the implementation of hedging transactions, depending on a number of factors including the likelihood of completion, the availability of hedging instruments and their associated cost.

Hedging instruments and sources of hedge ineffectiveness

The Group principally uses the following risk management levers for mitigating interest rate risk:

- derivative instruments: these mostly correspond to over-the-counter contracts that are used to manage base interest rates. Such instruments include:
  - swaps, to change the nature of interest payments on debts, typically from fixed to floating rates or *vice versa*,
  - plain vanilla interest rate options;
- caps, floors and collars that allow the impact of interest rate fluctuations to be limited by setting minimum and/or maximum limits on floating interest rates.

Sources of hedge ineffectiveness are mainly related to changes in the credit quality of the counterparties and related charges, as well as potential gaps in settlement dates and in indices between the derivative instruments and the related underlying exposures.

15.1.5.3 Currency and interest rate hedges

The Group has elected to apply hedge accounting whenever possible and suitable for currency risk and interest rate risk management purposes and also manages a portfolio of undesignated derivative instruments, corresponding to economic hedges relating to net debt and foreign currency exposures.

The Group uses the three hedge accounting methods: cash flow hedging, fair value hedging and net investment hedging.

In general, the Group does not frequently reset hedging relationships, designate specific risk components as a hedged item or designate credit exposures as measured at fair value through income.

The Group qualifies interest rate or cross currency swaps transforming fixed-rate debt into floating-rate debt as fair value hedges.

Cash flow hedges are mainly used to hedge future cash flows in foreign currency, floating-rate debt as well as future refinancing requirements.

Net investment hedging instruments are mainly FX swaps, forwards and cross-currency swaps.

The fair values of derivatives (excluding commodity instruments) are indicated in the table below:

	Dec. 31, 2023				Dec. 31, 2022			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivatives hedging borrowings	279	111	(457)	(131)	226	92	(620)	(114)
Fair value hedges	*190*	*43*	*(289)*	*(21)*	*167*	*4*	*(394)*	*(38)*
Cash flow hedges	*43*	*-*	*(120)*	*(45)*	*30*	*5*	*(195)*	*(11)*
Derivative instruments not qualifying for hedge accounting	*47*	*68*	*(48)*	*(66)*	*30*	*84*	*(32)*	*(65)*
Derivatives hedging other items	1,501	26	(1,167)	(159)	1,975	84	(1,587)	(47)
Cash flow hedges	*189*	*2*	*(351)*	*(91)*	*509*	*41*	*(222)*	*(7)*
Net investment hedges	*180*	*-*	*(1)*	*-*	*156*	*-*	*(1)*	*-*
Derivative instruments not qualifying for hedge accounting	*1,131*	*23*	*(815)*	*(67)*	*1,310*	*43*	*(1,364)*	*(40)*
TOTAL	**1,780**	**137**	**(1,623)**	**(290)**	**2,201**	**176**	**(2,208)**	**(161)**

The fair values shown in the table above reflect the amounts relating to the price that would be received for the sale of an asset or paid for the transfer of a liability between market participants in the normal course of business. They are not representative of expected future cash flows insofar as the positions (i) are sensitive to changes in prices or to changes in credit ratings, (ii) can be modified by subsequent transactions, and (iii) can be offset by future cash flows arising on the underlying transactions.

Amount, timing and uncertainty of future cash flows

The following tables provide a profile of the timing at December 31, 2023 of the nominal amount of hedging instruments:

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2024	2025	2026	2027	2028	Beyond 5 years
Buy	Fixed	CCS	USD	(337)	(113)	(86)	(93)	-	-	(45)
			GBP	(2,589)	-	-	-	-	(575)	(2,014)
			EUR	(1,230)	-	-	-	-	(569)	(661)
			CHF	(637)	(189)	-	-	(205)	-	(243)
			HKD	(266)	-	-	-	(104)	-	(162)
			PEN	(198)	(19)	-	(61)	(61)	(56)	-
			Other currencies	(295)	(172)	(71)	-	-	-	(52)
	Floating	CCS	CLP	(46)	-	-	(46)	-	-	-
Sell	Fixed	CCS	EUR	3,539	216	75	-	98	638	2,512
			USD	1,446	22	-	114	70	607	633
	Floating	CCS	EUR	339	144	-	-	195	-	-
			BRL	309	118	93	99	-	-	-

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2024	2025	2026	2027	2028	Beyond 5 years
Sell	Fixed	CAP	EUR	5	5	-	-	-	-	-
		IRS	EUR	9,524	(663)	97	1,216	376	(99)	8,596
			USD	1,322	(67)	35	723	296	30	305
			ZAR	140	(87)	(50)	64	(48)	12	249
			Other currencies	63	3	3	3	3	3	47
	Floating	IRS	EUR	17,643	1,690	2,415	1,950	800	138	10,650
			ZAR	-	(89)	(55)	58	(57)	1	142
			BRL	59	-	-	-	-	59	-

The tables presented above exclude currency derivatives (except for cross currency swaps – CCS). Their maturity dates are aligned with those of the hedged items.

Pursuant to the FX and interest rate risk management policy, FX sensitivity is presented in Note 15.1.3.2 “Currency risk sensitivity analysis” and the average cost of gross debt is 4.31% as presented in Note 10 “Net financial income/(loss)”.

Effects of hedge accounting on the Group’s financial position and performance

Currency derivatives

	Dec. 31, 2023				Dec. 31, 2022	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	51	(581)	(530)	4,708	(338)	3,139
Net investment hedges	180	(1)	179	5,596	155	5,939
Derivative instruments not qualifying for hedge accounting	55	(39)	16	12,086	123	12,007
TOTAL	**286**	**(621)**	**(335)**	**22,391**	**(60)**	**21,085**

Interest rate derivatives

	Dec. 31, 2023				Dec. 31, 2022	
	Fair value			Nominal amount	Fair value	Nominal amount
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Fair value hedges	232	(309)	(77)	7,975	(261)	5,148
Cash flow hedges	183	(25)	158	3,399	491	5,260
Derivative instruments not qualifying for hedge accounting	1,215	(957)	258	25,438	(186)	25,885
TOTAL	**1,631**	**(1,291)**	**339**	**36,812**	**44**	**36,293**

The fair values presented in the above table are positive for assets and negative for liabilities.

In millions of euros		Nominal and outstanding amount	Fair value (1)	Change in fair value used for calculating hedge ineffective-ness	Change in the value of the hedging instrument recognized in equity (2)	Ineffective portion recognized in profit or loss (2)	Amount reclassified from the hedge reserve to profit or loss (2)	Line item of the income statement
Fair value hedges	Hedging instruments	7,975	(77)	(77)	-	-	NA	Cost of net debt
	Hedged items (3) (4)	5,715	(41)	2,076	NA		NA	
Cash flow hedges	Hedging instruments	8,107	(371)	(188)	402	(4)	(321)	Other financial income and expenses/ Current operating income including operating MtM
	Hedged items			186				
Net investment hedges	Hedging instruments	5,596	179	148	(149)	NA	1	Other financial income and expenses/ Current operating income including operating MtM
	Hedged items			(148)				

(1) *The adjustment of the fair value of hedged items is presented as long term and short-term borrowings and debt for a negative amount of - €41 million.*
(2) *Gains/(losses).*
(3) *The difference between the fair value used to determine the ineffective portion relating to hedging instruments and that relating to the hedged items corresponds to the amortized cost of borrowings and debt that are part of a fair value hedge relationship.*
(4) *Of which €40 million relating to hedging items that are no longer adjusted as a result of discontinuation of the fair value hedge relationship.*

Hedge inefficiency is calculated based on the change in the fair value of the hedging instrument compared to the change in the fair value of the hedged items since inception of the hedging relationship. The fair value of the hedging instruments at December 31, 2023 reflects the cumulative change in their fair value since inception of the hedges. The same principle applies to the hedged items.

No significant impact in terms of ineffectiveness or discontinuation of certain hedges was recognized at December 31, 2023.

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity

In millions of euros	2024	2025	2026	2027	2028	Beyond 5 years	Total at Dec. 31, 2023	Total at Dec. 31, 2022
Fair value of derivatives by maturity date	(64)	23	6	10	(85)	(262)	(371)	147

Amounts presented in the statement of changes in equity and the statement of comprehensive income

The following table provides a reconciliation of each component of equity and an analysis of other comprehensive income:

<table>
<tr><th></th><th colspan="3">Cash flow hedge</th><th>Net investment hedge</th></tr>
<tr><th>In millions of euros</th><th>Derivatives hedging borrowings – currency risk hedging (1)</th><th>Derivatives hedging other items – interest rate risk hedging (1) (3)</th><th>Derivatives hedging other items – currency risk hedging (2)</th><th>Derivatives hedging other items – currency risk hedging (2) (4)</th></tr>
<tr><td>AT DECEMBER 31, 2022</td><td>46</td><td>179</td><td>35</td><td>(386)</td></tr>
<tr><td>Effective portion recognized in equity</td><td colspan="2">(381)</td><td>(21)</td><td>149</td></tr>
<tr><td>Amount reclassified from the hedge reserve to profit or loss</td><td colspan="2">321</td><td>-</td><td>(1)</td></tr>
<tr><td>Translation differences</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Changes in scope of consolidation and other</td><td>-</td><td>(24)</td><td>-</td><td>-</td></tr>
<tr><td>AT DECEMBER 31, 2023</td><td>45</td><td>97</td><td>14</td><td>(238)</td></tr>
</table>

(1) Cash flow hedges for given periods.
(2) Cash flow hedges for given transactions.
(3) Comprises a positive €275 million of cumulated reserves related to hedge transactions (a negative €86 million at December 31, 2022) for which hedge accounting has been discontinued (instruments cancelled prior to their maturity).
(4) All of the reserves relate to continuing hedging relationships.

15.2 Counterparty risk

Due to its financial and operational activities, the Group is exposed to the risk of default of its counterparties (customers, suppliers, EPC contractors, partners, intermediaries, and banks). Default could affect payments, delivery of goods and/or asset performance.

The principles of counterparty risk management are set out in the Group counterparty risk policy, which:

- assigns roles and responsibilities for managing and controlling counterparty risk at different levels (Corporate, BU or entity), and ensures operational procedures are in place and consistent across the Group;
- characterizes counterparty risk and the mechanisms by which it impacts the economic performance and financial statements of the Group;
- defines indicators, reporting and control mechanisms to ensure visibility and to provide tools for financial performance management; and
- provides guidelines on the use of mitigating mechanisms such as collateral and guarantees, which are widely used by some businesses.

Depending on the nature of the business, the Group is exposed to different types of counterparty risk. As a result some businesses use collateral instruments – particularly the Energy Management business, where the use of margin calls and other types of financial collateral (standardized legal framework) is a market standard. In addition, other businesses may request guarantees from their counterparties in certain cases (parent company guarantees, bank guarantees, etc.).

Under the new IFRS 9 standard, the Group has defined and applied a Group-wide methodology, which includes two different approaches:

- a portfolio approach, whereby the Group determines that:
  - coherent customer portfolios and sub-portfolios have to be considered (*i.e.*, portfolios that have comparable credit risk and/or comparable payment behavior), taking into account the following aspects:
    - public or private counterparties,
    - residential or BtoB counterparties,
    - geography,
    - type of activity,
    - size of the counterparty, and
    - any other aspects the Group may consider relevant,
  - impairment rates must be determined based on historical aging balances and, when correlation is proven and documentation possible, historical data must be adjusted by forward-looking elements; and
- an individualized approach for significant counterparties, for which the Group has set rules for defining the stage of the concerned asset for Expected Credit Loss (ECL) calculations:
  - stage 1 covers financial assets that have not deteriorated significantly since initial recognition. The ECL for stage 1 is calculated on a 12-month basis,
  - stage 2 covers financial assets for which the credit risk has significantly increased. The ECL for stage 2 is calculated on a lifetime basis. The decision to move an asset from stage 1 to stage 2 is based on certain criteria such as:

  - a significant downgrade in the creditworthiness of a counterparty and/or its parent company and/or its guarantor (if any),
  - significant adverse change in the regulatory environment,
  - changes in political or country-related risk, and
  - any other aspect the Group may consider relevant.

  Regarding financial assets that are more than 30 days past due, the move to stage 2 is not systematically applied as long as the Group has reasonable and verifiable information that demonstrates that, even if payments become more than 30 days past due, this does not represent a significant increase in the credit risk since initial recognition.
- stage 3 covers assets for which default has already been observed, such as:
  - when there is evidence of significant and ongoing financial difficulty of the counterparty,
  - when there is evidence of failure in credit support from a parent company to its subsidiary (in this case the subsidiary is the Group's at risk counterparty),
  - when a Group entity has initiated legal proceedings against the counterparty for non-payment.

  Regarding financial assets that are more than 90 days past due, the presumption can be rebutted if the Group has reasonable and supportable information that demonstrates that even if payments become more than 90 days past due, this does not indicate counterparty default.

The ECL formula applicable in stages 1 and 2 is ECL = EAD x PD x LGD, where:

- for 12-month ECL, Exposure At Default (EAD) equals the carrying amount of the financial asset, to which the relevant Probability of Default (PD) and the Loss Given Default (LGD) are applied;
- for lifetime ECL, the calculation method consists in identifying changes in exposure for each year, especially the expected timing and amount of the contractual repayments, then applying to each repayment the relevant PD and the LGD, and discounting the figures obtained. ECL is then the sum of the discounted figures; and
- probability of default is the likelihood of default over a particular time horizon (in stage 1, this time horizon is 12 months after the reporting period; in stage 2 this time horizon is the entire lifetime of the financial asset). This information is based on external data from a reputable rating agency. The PD depends on the time horizon and of the rating of the counterparty. The Group uses external ratings if they are available; ENGIE's credit risk experts determine an internal rating for major counterparties with no external rating.

LGD levels are notably based on Basel standards:

- 75% for subordinated assets; and
- 45% for standard assets.

For assets considered to be of strategic importance for the counterparty, such as essential public services or goods, LGD is set at 30%.

The Group has decided that write-offs apply in the following situations:

- assets for which a legal recovery procedure is pending: these should not be written off as long as the procedure is ongoing; and
- assets for which no legal recovery procedure is pending: these should be written off once the trade receivable is three years overdue (five years overdue for public counterparties).

In the context of its market activities (mainly concerning BtoB customers), the Group takes into account forward-looking information when assessing its expected credit losses, in order to best reflect the situation in a series of economic sectors deemed to be the most critical. Accordingly, the specific adjustment to the provisioning rate for expected credit losses made at December 31, 2022 on certain business sectors particularly exposed to fluctuations in commodity prices was maintained during the year, in the absence of a significant and lasting improvement in the general economic context.

In addition, the risk of default on the Group's BtoC energy supply activities has evolved differently in each country, depending on the mechanisms put in place. In France, for example, the risk of default has risen due to the end of government measures (*i.e.* gas tariff shield, energy vouchers) aimed at limiting price increases. This is reflected in longer collection times and more frequent requests for payment instalment plans. Conversely, lower prices in Belgium and the protection mechanisms put in place by the Romanian government have reduced our exposure to credit risk.

15.2.1 Counterparty risk arising on operating activities

Counterparty risk arising on operating activities is managed *via* standard mechanisms such as third-party guarantees, netting agreements and margin calls, using dedicated hedging instruments or special prepayment and debt recovery procedures, particularly for retail customers.

Under the Group's policy, each Global Business Unit is responsible for managing counterparty risk, although the Group continues to manage the biggest counterparty exposures centrally.

For large and medium-sized customers with which the Group's credit risk exposure exceeds a certain threshold, a specific, comprehensive rating determination model, is used to assess the Group's credit risk exposure as accurately as possible. A simplified scoring model is used for customers for whom the Group's credit risk exposure is lower. These processes are based on formally documented, consistent methods across the Group. Consolidated exposures are monitored by counterparty and by segment (credit rating, sector, etc.) using standard indicators (payment risk, mark-to-market exposure).

GEMS' large exposures to trading counterparties and large commercial clients are regularly monitored by the Group's governance committees.

15.2.1.1 Trade and other receivables, assets from contracts with customers

Total outstanding exposures presented in the tables below do not include impacts relating to VAT or to any other item not subject to credit risk, which amounted to €4,579 million at December 31, 2023 (compared to €6,084 million at December 31, 2022).

Individual approach

		Dec. 31, 2023							
In millions of euros		Individual approach	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [1]	Other	Total by 45 type
Trade and other receivables, net	Gross	13,653	12,304	1,248	101	13,653	11,533	2,121	13,653
	Expected credit losses	(909)	(696)	(116)	(97)	(909)	(594)	(315)	(909)
TOTAL		**12,745**	**11,609**	**1,132**	**4**	**12,745**	**10,939**	**1,806**	**12,745**
Assets from contracts with customers	Gross	4,377	4,374	2	-	4,377	3,299	1,078	4,377
	Expected credit losses	(22)	(22)	-	-	(22)	(15)	(7)	(22)
TOTAL		**4,354**	**4,352**	**2**	-	**4,354**	**3,284**	**1,070**	**4,354**

		Dec. 31, 2022							
In millions of euros		Individual approach	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [1]	Other	Total by counterparty type
Trade and other receivables, net	Gross	22,754	21,321	1,316	118	22,754	20,668	2,086	22,754
	Expected credit losses	(737)	(533)	(75)	(129)	(737)	(452)	(285)	(737)
TOTAL		**22,017**	**20,787**	**1,241**	**(11)**	**22,017**	**20,216**	**1,801**	**22,017**
Assets from contracts with customers	Gross	5,277	5,245	29	3	5,277	4,100	1,177	5,277
	Expected credit losses	(20)	(16)	-	(4)	(20)	(13)	(7)	(20)
TOTAL		**5,256**	**5,229**	**29**	**(1)**	**5,256**	**4,087**	**1,169**	**5,256**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

Collective approach

		Dec. 31, 2023				
In millions of euros		Collective approach	0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2022
Trade and other receivables, net	Gross	3,953	420	212	199	831
	Expected credit losses	(1,153)	(20)	(40)	(216)	(275)
TOTAL		**2,800**	**400**	**173**	**(16)**	**557**
Assets from contracts with customers	Gross	5,194	31	85	3	119
	Expected credit losses	(5)	-	(2)	-	(2)
TOTAL		**5,189**	**31**	**83**	**3**	**117**

In millions of euros		Dec. 31, 2022 Collective approach	0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2021
Trade and other receivables, net	Gross	4,459	300	101	272	673
	Expected credit losses	(1,151)	(19)	(47)	(172)	(238)
TOTAL		**3,308**	**281**	**54**	**100**	**435**
Assets from contracts with customers	Gross	7,370	8	-	1	10
	Expected credit losses	(27)	-	(8)	-	(8)
TOTAL		**7,343**	**8**	**(8)**	**1**	**2**

15.2.1.2 Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. When calculating the fair value of these derivative instruments, countreparty risk (CVA) is based on default probabilities whose parameters have been updated, in a context of uncertainty, to take account of an increased risk of default.

The volatility of commodity prices and the impact on the valuation of derivatives on the assets side of the balance sheet have not significantly altered the Group's exposure due to the credit quality of its counterparties.

In millions of euros	Dec. 31, 2023 Investment Grade [1]	Dec. 31, 2023 Total	Dec. 31, 2022 Investment Grade [1]	Dec. 31, 2022 Total
Gross exposure [2]	15,954	19,324	36,371	46,012
Net exposure [3]	6,385	8,050	12,434	16,124
% of credit exposure to "Investment Grade" counterparties	79.3%		77.1%	

(1) *Investment Grade corresponds to transactions with counterparties that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or equivalent by Dun & Bradstreet. "Investment Grade" is also determined based on an internal rating tool that has been rolled out within the Group, and covers its main counterparties.*

(2) *Corresponds to the maximum exposure, i.e., the value of the derivatives shown under assets (positive fair value).*

(3) *After taking into account the liability positions with the same counterparties (negative fair value), collateral, netting agreements and other credit enhancement techniques.*

15.2.2 Counterparty risk arising on financing activities

For its financing activities, the Group has put in place procedures for managing and monitoring risk based on (i) the accreditation of counterparties according to external credit ratings, objective market data (credit default swaps, market capitalization) and financial structure, and (ii) counterparty risk exposure limits.

To reduce its counterparty risk exposure, the Group has drawn increasingly on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls).

The oversight procedure for managing counterparty risk arising from financing activities is managed by a Middle Office that operates independently of the Group's Treasury Department and reports to the Finance Division.

15.2.2.1 Loans and receivables at amortized cost

The total outstanding exposures presented in the tables below do not include impacts relating to VAT or to any other item not subject to credit risk, which amounted to €425 million at December 31, 2023 (compared to €547 million at December 31, 2022).

In millions of euros	Dec. 31, 2023 Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade [1]	Other	Total by counterparty type
Gross	8,879	285	700	9,865	5,754	4,111	9,865
Expected credit losses	(78)	(45)	(1,180)	(1,302)	(174)	(1,128)	(1,302)
TOTAL	**8,802**	**240**	**(479)**	**8,563**	**5,580**	**2,983**	**8,563**

	Dec. 31, 2022						
In millions of euros	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total by risk level	Investment Grade (1)	Other	Total by counterparty type
Gross	6,596	274	720	7,591	3,490	4,101	7,591
Expected credit losses	(99)	(38)	(1,154)	(1,291)	(158)	(1,133)	(1,291)
TOTAL	**6,497**	**236**	**(434)**	**6,300**	**3,332**	**2,967**	**6,300**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

In 2022, the Group had impaired the loan related to the financing of the Nord Stream 2 pipeline project for a total amount of €987 million (including capitalized interest).

15.2.2.2 Counterparty risk arising on investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising on investments of surplus cash and from the use of derivative financial instruments. In the case of financial instruments at fair value through income, counterparty risk arises on instruments with a positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

	Dec. 31, 2023				Dec. 31, 2022			
In millions of euros	Total	Investment Grade (1)	Unrated (2)	Non Investment-Grade (2)	Total	Investment Grade (1)	Unrated (2)	Non-Investment Grade (2)
Exposure	17,577	89.6%	3.3%	7.1%	15,738	92.3%	4.5%	3.2%

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's or Baa3 by Moody's.
(2) The bulk of these two exposures is carried by consolidated companies that include non-controlling interests, or by Group companies that operate in emerging countries, where cash cannot be pooled and is therefore invested locally.

Furthermore, at December 31, 2023, Crédit Agricole SA is the main Group counterparty and represents 31% of cash surpluses. This relates mainly to a depositary risk.

15.3 Liquidity risk

In the context of its operating activities, the Group is exposed to a risk of having insufficient liquidity to meet its contractual obligations. As well as the risks inherent in managing working capital requirements (WCR), margin calls are required in certain market activities, which are a way of mitigating counterparty risk on hedging instruments through the use of collateral.

The Group has set up a committee that meets weekly and is tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, and preparing forecasts of cash investments and divestments. ENGIE has set up a comprehensive framework to monitor and streamline cash movements related to OTC margin calls and margin calls *via* clearing houses, based on the use of liquidity swaps with its key counterparties, as well as the issuing of letters of credit. Given the current volatility of the markets, these margin calls may have a significant timing impact on the Group's cash position, and the use of the two above-mentioned levers has therefore been reinforced in order to monitor the impact on its cash position. Quarterly stress-tests are also performed on the margin calls put in place when commodity, interest rate and currency derivatives are negotiated to assess the Group's resilience in terms of liquidity.

The Group centralizes virtually all the financing needs and cash flow surpluses of the companies it controls, as well as most of their medium- and long-term external financing requirements. Centralization is provided by financing vehicles (long-term and short-term) and by dedicated Group cash pooling vehicles based in France, Belgium and Luxembourg.

Surpluses held by these structures are managed in accordance with a uniform policy. In accordance with this policy, unpooled cash surpluses are invested in instruments selected on a case-by-case basis in light of local financial market imperatives and the financial strength of the counterparties concerned.

The succession of financial crises since 2008 and the ensuing rise in counterparty risk prompted the Group to tighten its investment policy with the aim of keeping an extremely high level of liquidity and protecting invested capital, with a daily monitoring of performance and counterparty risk, allowing the Group to take immediate action where required in response to market developments. Consequently, 89% of the cash pooled at December 31, 2023 was invested in overnight bank deposits and standard money market funds with daily liquidity.

The Group's financing policy is based on:

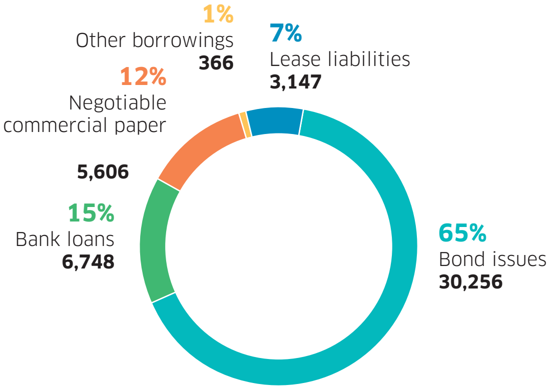
- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

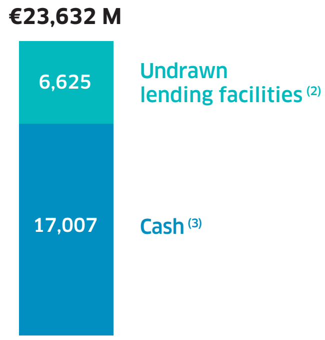
The Group seeks to diversify its sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues negotiable commercial paper in France (Negotiable European Commercial Paper) and in the United States (US Commercial Paper) as well as deeply-subordinated perpetual notes. As negotiable commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural manner to finance its short-term cash requirements. However, the refinancing of all outstanding negotiable commercial paper remains secured by confirmed bank lines of credit – mainly centralized – allowing the Group to continue to finance its activities if access to this financing source were to dry up. These facilities are appropriate for the scale of its operations and for the timing of contractual debt repayments.

The various actions carried out by the Group ensure a high and reinforced level of liquidity.

Diversifying sources of financing and liquidity (1)

In millions of euros





(1) *These sources of financing and liquidity do not include the deeply-subordinated perpetual notes recognized in equity (see Note 16.2.1 "Issuance of deeply-subordinated perpetual notes").*
(2) *Net amount of negotiable commercial paper.*
(3) *Cash corresponds to cash and cash equivalents for €16,578 million, other financial assets deducted from net financial debt for €884 million, net of bank overdrafts and current accounts for €455 million, of which 76% was invested in the Eurozone.*

At December 31, 2023, all Group entities whose debt is consolidated complied with the covenants and declarations included in their financial documentation, except for some non-significant entities for which compliance actions are being implemented. There are no defaults linked to financial ratios or rating levels on available centralized credit lines.

15.3.1 Undiscounted contractual payments relating to financial activities

Undiscounted contractual payments on outstanding borrowings and debt by maturity

In millions of euros	**2024**	**2025**	**2026**	**2027**	**2028**	**Beyond 5 years**	**Total at Dec. 31, 2023**	**Total at Dec. 31, 2022**
Bond issues	1,039	1,463	2,922	3,130	3,230	18,472	30,256	23,557
Bank borrowings	763	485	387	637	245	4,231	6,748	5,476
Negotiable commercial paper	5,606	-	-	-	-	-	5,606	7,386
Lease liabilities	510	480	398	365	407	2,552	3,147	2,875
Other borrowings	92	22	3	3	2	244	366	374
Bank overdrafts and current accounts	455	-	-	-	-	-	455	615

Other financial assets and cash and cash equivalents deducted from net financial debt have a liquidity of less than one year.

Undiscounted contractual interest payments on outstanding borrowings and debt by maturity

In millions of euros	**2024**	**2025**	**2026**	**2027**	**2028**	**Beyond 5 years**	**Total at Dec. 31, 2023**	**Total at Dec. 31, 2022**
Undiscounted contractual interest flows on outstanding borrowings and debt	1,319	1,267	1,230	1,116	1,053	10,915	16,900	11,131

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Undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) by maturity

In millions of euros	2024	2025	2026	2027	2028	Beyond 5 years	Total at Dec. 31, 2023	Total at Dec. 31, 2022
Derivatives (excluding commodity instruments)	(233)	1	18	17	(20)	743	527	239

To better reflect the economic substance of these transactions, the cash flows linked to the derivatives recognized in assets and liabilities shown in the table above relate to net positions.

Undiscounted contractual payments related to leases

At December 31, 2023, the Group, as lessee, was potentially exposed to future cash outflows not reflected in the measurement of lease liabilities for €1,045 million (of which approximately 75% relate to potential cash outflows beyond 2028). Those potential future cash outflows relate to leases not yet commenced to which the Group is committed (real estate and LNG vessels).

In addition, the Group is also exposed to future cash outflows in the form of variable lease payments in connection with the extension of the Rhone concession. These variable lease payments are dependent on revenue from electricity sales.

Undrawn credit facility programs

In millions of euros	2024	2025	2026	2027	2028	Beyond 5 years	Total at Dec. 31, 2023	Total at Dec. 31, 2022
Confirmed undrawn credit facility programs	1,619	738	552	-	8,500	822	12,231	12,511

Of these undrawn programs, an amount of €5,606 million is allocated to covering commercial paper.

At December 31, 2023, no single counterparty represented more than 10% of the Group's confirmed undrawn credit lines.

15.3.2 Undiscounted contractual payments relating to operating activities

The table below provides an analysis of undiscounted fair values due and receivable in respect of commodity derivatives recorded in assets and liabilities at the reporting date.

The Group provides an analysis of residual contractual maturities for commodity derivative instruments included in its portfolio management activities. Derivative instruments relating to trading activities are considered to be liquid in less than one year, and are presented under current items in the statement of financial position.

In millions of euros	2024	2025	2026	2027	2028	Beyond 5 years	Total at Dec. 31, 2023	Total at Dec. 31, 2022
Derivative instruments carried in liabilities								
relating to portfolio management activities	*(5,831)*	*(497)*	*(9,539)*	*(2,971)*	*(1,249)*	*(994)*	*(21,080)*	*(49,260)*
relating to trading activities	*(1,787)*	-	-	-	-	-	*(1,787)*	-
Derivative instruments carried in assets								
relating to portfolio management activities	*5,624*	*341*	*6,682*	*2,934*	*681*	*472*	*16,734*	*40,975*
relating to trading activities	*2,766*	-	-	-	-	-	*2,766*	*5,098*
TOTAL	**772**	**(155)**	**(2,857)**	**(37)**	**(568)**	**(522)**	**(3,366)**	**(3,187)**

15.3.3 Commitments relating to commodity purchase and sale contracts entered into in the ordinary course of business

Some Group operating companies have entered into long-term contracts, some of which include "take-or-pay" clauses. These consist of firm commitments to purchase or sell specified quantities of gas, electricity or steam as well as related services, in exchange for a firm commitment from the other party to deliver or purchase said quantities and services. These contracts were documented as falling outside the scope of IFRS 9. The table below shows the main future commitments arising from contracts entered into by GBU Renewables and GEMS (expressed in TWh).

In TWh	2024	2025-2028	Beyond 5 years	Total at Dec. 31, 2023	Total at Dec. 31, 2022
Firm purchases	(450)	(566)	(1,134)	(2,150)	(1,884)
Firm sales	617	470	224	1,310	1,243

NOTE 16 Equity

16.1 Share capital

	Number of shares			Value (in millions of euros)		
	Total	Treasury stock	Outstanding	Share capital	Additional paid-in capital	Treasury stock
AT DECEMBER 31, 2022	**2,435,285,011**	**(14,530,427)**	**2,420,754,584**	**2,435**	**25,667**	**(189)**
Dividend paid in cash	-	-	-	-	(1,752)	-
Purchase/disposal of treasury stock	-	(3,755,821)	(3,755,821)	-	-	(53)
Delivery of treasury stock (bonus)	-	4,450,881	4,450,881	-	-	65
AT DECEMBER 31, 2023	**2,435,285,011**	**(13,835,367)**	**2,421,449,644**	**2,435**	**23,916**	**(177)**

Changes in the number of outstanding shares in 2023 resulted exclusively from the disposal of 0.7 million treasury shares, as part of bonus share plans.

16.1.1 Potential share capital and instruments providing a right to subscribe for new ENGIE SA shares

Since 2017, the Group no longer has any stock purchase or subscription option plans.

Shares to be allocated under the performance share award plans described in Note 19 “Share-based payments” are covered by existing ENGIE SA shares.

16.1.2 Treasury stock

ACCOUNTING STANDARDS

Treasury shares are recognized at acquisition cost and deducted from equity. Gains and losses on disposals of treasury shares are recorded directly in equity and do not, therefore, impact income for the period.

The Group has a stock repurchase program as a result of the authorization granted to the Board of Directors by the Ordinary and Extraordinary Shareholders’ Meeting of April 26, 2023. This program provides for the repurchase of up to 10% of the shares comprising the share capital of ENGIE SA at the date of the said Shareholders’ Meeting. The aggregate amount of acquisitions net of expenses under the program may not exceed €7.3 billion, and the purchase price must be less than €30 per share excluding acquisition costs.

At December 31, 2023, the Group held 13.8 million treasury shares. To date, all the shares have been allocated to cover the Group’s share commitments to employees and corporate officers.

The liquidity agreement signed with an investment service provider assigns to the latter the role of operating on the market on a daily basis, to buy or sell ENGIE SA shares, in order to ensure liquidity and an active market for the shares on the Paris and Brussels stock exchanges. To date, the resources allocated to the implementation of this agreement amount to €55 million.

16.2 Other disclosures concerning additional paid-in capital, consolidated reserves and issuance of deeply-subordinated perpetual notes (Group share)

Total additional paid-in capital, consolidated reserves and issuance of deeply subordinated perpetual notes (including net income for the year), amounted to €32,507 million at December 31, 2023, including €23,916 million in additional paid-in capital. Additional paid-in capital includes a portion of the cash dividend payment for 2022 in an amount of €1,752 million.

Consolidated reserves include the cumulative income of the Group, the legal and statutory reserves of ENGIE SA, cumulative actuarial gains and losses, net of tax and the change in fair value of equity instruments at fair value through OCI.

Under French law, 5% of the net income of French companies must be allocated to the legal reserve until the latter reaches 10% of share capital. This reserve can only be distributed to shareholders in the event of liquidation. The ENGIE SA legal reserve amounts to €244 million.

16.2.1 Issuance of deeply subordinated perpetual notes

In accordance with IAS 32 – Financial Instruments – Presentation, and given their characteristics, these instruments are recognized in equity in the Group's consolidated financial statements.

At December 31, 2023, the outstanding nominal value of deeply subordinated perpetual notes amounted to €3,393 million. No movements have been recorded since December 31, 2022.

In 2023, the Group paid €80 million to the holders of these notes. This amount is accounted for as a deduction from equity in the Group's consolidated financial statements; the related tax saving is accounted for in the income statement.

16.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €24,537 million at December 31, 2023 (compared with €27,365 million at December 31, 2022), including €23,916 million of additional paid-in capital.

16.2.3 Dividends

The Shareholders' Meeting of April 26, 2023 approved the payment of a unit dividend of €1.40 per share in respect of the 2022 financial year. In accordance with Article 26.2 of the Articles of Association, a bonus dividend of 10%, *i.e.* €0.14 per share, has been allocated to shares which have been held from for at least two years at December 31, 2022, and which have remained continuously registered in this form in the name of the same shareholder until the dividend payment date. This bonus dividend may not apply to a number of shares representing more than 0.5% of the share capital for any one shareholder. On May 3, 2023, the Group paid a cash dividend of €3,391 million, including the dividend of €1.40 per share for shares eligible for the ordinary dividend, and a loyalty bonus of €36 million.

Proposed dividend in respect of 2023

At the Shareholders' Meeting convened to approve the ENGIE group financial statements for the year ended December 31, 2023, the shareholders will be asked to approve a dividend of €1.43 per share, representing a total payout of €3,482 million based on the number of shares outstanding at December 31, 2023. It will be increased by 10% for all shares held for at least two years at December 31, 2023 and up to the 2023 dividend payment date. Based on the number of outstanding shares at December 31, 2023, this increase is valued at €38 million.

Subject to approval by the Shareholders' Meeting of Tuesday April 30, 2024, this dividend will be detached on Thursday May 2, 2024 and paid on Monday May 6, 2024. It is not recognized as a liability in the financial statements at December 31, 2023, since the financial statements at the end of 2023 were presented before the appropriation of earnings.

16.3 Recyclable gains and losses recognized in equity (Group share)

All items shown in the table below correspond to cumulative gains and losses (Group share) at December 31, 2023 and December 31, 2022, which are recyclable to income in subsequent periods.

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Debt instruments	(44)	(369)
Net investment hedges (1)	(238)	(386)
Cash flow hedges (excl. commodity instruments) (1)	145	218
Commodity cash flow hedges (1)	(3,998)	(318)
Deferred taxes on the items above	786	(112)
Share of equity method entities accounted in recyclable items, net of tax (2)	334	300
Recyclable items relating to discontinued operations, net of tax	-	-
TOTAL RECYCLABLE ITEMS BEFORE TRANSLATION ADJUSTMENTS	**(3,015)**	**(668)**
Translation adjustments	(1,693)	(1,422)
TOTAL RECYCLABLE ITEMS	**(4,708)**	**(2,090)**

(1) *See Note 15 "Risks arising from financial instruments".*
(2) *See Note 3 "Investments in equity method entities".*

16.4 Capital management

ENGIE SA seeks to optimize its financial structure at all times by pursuing an optimal balance between its economic net debt and its EBITDA. The Group's key objective in managing its financial structure is to maximize value for shareholders and reduce the cost of capital, while ensuring that the Group has the financial flexibility required to continue its expansion. The Group manages its financial structure and makes any necessary adjustments in light of prevailing economic conditions. In this context, it may choose to adjust the amount of dividends paid to shareholders, reimburse a portion of capital, carry out share buybacks (see Note 16.1.2 "Treasury stock"), issue new shares, launch share-based payment plans, recalibrate its investment budget, or sell assets in order to scale back its net debt.

The Group's policy is to maintain an "strong investment grade" rating from the rating agencies. To achieve this, it manages its financial structure in line with the indicators usually monitored by these agencies, namely the Group's operating profile, financial policy and a series of financial ratios. One of the most commonly used ratios is the ratio where the numerator includes operating cash flows less cost of debt and taxes paid, and the denominator includes adjusted net financial debt. Net financial debt is mainly adjusted for nuclear provisions and provisions for pensions, as well as for 50% of hybrid debt (deeply-subordinated notes). In addition, the Group has issued a guidance targeting an "economic net debt to EBITDA" ratio less than or equal 4x.

The Group's objectives and processes for managing capital have remained unchanged over the past few years.

ENGIE SA is not obliged to comply with any external minimum capital requirements except those provided for by law.

NOTE 17 Provisions

ACCOUNTING STANDARDS

General principles related to the recognition of a provision

The Group recognizes a provision where it has a present obligation (legal or constructive) towards a third party arising from past events and where it is probable that an outflow of resources will be necessary to settle the obligation with no expected consideration in return.

A provision for restructuring costs is recognized when the general criteria for setting up a provision are met, *i.e.*, when the Group has a detailed formal plan relating to the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Provisions with a maturity of over 12 months are discounted when the effect of discounting is material. The Group's main long-term provisions are provisions for the back-end of the nuclear fuel cycle, provisions for dismantling facilities, provisions for site restoration costs, and provisions for post-employment and other long-term benefits. The discount rates used reflects current market assessments of the time value of money and the risks specific to the liability concerned. Expenses with respect to unwinding the discount on the provision are recognized as other financial income and expenses.

Estimates of provisions

Factors having a significant influence on the amount of provisions, and particularly, but not solely, those relating to the back-end of the nuclear fuel cycle, to the dismantling of nuclear facilities and of gas infrastructures in France, include:

- cost estimates (see Note 17.2);
- the timing of expenditure (notably, the timetable for the end of gas operations regarding the main gas infrastructure businesses in France) (see Notes 17.2 and 17.3); and
- the discount rate applied to cash flows.

These factors are based on information and estimates deemed by the Group to be the most appropriate as of today.

Modifications to certain factors could lead to a significant adjustment in these provisions.

In millions of euros	Post-employment and other long-term benefits	Back-end of the nuclear fuel cycle and dismantling of nuclear facilities	Dismantling of non-nuclear facilities	Other contingencies	Total
AT DECEMBER 31, 2022	**4,471**	**19,017**	**1,330**	**2,209**	**27,027**
Additions	264	5,271	107	557	6,198
Utilizations	(315)	(327)	(75)	(671)	(1,388)
Reversals	-	-	-	(36)	(35)
Changes in scope of consolidation	(6)	-	15	-	8
Impact of unwinding discount adjustments	161	581	47	14	803
Translation adjustments	1	-	(21)	(3)	(22)
Other	631	(655)	(18)	44	2
AT DECEMBER 31, 2023	**5,208**	**23,887**	**1,384**	**2,114**	**32,593**
Non-current	5,126	11,948	1,384	334	18,792
Current (1)	82	11,939	-	1,780	13,801

(1) The classification of liabilities as current or non-current reflects the effects of the agreement signed with the Belgian State on June 29, 2023 (which became binding on July 21, 2023), the implementation of which was specified in the transaction documents of December 13, 2023 (see Note 17.2). The Group will settle a large portion of this liability (€11.5 billion$_{2022}$) when the laws transposing this agreement come into force, and will settle the remaining balance (€3.5 billion$_{2022}$) when the extended units are restarted at the end of 2025.

The impact of unwinding discount adjustments in respect of post-employment and other long-term benefits relates to the interest expense on the benefit obligation, net of interest income on plan assets.

The “Other” line mainly comprises actuarial gains and losses arising on post-employment benefit obligations in 2023, which are recorded in “Other comprehensive income” as well as reversals of provisions recorded against a dismantling or site rehabilitation asset, notably due to the effect induced by the CNP’s final opinion of July 7, 2023 (see Note 17.2).

Additions, utilizations, reversals and the impact of unwinding discount adjustments are presented as follows in the consolidated income statement:

In millions of euros	Dec. 31, 2023
Net income/(loss) from operating activities	(4,774)
Other financial income and expenses	(824)
TOTAL	**(5,598)**

The different types of provisions and the calculation principles applied are described below.

17.1 Post-employment benefits and other long-term benefits

See Note 18 “Post-employment benefits and other long-term benefits”.

17.2 Obligations relating to nuclear power generation activities

17.2.1 Current legal context and expected developments following the agreement signed with the Belgian State on June 29, 2023 which became binding on July 21, 2023, the implementation of which was specified in the transaction documents of December 13, 2023

The Belgian law of April 11, 2003, partially repealed and amended by the law of July 12, 2022, granted Group subsidiary Synatom responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing spent fuel.

The tasks of the Commission for Nuclear Provisions (CNP), set up pursuant to the above-mentioned law, are to oversee the process of computing and managing these provisions. In accordance with the law, every three years the CNP conducts an audit of the application and adequacy of the calculation methods used to compute nuclear provisions.

In this context, the CNP issued a final opinion on July 7, 2023 on the proposals submitted by Synatom in September 2022. The provisions recorded by Synatom as of December 31, 2023 take full account of the comments and assumptions made by the CNP. In 2023, this opinion mainly resulted in a €0.6 billion reduction in the provision for dismantling, offset by an adjustment in the book value of dismantling assets, part of which was the subject of an impairment loss reversal (€0.4 billion). The provisions therefore include, in their assumptions, all existing or planned environmental regulatory requirements on a European, national and regional level.

On June 29, 2023, the Group signed an agreement with the Belgian government which became binding on July 21, 2023, the implementation of which was specified in the transaction documents of December 13, 2023. This agreement provides for:

- the 10-year extension of the Doel 4 and Tihange 3 nuclear reactors as part of a 50/50 partnership between the Belgian State and the Group, contingent upon the implementation of a contract for difference protecting ENGIE against market risks; and
- the transfer of financial responsibility to the Belgian State for managing nuclear waste and spent fuel in return for the payment of a lump-sum discharge amount of €15 billion$_{2022}$, within the limit of a volumetric credit covering all nuclear waste produced by the Belgian power plants during their legal operating life, from commissioning to dismantling.

This agreement is binding on both parties. Although it assumes the enactment and entry into force of draft laws included in the agreement, and the European Commission's assent to state aid, its closing (following the release from or fulfillment of conditions precedent) is considered highly probable. The transfer of financial responsibility for the management of nuclear waste and spent fuel meeting the transfer criteria will be concluded at closing, unless the units are not restarted before November 1, 2027 due to serious negligence on the part of ENGIE. In this highly unlikely event, the Belgian State may cancel the agreement on the lump-sum discharge and revert to the current system in which the nuclear operator bears the financial responsibility. The amounts already paid by the Group would accordingly be held in escrow for the benefit of the transferred nuclear provisions until the end of the dismantling program, including nuclear waste and back-end nuclear fuel cycle management.

The Group will settle its liability of €15 billion$_{2022}$ by means of a payment of €11.5 billion$_{2022}$ for category B and C waste (highly radioactive wastes, that are intended for geological storage), at the time of closing, after which it will settle the balance, for category A waste (low-level radioactive wastes, that are intended for surface storage), i.e., €3.5 billion$_{2022}$, when the extended units are restarted at the end of 2025. These amounts at December 31, 2022 are subject to a 3% indexation effective from January 1, 2023 until the date of payment.

As a result, the Group has increased its provisions by an amount corresponding to the balance between the liabilities already set aside for future nuclear waste treatment costs and the lump-sum amount of €15 billion$_{2022}$, *i.e.*, an amount of €5.1 billion$_{2022}$ (including Electrabel's partners' share in certain power plants for €0.4 billion). As a result, the Group recognized a net expense of €4.8 billion in "Other items of income/(loss) from operating activities" (see Note 9).

At the end of this agreement, the Group will essentially retain responsibility for the on-site storage of spent fuel waste until the end of the dismantling operations and until 2050 at the latest, as well as for the conditioning of all waste in accordance with the contractual agreement (see Note 17.2). The Group will also remain responsible for the final shutdown of the reactors, their dismantling and the clean-up of the site at the end of their operating life. The process of setting up and managing all these provisions, for which the Group is responsible, will continue to be reviewed by the CNP every three years.

17.2.2 Provisions for the back-end of the nuclear fuel cycle

When spent nuclear fuel is removed from a reactor and temporarily stored on-site, it requires conditioning, before being consigned to long-term storage.

As part of the implementation of a final payment for the transfer of financial responsibility for managing the storage and disposal of nuclear waste and spent fuel, as provided for in the agreement, the risks associated with this liability, as described in the consolidated financial statements at December 31, 2022 (see Note 17.2 "Obligations relating to nuclear power generation activities"), have been considerably reduced. The agreement stipulates that the State will bear financial responsibility for managing all spent fuel after its transfer to ONDRAF (National agency for radioactive waste and enriched fissile materials). The Group will settle a large portion of this liability (classified as current in the accounts) plus a risk premium for a total of €10.5 billion$_{2022}$.

With regard to waste management, the Group's responsibility will be essentially limited to on-site storage of fuel elements until the end of dismantling operations, and until 2050 at the latest, as well as compliance with the contractual criteria for transferring waste to ONDRAF, whose liability is estimated at €1.7 billion$_{2022}$ in the draft law implementing the agreement.

Provisions not covered in the agreement are calculated based on the following principles and inputs:

- storage costs primarily comprise the costs of building and operating additional dry storage facilities and operating existing facilities, along with the costs of purchasing containers;
- radioactive spent fuel that has not been reprocessed is to be conditioned, which requires conditioning facilities to be built according to ONDRAF's approved criteria. ONDRAF's recommendations as regards the cost of these facilities have been fully taken into account;
- the discount rate used by the CNP (for the part not covered by the agreement with the Belgian government) is 3.0% (including inflation of 2.0%).

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. Certain ONDRAF recommendations from the 2022 triennial revision of nuclear provisions that could not yet be quantified will be specifically examined under the oversight of the CNP within the context of the next triennial review.

Sensitivity

Following the assumption by the Belgian State of all obligations relating to nuclear waste after its transfer to ONDRAF, the Group will only remain exposed to changes in future storage and conditioning costs and the corresponding discounting inputs prior to the transfer:

- the costs of building dry storage facilities and purchasing fuel element containers at the Group's sites could differ from those covered by the provisions. A 10% change in these costs, still to incur would represent a €60 million change in provisions;
- a 10% change in the annual operating costs of the storage facilities would result in a €30 million change in the provision;
- a 25 basis point change in the discount rate would result in a €40 million adjustment to non-transferred provisions. A fall in the discount rate would lead to an increase in outstanding provisions, while a rise in the discount rate would reduce the provisions' amount.

It should be noted that the risk of exceeding volumetric credits is considered, at this stage, to be highly unlikely, as the volumetric credits established in the agreement have incorporated the volumetric contingencies estimated as part of the provision review in 2022.

17.2.3 Provisions for dismantling nuclear facilities

ACCOUNTING STANDARDS

A provision is recognized when the Group has a present legal or constructive obligation to dismantle facilities or to restore a site. The present value of the obligation at the time of commissioning represents the initial amount of the provision for dismantling with, as the counterpart, an asset for the same amount, which is included in the carrying amount of the facilities concerned. This asset is depreciated over the operating life of the facilities and is included in the scope of assets subject to impairment tests. Adjustments to the provision due to subsequent changes in (i) the expected outflow of resources, (ii) the timing of dismantling expenses or (iii) the discount rate, are deducted from or subject to specific conditions, added to the cost of the corresponding asset. The impacts of unwinding the discount each year are recognized in expenses for the period.

A provision is also recorded for nuclear units for which the Group holds a capacity right up to its share of the expected dismantling costs to be borne by the Group.

At the end of their operating life, the nuclear power plants must be shut down for the period during which spent fuel is unloaded from the plant, and until the site is decommissioned and cleaned up.

The dismantling strategy is based on the facilities being dismantled (i) immediately after the reactor is shut down, (ii) on a mass basis rather than on a unit-by-unit basis, and (iii) completely, the land being subsequently returned to greenfield status.

Until December 31, 2022, the amount of these dismantling provisions included costs related to handling Class A – low or medium activity and short-lived – and B – low or medium activity and long-lived – dismantling waste, that were determined using the fee rate set by ONDRAF and approved by its Board of Directors in May 2022. As a result of the agreement, financial responsibility for all Category A and B waste management operations conditioned in accordance with the contractual transfer criteria will henceforth lie with the State, in return for payment of the lump sum discharge amount described in Section 17.2.2 above. The Group will transfer this liability when the laws transposing this agreement come into force, for a total of €1 billion$_{2022}$ for category B waste, and when the extended units are restarted at the end of 2025, for a total of €3.5 billion$_{2022}$ for category A waste.

The Group only remains responsible for the final shutdown and dismantling, including the conditioning of Category A and B waste from these operations in accordance with the contractual transfer criteria. At December 31, 2023, provisions for dismantling nuclear facilities are calculated based on the following inputs:

- the start of the technical shutdown procedures depends on the unit concerned and on the timing of operations for the whole nuclear reactor. The shutdown procedures are immediately followed by dismantling operations;
- the scenario adopted is based on a dismantling program and on timetables that must be approved by the nuclear safety authorities. The safety conditions for the shutdown phases have been defined with the Belgian Federal Agency for Nuclear Control (AFCN) for the Doel 3 and Tihange 2 units that have already been shut down. The safety conditions for the dismantling phase have not yet been determined. The costs may change depending on the outcome of these discussions and the detailed schedule for the implementation of these phases which is currently being defined;
- costs payable over the long term are calculated by reference to the estimated costs for each nuclear facility, based on a study conducted by independent experts under the assumption that the facilities will be dismantled on a mass basis. The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment;
- fees for handling category A – low or medium activity and short-lived – and B – low or medium activity and long-lived – dismantling waste are determined using the fee rate set by ONDRAF and approved by its Board of Directors in May 2022;
- for the various phases, margins for contingencies, reviewed by ONDRAF and the Commission for Nuclear Provisions, are included;
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- the discount rate used by the CNP is 2.5% (including inflation of 2.0%)

The 10-year extension of the Doel 4 and Tihange 3 units provided for in the agreement "deoptimizes" the systematic dismantling of the various units. The State is expected to cover the related additional provisions that are currently estimated at between €500 and €600 million. Pending an agreement on the exact amount under the oversight of the CNP, this additional liability paid in the form of a lump sum by the Belgian State at the time of closing has not been included in the financial statements. If the additional costs are not fully covered by the State, the Group may have to bear a portion of this additional liability.

Lastly, the Group sets aside provisions to cover the costs relating to the final shutdown phase of its drawing rights in Tricastin and Chooz B, as well as for the dismantling period leading to the decommissioning and clean-up of the Chooz B site, in accordance with the respective agreements with EDF. These are based on provisions for Belgian assets that most closely resemble these power plants, and are updated in line with revisions by the CNP.

Sensitivity

In light of the agreement, the Group will only be responsible for shutdown and dismantling, including conditioning of the nuclear waste arising from these operations, in accordance with the contractual transfer criteria. The Group's remaining liability is estimated at €6.7 billion$_{2022}$ in the draft law implementing the agreement.

- a 10% change in shutdown costs of the units would lead to a change in the provisions of around €200 million;
- a 10% change in unit dismantling costs would lead to a change of around €400 million in nuclear provisions;
- a 25 basis point change in the discount rate would lead to an adjustment of approximately €170 million in the provisions. A fall in the discount rate would lead to an increase in outstanding provisions, while a rise in the discount rate would reduce the provisions' amount.

17.2.4 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

As indicated above, the Belgian law of July 12, 2022, partially repealing and amending the law of April 11, 2003, granted the Group's wholly-owned subsidiary Synatom responsibility for managing and investing funds received from operators of nuclear power plants in Belgium and intended to cover the costs of dismantling nuclear power plants and managing spent fuel. Pursuant to the law of April 11, 2003, Synatom could lend up to 75% of these funds to nuclear power plant operators provided that certain credit quality criteria are met.

The amount of outstanding loans between Synatom and nuclear operators, representing the countervalue of provisions for spent fuel management, will be repaid to Synatom by December 31, 2025, and the amount of outstanding loans between Synatom and Electrabel, representing the countervalue of provisions for dismantling, will be repaid by September 30, 2031.

The percentage of the provisions not subject to loans to nuclear operators is invested by Synatom either in external financial assets or in loans to legal entities meeting the "credit quality" criteria imposed by law.

Synatom invested just over €3 billion in such assets in 2023.

Synatom's objective for its investment in these assets has been adapted in light of the agreement. The objective is:

- for the portion to be liquidated at closing, to maintain the value of the underlying assets by investing in predominantly money-market instruments providing a return at least equivalent to the indexation of the fee amounts fixed at 3%;
- for the investments aimed at covering the Group's remaining liabilities, to ensure a sufficient return with an acceptable level of risk in order to cover dismantling costs and the costs of storing radioactive fissile material, under the constraints of diversification, risk minimization and availability as defined by the law of July 12, 2022.

The Synatom Board of Directors and its Investment Committee are responsible for defining Synatom's investment policy after consultation with the CNP, in accordance with the law of July 12, 2022. Based on a rigorous risk control policy, the Investment Committee oversees investment decisions, which are managed by a team headed by an Investment Director.

The value of financial assets dedicated to covering nuclear provisions amounted to €9,984 million at December 31, 2023, and their return was 5.01% for the year. The year 2023 was marked by the gradual re-exposure of the portfolio to recovering markets, following a year marked by the downward volatility of global equity and bond markets. However, this re-exposure had to be put on hold following the government's request, as part of the agreement, to be paid the fixed fees linked to the cost of nuclear waste treatment in cash rather than in dedicated assets.

17.2.4.1 Valuation of financial assets in 2023

Loans to entities outside the Group and other cash investments are shown in the table below:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Loans to third parties	3	5
Loan to Sibelga	3	5
Other loans and receivables at amortized cost	3,777	2,270
Debt instruments – restricted cash UCITS	3,777	2,270
Total loans and receivables at amortized cost	**3,780**	**2,276**
Equity and debt instruments at fair value	1,640	863
Equity instruments at fair value through other comprehensive income	25	24
Equity instruments at fair value through income	1,665	887
Debt instruments at fair value through other comprehensive income	1,873	2,418
Debt instruments at fair value through income	2,663	933
Debt instruments at fair value	4,536	3,350
Total equity and debt instruments at fair value	**6,201**	**4,237**
Derivative instruments	**3**	**113**
TOTAL (1)	**9,984**	**6,626**

(1) Not including €307 million in uranium inventories at December 31, 2023 (€308 million at December 31, 2022).

Loans to legal entities outside the Group and the cash held by the Undertaking for Collective Investment in Transferable Securities (UCITS) are presented in the statement of financial position under "Loans and receivables at amortized cost". Bonds and associated hedging instruments held by Synatom through the UCITS are presented under equity or debt instruments (see Note 14.1 "Financial assets").

The breakdown in the change in the cumulative fair value of Synatom's assets is presented as follows:

	Cumulative change in the fair value of dedicated financial assets	
In millions of euros	**Dec. 31, 2023**	**Dec. 31, 2022**
Equity instruments at fair value through other comprehensive income	88	(157)
Debt instruments at fair value through other comprehensive income	(101)	(282)
Debt instruments at fair value through income	122	(52)
TOTAL	**108**	**(491)**

The net loss for the period generated by these assets amounted to €184 million in 2023 (loss of €217 million in 2022).

	Effects on the result of the return on dedicated financial assets	
In millions of euros	**Dec. 31, 2023**	**Dec. 31, 2022**
Disposal proceeds	(312)	14
Return on assets	71	66
Change in fair value of derivatives not designated as hedges	(108)	(15)
Change in fair value of dedicated assets through income	167	(282)
TOTAL	**(184)**	**(217)**

17.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

17.3.1 Dismantling obligations arising on non-nuclear plant and equipment

Certain items of plant and equipment, including conventional power stations, transmission and distribution pipelines, storage facilities and LNG terminals, have to be dismantled at the end of their operational lives or at least safely shut down. These obligations are the result of prevailing environmental regulations in the countries concerned, contractual agreements, or an implicit Group commitment. The most important issue for the Group concerns gas infrastructures in France.

France's political and societal guidelines for the energy transition aim to achieve carbon neutrality by 2050, by reducing greenhouse gas emissions and promoting renewable or so-called "green" energies, particularly biomethane and hydrogen. The various scenarios that make it possible to achieve carbon neutrality, in particular the National Low Carbon Strategy in France, the French Environment and Energy Management Agency (ADEME) scenarios, and the "Energy Futures" prospective study by the electricity transmission system operator, RTE, all lead to a significant decrease in the quantities of gas consumed, while maintaining a high number of gas connection points to manage peak electricity demand. The Group is closely analyzing this prospect, particularly for the purpose of defining its strategy and assessing the useful life of assets and evaluating provisions for their possible dismantling.

The future French Strategy for Energy and Climate (SFEC) will set out France's updated roadmap to achieve carbon neutrality by 2050 and ensure that France can adapt to the impacts of climate change. It will encompass the first five-year programming law on energy and the climate (LPEC), which must be adopted in 2024 and set out in the National Low-Carbon Strategy (SNBC, 3rd issue), the National Climate Change and Adaptation Plan (PNACC, 3rd issue) and the Long Term Energy Schedule (PPE 2024-2033), which are all to be adopted in the first half of 2024. Consequently, the next five-year review of the PPE and the SNBC will be preceded for the first time by the adoption of a programming law on energy and the climate, which will set the French policy for energy and climate's priorities for action.

In line with the objective of carbon neutrality by 2050, the long-term scenario adopted by the Group, which governs the implementation of its strategy, is one that combines reasonable electrification, *i.e.* just under 50% of final demand in 2050, with the development of a diversified range of green gases (biomethane, synthesized e-CH4, natural gas with the Carbon-Capture and Storage process, pure hydrogen). The scenario used by the Group is close to the ADEME's S3 scenario.

Due to the importance of green gases in the French energy mix scheduled for 2050 and beyond, gas infrastructures will remain largely necessary and will be essential to provide flexibility to the energy system. The adaptation and conversion of these infrastructures to green gas mean that they can be used in the very distant future, which means that the present value of dismantling provisions is almost zero, except in the specific cases of LNG terminals and reduced operation and non-regulated storage sites mainly in France and Germany, for which provisions for dismantling amounted to €326 million at December 31, 2023 and €359 million at December 31, 2022.

Given its time horizon and developments in French and European public policies, the Group will continue to assess the long-term scenario that will enable it to achieve carbon neutrality by 2050 on a regular basis. These assessments will be accompanied by a review of the valuation of dismantling provisions.

17.3.2 Hazelwood Power Station & Mine (Australia)

The Group and its partner Mitsui announced in November 2016 their decision to close the coal-fired Hazelwood Power Station, and cease coal extraction operations from the adjoining mine from late March 2017. The Group holds a 72% interest in the former 1,600 MW power station and adjoining coal mine, which has been consolidated as a joint operation.

At December 31, 2023, the Group's share (72%) of the provision covering the obligation to dismantle and rehabilitate the mine amounted to €280 million, *versus* €220 million at December 31, 2022. The updating of certain provision inputs has resulted in an increase of around €90 million.

Dismantling and site rehabilitation work commenced in 2017 and focused on: managing site contamination; planning site wide environmental clean-up; the demolition and dismantling of all of the site's industrial facilities, including the former power station; and ongoing aquifer pumping and designated earthworks within the mine to ensure mine floor and batter stability with a view to long-term rehabilitation into a pit lake.

The ultimate regulatory obligations are likely to be revised during the life of the project and could therefore have an impact on provisions.

The amount of the provision recognized is based on the Group's best current estimate of the demolition and rehabilitation costs that Hazelwood is expected to incur. However, the amount of this provision may be adjusted in the future to take into account any changes in the key inputs.

17.4 Other contingencies

This caption essentially includes provisions for commercial litigation, tax claims and disputes (except income tax, pursuant to IFRIC 23) as well as provisions for onerous contracts relating to storage and transport capacity reservation contracts.

NOTE 18 Post-employment benefits and other long-term benefits

ACCOUNTING STANDARDS

Depending on the laws and practices in force in the countries where the Group operates, Group companies have obligations in terms of pensions, early retirement payments, retirement bonuses and other benefit plans. Such obligations generally apply to all employees within the companies concerned.

The Group's obligations in relation to pensions and other employee benefits are recognized and measured in compliance with IAS 19. Accordingly:

- the cost of defined contribution plans is expensed based on the amount of contributions payable in the period;
- the Group's obligations concerning pensions and other employee benefits payable under defined benefit plans are assessed on an actuarial basis using the projected unit credit method. These calculations are based on assumptions relating to mortality, staff turnover and estimated future salary increases, as well as the economic conditions specific to each country or entity of the Group. Discount rates are determined by reference to the yield, at the measurement date, on investment grade corporate bonds in the related geographical area (or on government bonds in countries where no representative market for such corporate bonds exists).

Pension commitments are measured on the basis of actuarial assumptions. The Group considers that the assumptions used to measure its obligations are relevant and documented. However, any change in these assumptions could have a significant impact on the resulting calculations.

Provisions are recorded when commitments under these plans exceed the fair value of plan assets. Where the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under "Other assets" (current or non-current).

As regards post-employment benefit obligations, actuarial gains and losses are recognized in other comprehensive income. Where appropriate, adjustments resulting from applying the asset ceiling to net assets relating to overfunded plans are treated in a similar way. However, actuarial gains and losses on other long-term benefits such as long-service awards, are recognized immediately in profit or loss.

Net interest on the net defined benefit liability (asset) is presented in net financial income/(loss).

18.1 Description of the main pension plans

18.1.1 Companies belonging to the Electricity and Gas Industries sector in France

Since January 1, 2005, the CNIEG (Caisse Nationale des Industries Électriques et Gazières) has operated the pension, disability, death, occupational accident and occupational illness benefit plans for electricity and gas industry (hereinafter "EGI") companies in France. The CNIEG is a social security legal entity under private law placed under the joint responsibility of the ministries in charge of social security and the budget.

Employees and retirees of EGI sector companies have been fully affiliated to the CNIEG since January 1, 2005. The main affiliated Group entities are ENGIE SA, GRDF, GRTgaz, Elengy, Storengy, ENGIE Thermique France, CPCU, CNR and SHEM.

Following the funding reform of the special EGI pension plan introduced by Law No. 2004-803 of August 9, 2004 and its implementing decrees, specific benefits (pension benefits on top of the standard benefits payable under ordinary law) already vested at December 31, 2004 ("past specific benefits") were allocated between the various EGI entities. Past specific benefits (benefits vested at December 31, 2004) relating to regulated transmission and distribution businesses ("regulated past specific benefits") are funded by the levy on gas and electricity transmission and distribution services (*Contribution Tarifaire d'Acheminement*) and therefore no longer represent an obligation for the ENGIE group. Unregulated past specific benefits (benefits vested at December 31, 2004) are funded by EGI sector companies to the extent defined by Decree No. 2005-322 of April 5, 2005.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective weight in terms of payroll costs within the EGI sector.

As this plan is a defined benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated businesses and specific benefits vested by employees of regulated businesses since January 1, 2005. This provision also covers the Group's early retirement obligations. The provision amount may be subject to fluctuations based on the weight of the Group's companies within the EGI sector. The special EGI pension plan has been closed to new entrants since September 1, 2023.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2023, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €2.73 billion.

The duration of the pension benefit obligation of the EGI pension plan is 19 years.

18.1.2 Companies belonging to the electricity and gas sector in Belgium

In Belgium, the rights of employees in electricity and gas sector companies, principally Electrabel, Laborelec and some ENGIE Energy Management Trading and ENGIE CC employee categories, are governed by collective bargaining agreements.

These agreements, applicable to "wage-rated" employees recruited prior to June 1, 2002 and managerial staff recruited prior to May 1, 1999, specify the benefits entitling employees to a supplementary pension equivalent to 75% of their most recent annual income, for a full career and in addition to the statutory pension. These top-up pension payments provided under defined benefit plans are partly reversionary. In practice, the benefits are paid in the form of a lump sum for the majority of plan participants. Most of the obligations resulting from these pension plans are financed through pension funds set up for the electricity and gas sector and by certain insurance companies. Pre-funded pension plans are financed by employer and employee contributions. Employer contributions are calculated annually based on actuarial assessments.

The actuarial "pension" liability relating to these plans amounted to €1.22 billion at December 31, 2023. The average duration of these plans is nine years.

"Wage-rated" employees recruited after June 1, 2002 and managerial staff (i) recruited after May 1, 1999 or (ii) having opted for the transfer through defined contribution plans, are covered under defined contribution plans. Prior to January 1, 2017, the law specified a minimum average annual return (3.75% on wage contributions and 3.25% on employer contributions) when savings are liquidated.

The law on supplementary pensions, approved on December 18, 2016 and enforced on January 1, 2017 henceforth specifies a minimum rate of return, depending on the actual rate of return of Belgian government bonds, within a range of 1.75%-3.25% (the rates are now identical for employee and employer contributions). In 2023, the minimum rate of return stood at 1.75%.

An expense of €42 million was recognized in 2023, and €38 million in 2022 in respect of these defined contribution plans.

18.1.3 Other pension plans

Most other Group companies also grant their employees retirement benefits. In terms of financing, pension plans within the Group are almost equally split between defined benefit and defined contribution plans.

The Group's main pension plans outside France and Belgium concern:

- the United Kingdom: the large majority of defined benefit pension plans are now closed to new entrants and future benefits no longer vest under these plans. All entities run a defined contribution scheme. The pension obligations of International Power's subsidiaries in the United Kingdom are covered by the special Electricity Supply Pension Scheme (ESPS). The assets of this defined benefit scheme are invested in separate funds. Since June 1, 2008, the scheme has been closed and a defined contribution plan has been set up for new entrants;
- Germany: the Group's German subsidiaries have closed their defined benefit plans to new entrants and now offer defined contribution plans;
- Brazil: ENGIE Brasil Energia operates its own pension scheme. This scheme has been split into two parts, one for the (closed) defined benefit plan, and the other for the defined contribution plan that has been available to new entrants since the beginning of 2005.

18.2 Description of other post-employment benefit obligations and other long-term benefits

18.2.1 Other benefits granted to current and former EGI sector employees

Other benefits granted to EGI sector employees are:

- post-employment benefits:
  - reduced energy prices,
  - end-of-career indemnities,
  - bonus leave;
  - death capital benefits;
- long-term benefits:
  - allowances for occupational accidents and illnesses,
  - temporary and permanent disability allowances,
  - length-of-service awards.

The Group's main obligations are described below.

18.2.1.1 Reduced energy prices

Under Article 28 of the national statute for electricity and gas industry personnel, all employees (current and former employees, provided they meet certain length-of-service conditions) are entitled to benefits in kind, which take the form of reduced energy prices known as “employee rates”.

This benefit entitles employees to electricity and gas supplies at a reduced price. For retired employees, this provision represents a post-employment defined benefit. Retired employees are only entitled to the reduced rate if they have completed at least 15 years' service within EGI sector companies. In accordance with the agreements signed with EDF in 1951, ENGIE provides gas to all current and former employees of ENGIE and EDF, while EDF supplies electricity to these same beneficiaries. ENGIE pays (or benefits from) the balancing contribution payable in respect of its employees as a result of energy exchanges between the two utilities.

The obligation to provide energy at a reduced price to current and former employees during their retirement is measured as the difference between the energy sale price and the preferential rate granted to employees.

The provision set aside in respect of reduced energy prices stood at €2.97 billion at December 31, 2023. The duration of the obligation is 19 years.

18.2.1.2 End-of-career indemnities

Retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities, which increase in line with the length of service within the EGI sector.

18.2.1.3 Compensation for occupational accidents and illnesses

EGI sector employees are entitled to compensation for accidents at work and occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries undergone on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

18.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other post-employee benefits such as the reimbursement of medical expenses, electricity and gas price reductions, as well as length-of-service awards and early retirement schemes. These benefits are not prefunded, with the exception of the special *allocation transitoire* termination indemnity, considered as an end-of-career indemnity.

18.2.3 Other collective agreements

Most other Group companies also grant their staff post-employment benefits (early retirement plans, medical coverage, benefits in kind, etc.) and other long-term benefits such as jubilee and length-of-service awards.

18.3 Defined benefit plans

18.3.1 Amounts presented in the statement of financial position and statement of comprehensive income

In accordance with IAS 19, the information presented in the statement of financial position relating to post-employment benefit obligations and other long-term benefits results from the difference between the gross projected benefit obligation and the fair value of plan assets. A provision is recognized if this difference is positive (net obligation), while a prepaid benefit cost is recorded in the statement of financial position when the difference is negative, provided that the conditions for recognizing the prepaid benefit cost are met.

Changes in provisions for pension plans, post-employment benefits and other long-term benefits, plan assets and reimbursement rights recognized in the statement of financial position are as follows:

In millions of euros	Provisions	Plan assets	Reimbursement rights
AT DECEMBER 31, 2022	**(4,471)**	**316**	**208**
Exchange rate differences	6	1	-
Changes in scope of consolidation and other	(3)	3	25
Actuarial gains and losses	(645)	44	-
Periodic pension cost	(403)	(89)	9
Contributions/benefits paid	308	14	1
AT DECEMBER 31, 2023	**(5,208)**	**289**	**244**

Plan assets and reimbursement rights are presented in the statement of financial position under “Other non-current assets” or “Other current assets”.

The cost recognized for the period amounted to €492 million in 2023 (€354 million in 2022). The components of this defined benefit cost in the period are set out in Note 18.3.3 “Components of the net periodic pension cost”.

The Eurozone represented 97% of the Group's net obligation at December 31, 2023, (98% at December 31, 2022).

Cumulative actuarial gains and losses recognized in equity amounted to €1,979 million at December 31, 2023, compared to €1,400 million at December 31, 2022.

Net actuarial differences arising in the period and presented on a separate line in the statement of comprehensive income represented a net actuarial loss of €601 million in 2023 and a gain of €2,774 million in 2022.

18.3.2 Change in benefit obligations and plan assets

The table below shows the amount of the Group's projected benefit obligations and plan assets, changes in these items during the periods presented, and their reconciliation with the amounts reported in the statement of financial position:

		Dec. 31, 2023				Dec. 31, 2022			
In millions of euros		**Pension benefit obligations (1)**	**Other post-employment benefit obligations (2)**	**Long-term benefit obligations (3)**	**Total**	**Pension benefit obligations (1)**	**Other post-employment benefit obligations (2)**	**Long-term benefit obligations (3)**	**Total**
A – CHANGE IN PROJECTED BENEFIT OBLIGATION									
Projected benefit obligation at January 1		**(5,565)**	**(3,308)**	**(395)**	**(9,268)**	**(7,566)**	**(4,649)**	**(499)**	**(12,715)**
Service cost		(168)	(48)	(33)	(248)	(229)	(97)	(45)	(372)
Interest expense		(245)	(123)	(16)	(384)	(124)	(60)	(6)	(190)
Contributions paid		(9)	-	-	(9)	(8)	-	-	(8)
Amendments		(82)	27	(1)	(56)	-	-	-	-
Changes in scope of consolidation		-	-	-	-	10	2	-	12
Curtailments/settlements		8	5	1	14	(87)	-	-	(87)
Financial actuarial gains and losses		(163)	(233)	(33)	(430)	2,118	1,390	81	3,590
Demographic actuarial gains and losses		(110)	25	-	(85)	8	(4)	34	39
Benefits paid		378	127	43	549	346	110	39	495
Other (of which translation adjustments)		(11)	-	(1)	(11)	(33)	-	(1)	(34)
Projected benefit obligation at December 31	**A**	**(5,966)**	**(3,529)**	**(433)**	**(9,928)**	**(5,565)**	**(3,308)**	**(395)**	**(9,268)**
B – CHANGE IN FAIR VALUE OF PLAN ASSETS									
Fair value of plan assets at January 1		**5,181**	-	-	**5,181**	**5,843**	-	-	**5,843**
Interest income on plan assets		214	-	-	214	97	-	-	97
Financial actuarial gains and losses		(119)	-	-	(119)	(739)	-	-	(739)
Contributions received		91	-	-	91	133	-	-	133
Changes in scope of consolidation		-	-	-	-	3	-	-	3
Settlements		-	-	-	-	81	-	-	81
Benefits paid		(308)	-	-	(308)	(260)	-	-	(260)
Other (of which translation adjustments)		9	-	-	9	22	-	-	22
Fair value of plan assets at December 31	**B**	**5,067**	-	-	**5,067**	**5,181**	-	-	**5,181**
C – FUNDED STATUS	**A+B**	**(899)**	**(3,529)**	**(433)**	**(4,861)**	**(384)**	**(3,308)**	**(395)**	**(4,087)**
Asset ceiling		(58)	-	-	(58)	(68)	-	-	(68)
Net benefit obligation		**(957)**	**(3,529)**	**(433)**	**(4,919)**	**(452)**	**(3,308)**	**(395)**	**(4,155)**
ACCRUED BENEFIT LIABILITY		**(1,246)**	**(3,529)**	**(433)**	**(5,208)**	**(768)**	**(3,308)**	**(395)**	**(4,471)**
PREPAID BENEFIT COST		**289**	-	-	**289**	**316**	-	-	**316**

(1) Pensions and retirement bonuses.
(2) Reduced energy prices, healthcare, gratuities and other post-employment benefits.
(3) Length-of-service awards and other long-term benefits.

18.3.3 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined benefit obligations for the years ended December 31, 2023 and 2022 breaks down as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Current service cost	248	372
Actuarial gains and losses (1)	32	(116)
Gains or losses on pension plan curtailments, terminations and settlements (2)	42	6
Total accounted for under current operating income including operating MtM and share in net income of equity method entities	**322**	**261**
Net interest expense	170	93
Total accounted for under net financial income/(loss)	**170**	**93**
TOTAL	**492**	**354**

(1) On the long-term benefit obligation.
(2) Including the €56 million impact of the pension reform in 2023 on the IEG plan.

18.3.4 Funding policy and strategy

When defined benefit plans are funded, the related plan assets are invested in pension funds and/or with insurance companies, depending on the investment practices specific to the country concerned. The investment strategies underlying these defined benefit plans are aimed at striking the right balance between return on investment and acceptable levels of risk.

The objectives of these strategies can be summarized as follows: to maintain sufficient liquidity to cover pension and other benefit payments; and as part of risk management, to achieve a long-term rate of return higher than the discount rate or, where appropriate, at least equal to future required returns.

When plan assets are invested in pension funds, investment decisions are the responsibility of the fund management concerned. For French companies, where plan assets are invested with an insurance company, the latter manages the investment portfolio for unit-linked policies or euro-denominated policies, in a manner adapted to the risk and long-term profile of the liabilities.

The funding of these obligations for each of the periods presented can be analyzed as follows:

In millions of euros	Projected benefit obligation	Fair value of plan assets	Asset ceiling	Total net obligation
Underfunded plans	(4,063)	3,382	(56)	(737)
Overfunded plans	(1,365)	1,686	(2)	319
Unfunded plans	(4,501)	-	-	(4,501)
AT DECEMBER 31, 2023	**(9,929)**	**5,068**	**(58)**	**(4,919)**
Underfunded plans	(3,886)	3,391	(63)	(558)
Overfunded plans	(1,360)	1,788	(4)	424
Unfunded plans	(4,021)	-	-	(4,021)
AT DECEMBER 31, 2022	**(9,267)**	**5,180**	**(68)**	**(4,156)**

The allocation of plan assets by principal asset category can be analyzed as follows:

In %	Dec. 31, 2023	Dec. 31, 2022
Equity investments	26	27
Sovereign bond investments	26	25
Corporate bond investments	33	35
Money market securities	4	4
Real estate	3	2
Other assets	8	8
TOTAL	**100**	**100**

All plan assets were quoted on an active market at December 31, 2023.

The actual return on assets of EGI sector companies stood at a positive 7.7% in 2023.

In 2023, the actual return on plan assets of Belgian entities amounted to approximately a positive 6.9% in Group insurance and a positive 9.3% in pension funds.

The allocation of plan asset categories by geographic area of investment can be analyzed as follows:

In %	Europe	North America	Latin America	Asia – Oceania	Rest of the World	Total
Equity investments	45	34	7	12	2	100
Sovereign bond investments	74	3	19	1	3	100
Corporate bond investments	64	27	1	5	4	100
Money market securities	29	-	3	-	68	100
Real estate	68	3	5	-	24	100
Other assets	10	-	-	-	89	100

18.3.5 Actuarial assumptions

Actuarial assumptions are determined individually by country and company in conjunction with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

		Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
		2023	2022	2023	2022	2023	2022	2023	2022
Discount rate	Eurozone	3.5%	3.8%	3.5%	3.8%	3.5%	3.8%	3.5%	3.8%
	UK Zone	5.2%	4.1%	-	-	-	-	-	-
Inflation rate	Eurozone	2.0%	2.1%	2.0%	2.1%	2.0%	2.1%	2.0%	2.1%
	UK Zone	3.5%	3.9%	-	-	-	-	-	-

18.3.5.1 Discount and inflation rates

The discount rate applied is determined based on the yield, at the date of the calculation, of investment grade corporate bonds with maturities mirroring the term of the plan.

The rates were determined for each monetary area based on data for AA corporate bond yields. For the Eurozone, data (from Bloomberg) are extrapolated on the basis of government bond yields for long maturities.

According to the Group's estimates, a 100-basis-point increase (decrease) in the discount rate would result in a decrease (increase) of approximately 13% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase (decrease) in the inflation rate (with an unchanged discount rate) would result in an increase (decrease) of approximately 13% in the projected benefit obligation.

18.3.6 Estimated employer contributions payable in 2024 under defined benefit plans

The Group expects to pay around €207 million in contributions into its defined benefit plans in 2024, including €103 million for EGI sector companies. Annual contributions in respect of EGI sector companies will be made by reference to rights vested during the year, taking into account the funding level for each entity in order to even out contributions over the medium term.

18.4 Defined contribution plans

In 2023, the Group recorded a €92 million expense in respect of amounts paid into Group defined contribution plans of which €8 million concerning multi-employer plans in Netherlands (compared with €91 million in 2022, of which €9 million concerned multi-employer plans in the Netherlands). These contributions are recorded under "Personnel costs" in the consolidated income statement.

NOTE 19 Share-based payments

ACCOUNTING STANDARDS

Under IFRS 2, share-based payments made in consideration for services provided are recognized as personnel costs. These services are measured at the fair value of the instruments awarded.

The fair value of bonus share plans is estimated by reference to the share price at the grant date, taking into account the fact that no dividend is payable over the vesting period, and based on the estimated turnover rate for the employees concerned and the probability that the Group will meet its performance targets. The fair value measurement also takes into account the non-transferability period associated with these instruments. The cost of shares granted to employees is expensed over the vesting period of the rights and offset against equity.

A Monte Carlo pricing model is used for performance shares granted on a discretionary basis and subject to external performance criteria.

Expenses recognized in respect of share-based payments break down as follows:

	Expense for the year	
In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Employee share issues [(1)]	1	(49)
Bonus/performance share plans [(2) (3)]	(46)	(40)
Other Group companies' plans	-	(3)
TOTAL	**(45)**	**(92)**

(1) *Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.*
(2) *Following the review of performance conditions, the expense has not been adjusted in 2023 (an additional expense of €4.2 million was recognized in 2022).*
(3) *Following the review of continuing employment, the expense was not adjusted in 2023 (a reversal of €9,8 million was recognized in 2022).*

19.1 Performance shares

19.1.1 New awards in 2023

No award of performance shares to members of the Group's executive or senior management has been made in 2023.

19.1.2 Review of internal performance conditions applicable to the plans

In addition to the condition of continuing employment within the Group, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in accordance with the plans' regulations, leading to a decrease in the total expense recognized in relation to the plans in accordance with IFRS 2. Performance conditions are reviewed at each reporting date.

NOTE 20 Related party transactions

This note describes material transactions between the Group and its related parties.

Compensation payable to key management personnel is disclosed in Note 21 "Executive compensation".

Transactions with joint ventures and associates are described in Note 3 "Investments in equity method entities".

Only material transactions are described below.

20.1 Relations with the French State and with entities owned or partly owned by the French State

20.1.1 Relations with the French State

The French State's interest in the Group at December 31, 2023 remained unchanged at 23.64% compared with the previous year. This entitles it to three of the fourteen seats on the Board of Directors (one Director representing the State appointed by decree, and two Directors appointed by the Shareholders' Meeting at the proposal of the State).

The French State holds 33.80% of the theoretical voting rights (33.95% of exercisable voting rights) compared with 33.56% at end-2022.

On May 22, 2019, the PACTE Law ("Action plan for business growth and transformation") was enacted, enabling the French State to dispose of its ENGIE shares without restriction.

In addition, the French State holds a golden share aimed at protecting France's critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE if it considers they could harm France's interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals and revenues from storage capacities, are all regulated.

The Law on Energy and Climate enacted on November 8, 2019 provided for the phase out of regulated gas tariffs and the restriction of regulated electricity tariffs to residential consumers and small businesses. Regulated gas tariffs were phased out on July 1, 2023.

20.1.2 Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks. Enedis SA, a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and December 31, 2007, respectively, and act in accordance with the agreement previously signed by the two incumbent operators. With the deployment of smart meters for both electricity and gas, the "common" activities operated by the two distributors evolved significantly. The remaining mixed activities are mainly in the areas of inventory management, human resources, the medical field, local IT and accountancy.

20.2 Relations with the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of the Group who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées* – ENN), are described in Note 18 "Post-employment benefits and other long-term benefits".

NOTE 21 Executive compensation

The executive compensation presented below includes the compensation of the members of the Group's Executive Committee and Board of Directors.

The Executive Committee had ten members at December 31, 2023 and at December 31, 2022.

Their compensation breaks down as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Short-term benefits	23	34
Post-employment benefits	-	-
Share-based payments	4	4
Termination benefits	-	-
TOTAL	**27**	**37**

NOTE 22 Working capital requirements, inventories, other assets and other liabilities

ACCOUNTING STANDARDS

In accordance with IAS 1, the Group's current and non-current assets and liabilities are shown separately in the consolidated statement of financial position. For most of the Group's activities, the breakdown into current and non current items is based on when assets are expected to be realized, or liabilities extinguished. Assets expected to be realized or liabilities extinguished within 12 months of the reporting date are classified as current, while all other items are classified as non-current.

Inventories

Inventories are measured at the lower of cost and net realizable value. Net realizable value corresponds to the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories is determined based on the first-in, first-out method or the weighted average cost formula.

Nuclear fuel purchased is consumed in the process of producing electricity over a number of years. The consumption of this nuclear fuel inventory is recorded based on estimates of the quantity of electricity produced per unit of fuel.

Gas inventories

Gas injected into underground storage facilities includes working gas, which can be extracted without adversely affecting the subsequent operation of the reservoirs, and cushion gas, which is inseparable from the reservoirs and essential for their operation (see Note 13.3 "Property, plant and equipment").

Working gas is classified in inventories and measured at weighted average purchase cost upon entering the transportation network regardless of its source, including any regasification costs.

Group inventory outflows are valued using the weighted average unit cost method.

Certain inventories are used for trading purposes and are recognized at fair value less selling costs, in accordance with IAS 2. Any changes in said fair value are recognized in the consolidated income statement for the year in which they occur.

Greenhouse gas emission rights, energy saving certificates and green certificates

In the absence of specific IFRS standards or IFRIC interpretations on accounting for greenhouse gas emission allowances, energy saving certificates and green certificates, the Group has decided to recognize certificates in inventories at their acquisition or production cost. At the reporting date, a liability is recognized if the certificates held by the Group are insufficient to meet the obligation to return certificates to the French government. When not covered by the certificates held in inventories, the liability is measured at the market value or based on the price of any future contracts that have been entered into, when applicable.

Tax equity

The ENGIE group finances its renewables projects in the United States through tax equity structures, in which part of the necessary funds is provided by a tax partner. The tax partner obtains, up to a pre-determined level, a preferential right essentially to the project's tax credits, which it can deduct from its own tax base.

The tax partner's investments meet the definition of a liability under IFRS. Since the tax equity liability corresponding to these tax benefits does not give rise to any cash outflow for the project entity, it does not represent a financial debt and is accounted for in "Other liabilities".

Besides the unwinding effect, the liability changes mainly in line with the tax credits allocated to the tax partner and recognized in profit or loss.

22.1 Composition of change in working capital requirements

In millions of euros	Change in working capital requirements at Dec. 31, 2023	Change in working capital requirements at Dec. 31, 2022
Inventories	3,003	(2,115)
Trade and other receivables, net	12,507	(11,614)
Trade and other payables, net	(13,554)	8,521
Tax and employee-related receivables/payables	(325)	1,545
Margin calls and derivative instruments hedging commodities relating to trading activities	(1,113)	199
Other	(120)	1,040
TOTAL	**397**	**(2,424)**

22.2 Inventories

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Inventories of natural gas, net	2,218	4,628
Inventories of uranium (1)	307	308
CO_2 emissions allowances, green certificates and energy saving certificates, net	1,535	1,788
Inventories of commodities other than gas and other inventories, net	1,283	1,420
TOTAL	**5,343**	**8,145**

(1) Financial hedging instruments are backed by these uranium inventories and represented a negative amount of €1 million at December 31, 2023.

22.3 Other assets and other liabilities

	Dec. 31, 2023				Dec. 31, 2022			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Other assets and liabilities	990	13,424	(3,614)	(18,118)	766	18,294	(3,646)	(23,583)
Tax receivables/payables	*-*	*9,420*	*-*	*(10,415)*	*-*	*14,647*	*-*	*(16,863)*
Employee receivables/payables	*531*	*16*	*(2)*	*(2,503)*	*523*	*22*	*(2)*	*(2,479)*
Dividend receivables/payables	*-*	*127*	*-*	*(20)*	*-*	*12*	*-*	*(23)*
Other	*459*	*3,845*	*(3,613)*	*(5,178)*	*243*	*3,614*	*(3,644)*	*(4,218)*

At December 31, 2023, other non-current assets included a receivable towards EDF in respect of nuclear provisions amounting to €654 million (€162 million at December 31, 2022).

Other liabilities include €2,140 million in investments made by tax partners as part of the financing of renewable projects in the United States by tax equity (€1,981 million at December 31, 2022).

NOTE 23 Legal and anti-trust proceedings

The Group is party to a number of legal and anti-trust proceedings with third parties or with legal and/or administrative authorities (including tax authorities) in the normal course of its business.

The main disputes and investigations presented hereafter are recognized as liabilities or give rise to contingent assets or liabilities.

In the ordinary course of its business, the Group is involved in a number of disputes and investigations before state courts, arbitral tribunals or regulatory authorities. The disputes and investigations that could have a material impact on the Group are presented below.

23.1 Renewables

23.1.1 Mexico – Renewable energy

In 2021, the Mexican government and public authorities took positions and legislative and regulatory measures that directly affect private players in the energy sector (in particular renewable energy producers) and go against the letter and spirit of the latest energy sector reforms introduced in 2013 and 2014. The constitutionality and legality of some of these measures have been contested in legal proceedings launched by non-government bodies and private investors, in particular by ENGIE subsidiaries that develop or implement renewable energy projects in the country. These proceedings have been abandoned. The Mexican President has also submitted a draft revision of the Constitution that would substantially change the regulatory framework applicable to the electricity sector. However, Congress rejected the constitutional amendments proposed by the government, so the current law remains in force.

23.2 Energy Solutions

23.2.1 Spain – Púnica

In the Púnica case (procedure concerning the awarding of contracts), 15 Cofely España employees, as well as the company itself, were placed under investigation by the examining judge in charge of the case. The criminal investigation was closed on July 19, 2021 with the referral of Cofely España and eight (former) employees before the criminal court. Cofely España lodged an appeal against this decision on September 30, 2021. On March 9, 2022, the appeal was dismissed and the referral decision upheld. The hearings are expected to begin in 2024.

23.2.2 Italy – Competition procedure

On May 9, 2019, a fine of €38 million was jointly and severally imposed on ENGIE Servizi SpA and ENGIE Energy Services International SA ("ENGIE ESI") by the Italian Competition Authority (the "Authority") for certain alleged anti-competitive practices relating to the award of the Consip FM4 2014 contract. An appeal was lodged with the Lazio Regional Administrative Court (Lazio RAC). On July 18, 2019, the Lazio RAC suspended the payment of the fine, and on July 27, 2020, it overturned the Authority's decision as regards both ENGIE Servizi SpA and ENGIE ESI. On November 17, 2020, the Authority appealed the Lazio RAC's decision before Italy's highest administrative court. On May 9, 2022, the Italian administrative court rejected the Authority's appeal and upheld the Lazio RAC's reversal of the Authority's decision. Two companies (including Consorzio Innova whose appeals concern ENGIE Servizi SpA and ENGIE ESI) filed a special appeal against the administrative court's decision before the administrative court itself on June 13, 2022. This appeal does not have suspensive effect. Another appeal challenging the administrative court's rejection was also filed by the same companies before the Supreme Court on July 11, 2022. Following Consorzio Innova's withdrawal of its appeal to the Supreme Court, it closed the proceedings on April 4, 2023. On July 21, 2023, the Italian administrative court rejected Consorzio Innova's appeal. The Italian administrative court thereby confirmed its previous decision and upheld the Lazio RAC's reversal of the Authority's decision concerning ENGIE Servizi SpA and ENGIE ESI. The procedure is definitely closed.

23.2.3 Italy – Manitalidea

In 2012, ENGIE Servizi formed a temporary association ("associazione temporanea di imprese" or "ATI") with Manitalidea with the aim of submitting a bid for a public contract launched by CONSIP. ENGIE Servizi had an 85% stake in the ATI, with Manitalidea holding the remaining 15%. The purpose of the contract was to provide energy and maintenance services to hospitals.

In September 2012, three lots of the contract were awarded to the ATI.

On March 11, 2022, Manitalidea filed for damages against ENGIE Servizi in the Rome Civil Court, claiming that (i) ENGIE Servizi had not complied with the provisions of the temporary association agreement relating to the distribution of contracts between the partners, and (ii) as a result, Manitalidea had missed an opportunity to increase its revenue. After Manitalidea filed for bankruptcy, the claim was extended to include the alleged responsibility of ENGIE Servizi for Manitalidea's financial difficulties and bankruptcy.

The proceedings are still ongoing.

23.3 Retail

23.3.1 Peru – Antamina

In 2012, following a tender for the annual purchase of 170 MW for a period extending from 2015 until 2032, ENGIE Energía Perú S.A. entered into a long-term gas purchase agreement with the Peruvian mining company Antamina (the "Agreement").

In 2021, however, Antamina launched another tender for the same annual volume and entered into three purchase agreements with three new suppliers for a period starting January 2022, until June 2024. This called into question the exclusivity that ENGIE Energía Perú S.A. believed it had been granted until 2032 under the Agreement. Following the signing of these new agreements, Antamina divided its gas procurement between ENGIE and the other third parties, and refused, as of January 2022, to accept exclusively from ENGIE delivery of the agreed upon quantity of gas under the Agreement and, consequently, to pay the corresponding invoices (approximately 50% of the monthly needs of Antamina).

On April 26, 2022, ENGIE Energía Perú S.A. filed an arbitration procedure against Antamina, seeking recognition of the exclusive nature of the Agreement and Antamina's obligation to only procure gas supplies from ENGIE up to the 170MW gas contracted, from the start date of the Agreement (January 2015), until the end date (December 2032). The suit also seeks the payment of invoices that have been outstanding since January 2022. The arbitration procedure is governed by the rules of the Arbitration Center of the Lima Chamber of Commerce. On January 4, 2023, ENGIE Energía Perú S.A. filed its statement of claim. The procedure is underway, and the award is expected in May 2024.

23.3.2 GEMS

At the beginning of the fourth quarter of 2022, ENGIE initiated an arbitration procedure against Gazprom Export LLC seeking, in particular to obtain (i) recognition of Gazprom Export LLC's non-performance of its gas delivery obligations towards ENGIE under long-term gas delivery agreements and (ii) payment of contractual penalties as well as compensation for damage resulting from this non-performance from Gazprom Export LLC.

This arbitration procedure is due to the significant delivery shortages by Gazprom Export LLC to ENGIE as of mid-June 2022, followed by Gazprom Export LLC's unilateral decision at the end of summer 2022 to reduce its deliveries to ENGIE due to a disagreement between the parties on the application of the agreements.

23.3.3 Chile – TotalEnergies

On January 3, 2023, ENGIE Energía Chile SA initiated international arbitration proceedings against TotalEnergies Gas & Power Limited for breaching its contractual obligations under an LNG supply contract entered into in August 2011. The proceedings are currently ongoing.

23.4 FlexGen

23.4.1 Italy – Vado Ligure

On March 11, 2014, the Court of Savona seized and closed down the VL3 and VL4 coal-fired production units at the Vado Ligure thermal power plant belonging to Tirreno Power S.p.A. (TP), a company which is 50%-owned by the ENGIE group. This decision was taken as part of a criminal investigation against the present and former executive managers of TP into environmental infringements and public health risks. The investigation was closed on July 20, 2016. The case was referred to the Court of Savona to be tried on the merits. The proceedings before the Court of First Instance began on December 11, 2018 and carried on into 2023, seeking the liability of the former members of the Board of Directors and management. Third parties, including the Italian Ministry of the Environment and Ministry of Health, joined the proceedings to claim damages. On October 3, 2023, the Court of Savona acquitted all 26 directors and managers of all charges. The subsidiary Tirreno Power SpA, in which ENGIE has a 50% stake, was also acquitted. The decision was notified in January 2024. The public prosecutor has appealed the decision in February 2024.

23.4.2 Brazil – Claim against sales tax adjustments

ENGIE Brasil Energia SA was subject to a tax reassessment covering fiscal years 2014, 2015, 2016 and 2018 in respect of federal value-added taxes (PIS and COFINS) for refunds relating to fuels used in the production of energy by thermopower plants. The total amount at stake is 693.6 million Brazilian real, including a principal amount of 258.9 million.

The company is contesting these reassessments and has lodged administrative appeals. The administrative appeals for fiscal years 2014, 2015 and 2016 were rejected and the company initiated the discussion at the judicial court. The administrative appeal for 2018 is being examined. If this administrative appeal is unsuccessful, the case could also be brought before the ordinary courts and tribunals.

In 2023, Diamante Geraçao de Energia (controlled by ENGIE Brasil Energia SA at the time and owner of the thermopower plants) was also subject to reassessments for the tax treatment of comparable fuel reimbursements. The reassessments concerned both PIS and COFINS taxes (fiscal years 2019 and 2020) and corporate income tax (fiscal year 2018). The total amount at stake is 542 million Brazilian real, including a principal amount of 260.5 million. Although ENGIE Brasil Energia SA sold this company in 2021, it remains financially responsible under the vendor's warranty regarding the years prior to the sale. The company is challenging these reassessments and has lodged an administrative appeal, which is currently under review, with the potential for escalation to ordinary courts and tribunals.

23.4.3 Italy – exceptional tax on the energy sector

In December 2022, ENGIE filed an action against the tax authorities to obtain the reimbursement of the tax it had paid in July and November 2022 for a total amount of more than €308 million, pursuant to two legislative decrees (no. 21 and no. 50/2022) that introduced an exceptional solidarity contribution to be paid by operators in the energy sector. ENGIE contests the validity of the basis of the tax in relation to the decree's objective, its compatibility with the Italian Constitution as well as its compatibility with Italy's European commitments (EU law). In December 2023, the Milan Court of First Instance asked the Italian Constitutional Court to rule on the constitutionality of the tax as part of the proceedings launched by ENGIE.

23.4.4 Flémalle – EPC

In November 2021, Electrabel SA entered into an EPC (Engineering, Procurement, Construction) agreement with SEPCO III for the construction of a gas-fired power plant in Flémalle (Belgium), in the context of the CRM (Capacity Remuneration Mechanism).

In August 2022, Electrabel SA terminated the EPC agreement with SEPCO III for non-performance of its contractual obligations and initiated arbitration proceedings in November 2022, to obtain compensation for the damage sustained.

SEPCO III filed a counterclaim against Electrabel seeking damages to cover the alleged loss it had sustained due to the termination of the contract.

23.5 Nuclear

23.5.1 Extension of operations at the nuclear power plants 2015-2025

Various associations have brought actions before the Constitutional Court, the Conseil d'État and the ordinary courts against the laws and administrative decisions authorizing the extension of operations at the Doel 1 and Doel 2 plants. On June 22, 2017 the Constitutional Court referred the case to the Court of Justice of the European Union (CJEU) for a preliminary ruling. In its judgment of July 29, 2019, the CJEU ruled that the Belgian law extending the operating lives of the Doel 1 and Doel 2 reactors (law extending Doel 1 and Doel 2) was adopted without the required environmental assessments being carried out first, but that the effects of the law on extension could provisionally be maintained where there was a genuine and serious threat of an interruption to the electricity supply, and then only for the length of time strictly necessary to eliminate this threat. In its decision of March 5, 2020, the Constitutional Court overturned the law extending Doel 1 and Doel 2, while maintaining its effects until the legislator adopts a new law after having carried out the required environmental assessment, including a cross-border public consultation process, by December 31, 2022 at the latest.

The environmental assessment and the cross-border public consultation were carried out by the Belgian State in 2021. The draft law incorporating the conclusion of the assessment and the consultation was passed by the Belgian Federal Parliament on October 11, 2022 and published on November 3, 2022.

The appeal before the Conseil d'État against the administrative decisions that allowed the extension of operations at the Doel 1 and Doel 2 plants is still pending.

23.5.2 Shutdown of the Doel 3 and Tihange 2 power plants

Various associations have lodged appeals before the Brussels Court of First Instance against Electrabel, the Belgian State, the Nuclear Safety Authority and/or the Elia electricity transmission network to contest the decisions and actions to shut down the Doel 3 (on September 23, 2022) and/or Tihange 2 (on January 31, 2023) power plants. In a first judgment dated November 16, 2022, the Brussels Court of First Instance, ruling in summary proceedings in one of the cases, confirmed the decisions and actions taken in relation to the shutdown. The applicants in this case withdrew their action on the merits. In the second case on the merits, a judgment was handed down on June 30, 2023, rejecting the interim measures requested, including the request to prohibit Electrabel from taking any irreversible action in connection with the shutdown of Doel 3 and Tihange 2. The case is continuing on the merits, with no precise timetable at this stage.

23.5.3 Appeal against the Belgian energy regulator's decision implementing the law of December 16, 2022 introducing a cap on electricity producers' market revenues

Electrabel lodged an appeal with the Belgian Market Court (Cour des Marchés) on March 29, 2023 against the decision of the Belgian energy regulator (CREG) to implement the December 16, 2022 law introducing a cap on electricity producers' market revenues for 2022. Electrabel lodged a second action for annulment with the same court against the same regulator's decision for 2023 revenues.

Electrabel contests the validity of this revenue cap, arguing that it is contrary to the European Regulation that introduced it, notably because it falsely determines market revenues using presumptions and not on the basis of revenues actually received, as provided for by the Regulation, and because it is implemented retroactively from August 1, 2022, outside the period covered by the Regulation. The Market Court handed down its ruling in the first case on October 18, 2023, finding that the action was admissible and prima facie founded, and referred three questions to the Court of Justice of the European Union for a preliminary ruling. The second case was heard on January 10, 2024, and the ruling handed down on January 31 suspends delivery until the Court of Justice of the European Union has ruled on the first case.

An appeal was also lodged with the Constitutional Court in June 2023.

In addition to the above-mentioned appeals, a claim for restitution of the 2022 tax has been lodged, as well as an appeal to the Court of First Instance for the annulment of the tax.

23.5.4 Arbitration procedure in application of the Tihange 1 and Doel 1 and 2 agreements following the adoption of the law of December 16, 2022 introducing a cap on electricity producers' market revenues

On October 17, 2023, Electrabel initiated arbitration proceedings against Belgian State for the breach of the agreements signed for the extension of Tihange 1 on March 12, 2014 and the extension of Doel 1 and Doel 2 on November 30, 2015. These agreements excluded, by virtue of the royalties paid in particular, any other charges in favor of the State (with the exception of general application taxes) linked to the ownership or operation of Tihange 1 or Doel 1 and Doel 2, the revenues, production or production capacity of these plants, or their use of nuclear fuel. Under the terms of the agreements, Electrabel is claiming the reimbursement of the tax paid for 2022 and the levy for 2023 on these plants.

23.6 Other

23.6.1 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse Dailly sale by SUEZ (now ENGIE) of a disputed withholding tax (*précompte*) receivable in 2005 for an amount of €995 million (receivable relating to the *précompte* paid in respect of the 1999-2003 fiscal years). The Montreuil Administrative Court handed down a judgment in ENGIE's favor in 2019, which led the French tax authorities to appeal the decision before the Versailles Court of Appeal, which overturned the prior Court's decision in 2021. On April 14, 2023, the Conseil d'État overturned the Court's ruling on the grounds that the assigned claim should be classified as an advance repayment of non-deductible tax, irrespective of the fact that the State had not authorized its repayment by the bank assigning the claim, and that the repayment was only partial. The Conseil d'État referred the case back to the Versailles Administrative Court of Appeal to decide on the basis of a procedure that made the tax treatment of the disputed assignment of receivables in 2005 dependent on the outcome of the *précompte* litigation itself. The Court of Appeal's decision is expected in 2024.

Regarding the dispute over the *précompte* itself, on February 1, 2016, the Conseil d'État dismissed the appeal before the Court of Cassation seeking the repayment of the *précompte* in respect of the 1999, 2000 and 2001 fiscal years. On June 23, 2020, the Versailles Administrative Court of Appeal found in favor of ENGIE as regards the cases seeking repayment of the *précompte* in respect of the 2002 and 2003 fiscal years but rejected the case in respect of the 2004 fiscal year. As the *précompte* receivables for 2002/2003 have been assigned, the relevant amounts have been repaid to the assignee banks. The case has been referred to the Conseil d'État by the two parties. On March 27, 2023, the Conseil d'État dismissed ENGIE's appeal in light of the Conseil Constitutionnel's decision of October 2022. On June 30, 2023, the Conseil d'État upheld the Court's ruling and dismissed the Minister's appeal in respect of the 2002 claim. It accordingly referred the matter back to the Versailles Administrative Court of Appeal, which was tasked with quantifying the amount of the 2003 *précompte* claim to be refunded in the light of the rules it had laid down, taking into account the prior decisions of the Court of Justice of the European Union and the Conseil Constitutionnel. On January 9, 2024, the Court validated the calculation of the refundable *précompte* proposed by the tax authorities, without responding to ENGIE's arguments. The latter intends to appeal the decision before the Conseil d'État.

Furthermore, after ENGIE and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the Conseil d'État did not comply with European Union law when handing down decisions in disputes regarding the *précompte*, such as those involving ENGIE. On July 10, 2017, the European Commission referred the matter to the Court of Justice of the European Union on the grounds of France's failure to comply. On October 4, 2018, the Court of Justice of the European Union ruled partially in favor of the European Commission. Following this decision, France must revisit its methodology in order to determine the *précompte* repayment amounts in closed and pending court cases. No action has been initiated to date due to parallel litigation proceedings on the basis of Directive 90/435/EC.

23.6.2 Luxembourg – State aid investigation

On September 19, 2016, the European Commission announced its decision to open an investigation into whether or not two private rulings granted by the Luxembourg State in 2008 and 2010 covering two similar transactions between several of the Group's Luxembourg subsidiaries constituted State aid. On June 20, 2018, the European Commission adopted a final, unfavorable decision deeming that Luxembourg had provided ENGIE with State aid. On September 4, 2018, ENGIE requested the annulment of the decision before the European Courts, thereby challenging the existence of a selective advantage. As these proceedings did not have a suspensive effect, ENGIE paid a sum of €123 million into an escrow account on October 22, 2018 in respect of one of the two transactions in question, since no aid was actually received for the other. Following the proceedings before the European Courts, this sum will be returned to ENGIE or paid to the Luxembourg State depending on whether or not the Commission's decision is annulled. On May 12, 2021, the Court rejected the appeals of the Luxembourg State and of ENGIE, thereby confirming the European Commission's position on the existence of State aid granted to the Group's Luxembourg subsidiaries. On July 22, 2021, ENGIE referred the matter to the Court of Justice of the European Union seeking the annulment of the Court's decision. On December 5, 2023, the Court ruled in favor of the Luxembourg State and ENGIE, annulling both the judgment of the Court of First Instance and the Commission's decision on the grounds of errors in the reference framework. ENGIE recovered the 123 million in escrow in January 2024, thus concluding the dispute.

23.6.3 Poland – Competition procedure

On November 7, 2019, a fine of 172 million Polish zloty (€40 million) was imposed on ENGIE Energy Management Holding Switzerland AG (EEMHS) for failing to respond to a request for disclosure of documents from the Polish Competition Authority (UOKiK) in proceedings initiated by the UOKiK which suspected a potential failure to notify by EEMHS and other financial investors involved in the financing of the Nord Stream 2 pipeline (main proceeding). EEMHS filed an appeal with the Competition Protection Court. On November 7, 2023, the Court reduced the penalty to around €100,000. The UOKiK has appealed this decision to the Warsaw Court of Appeal (2nd degree). The proceedings are pending.

In the context of the main proceedings, on October 6, 2020, the UOKiK ordered EEMHS to pay a fine of 55.5 million Polish zlotys (approximately €12.3 million). The UOKiK also ordered the termination of the financing agreements for the Nord Stream 2 project. On November 5, 2020, EEMHS appealed this decision with the Competition Protection Court (the "Court"). The appeal automatically suspends the execution of all of the penalties ordered by the UOKiK. On November 21, 2022, the Court overturned the UOKiK's decision in its entirety. The UOKiK has appealed this decision. On October 16, 2023, the Warsaw Court of Appeal (2nd degree) upheld the lower court's decisions, which overturned the UOKIK's decision in its entirety. The UOKiK may file an appeal in cassation.

23.6.4 Claim by the Dutch tax authorities related to interest deductibility

Based on a disputable interpretation of a statutory modification that came into force in 2007, the Dutch tax authorities refused the deductibility of a portion (€1.1 billion) of the interest paid on financing contracted for the acquisition of investments made in the Netherlands since 2000. Following the Dutch tax authorities' rejection of the administrative claim against the 2007 tax assessment, action was brought before the Arnhem Court of First Instance in June 2016. On October 4, 2018, the court ruled in favor of the tax authorities. On October 26, 2020, the ruling was confirmed by the Arnhem Court of Appeal. ENGIE Energie Nederland Holding BV considers that the Court committed errors in law and that its decision was not well-founded, under either Dutch or European law. It has therefore appealed the decision before the Court of Cassation. In July 2022, the Court of Cassation decided to refer questions on the compatibility of the Dutch legislation on interest with three of the European fundamental freedoms to the Court of Justice of the European Union for a preliminary ruling. The hearing was held before the Court of Justice of the European Union in November 2023. Its decision is expected in the first half of 2024.

23.6.5 Transfer price of gas

The Belgian tax authorities' Special Tax Inspectorate has issued two tax deficiency notices in respect of taxable income for fiscal years 2012 and 2013 for an aggregate amount of €706 million, considering that the price applied for the supply of gas by ENGIE (then GDF SUEZ) to Electrabel SA was excessive. ENGIE and Electrabel SA are challenging this adjustment and have submitted a request for conciliation proceedings, which was accepted by France and Belgium in May 2018. The proceedings are ongoing between the two States, who put forward their respective positions late 2022/early 2023, although the issue was still not resolved by the end of December 2023.

NOTE 24 Subsequent events

No significant subsequent events have occurred since the closing of the accounts at December 31, 2023.

NOTE 25 Fees paid to the Statutory Auditors and to members of their networks

Pursuant to Article 222-8 of the General Regulations of the French Financial Markets Authority (AMF), the following table presents information on the fees paid by ENGIE SA, its fully consolidated subsidiaries and joint operations to each of the Auditors in charge of auditing the annual and consolidated financial statements of the ENGIE group.

The Shareholders' Meeting of ENGIE SA of May 14, 2020 decided to renew the terms of office of Deloitte and EY as Statutory Auditors for a six-year period from 2020 to 2025.

	Deloitte			EY			
In millions of euros	Deloitte & Associés	Network	Total	EY & others	Network	Total	Total
Statutory audit and review of consolidated and parent company financial statements	**5.0**	**6.8**	**11.8**	**5.7**	**9.5**	**15.1**	**26.9**
ENGIE SA	2.5	-	2.5	2.9	-	2.9	5.4
Controlled entities	2.5	6.8	9.3	2.8	9.5	12.2	21.5
Non-audit services	**0.7**	**0.7**	**1.4**	**1.5**	**2.2**	**3.7**	**5.1**
• ENGIE SA	**0.6**	**-**	**0.6**	**1.0**	**-**	**1.1**	**1.6**
Of which services related to legal and regulatory requirements	*0.4*	*-*	*0.4*	*0.6*	*-*	*0.6*	*0.9*
Of which other audit services	*0.1*	*-*	*0.1*	*0.5*	-	*0.5*	*0.6*
Of which reviews of internal control	-	-	-	-	-	-	-
Of which due diligence services	-	-	-	-	-	-	-
Of which tax services	*0.1*	-	*0.1*	-	-	-	*0.1*
• Controlled entities	**0.1**	**0.7**	**0.8**	**0.5**	**2.2**	**2.6**	**3.4**
Of which services related to legal and regulatory requirements	-	*0.4*	*0.4*	*0.4*	*0.5*	*0.9*	*1.3*
Of which other audit services	*0.1*	*0.1*	*0.2*	-	*0.2*	*0.2*	*0.4*
Of which reviews of internal control	-	-	-	-	-	-	-
Of which due diligence services	-	-	-	-	*1.1*	*1.1*	*1.1*
Of which tax services	-	*0.1*	*0.1*	-	*0.4*	*0.4*	*0.5*
TOTAL	**5.6**	**7.5**	**13.1**	**7.1**	**11.7**	**18.8**	**31.9**

NOTE 26 Information regarding Luxembourg and Dutch companies exempted from the requirements to publish annual financial statements

Some companies do not publish annual financial statements pursuant to domestic provisions under Luxembourg law (Article 70 of the Law of December 19, 2002) and Dutch law (Article 403 of the Civil Code) relating to the exemption from the requirement to publish audited annual financial statements.

The companies exempted are notably: ENGIE Energie Nederland NV, ENGIE Energie Nederland Holding BV, ENGIE Nederland Retail BV, ENGIE United Consumers Energie BV, Electrabel Invest Luxembourg, ENGIE Treasury Management SARL and ENGIE Invest International SA.

6.3 STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

Year ended December 31, 2023

To the Engie Shareholders' Meeting,

Opinion

In compliance with the engagement entrusted to us by your Shareholders' Meeting, we have audited the accompanying consolidated financial statements of ENGIE for the year ended December 31, 2023.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2023 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with the independence requirements of the French Commercial Code *(Code de commerce)* and the French Code of Ethics for Statutory Auditors *(Code de déontologie de la profession de commissaire aux comptes)* for the period from January 1, 2023 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No. 537/2014.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L. 821-53 and R. 821-180 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Measurement of the recoverable amount of goodwill, intangible assets and property, plant and equipment

[Notes 1.3 "Use of estimates and judgment", 9.1 "Impairment losses", 13.1" Goodwill" and 13.4 "Impairment tests of goodwill, intangible assets and property, plant and equipment" to the consolidated financial statements]

Key audit matter	Our response
As at December 31, 2023, the net carrying amount of goodwill, intangible assets and property, plant and equipment amounted to €79.3 billion (after recognition of impairment losses of €1.3 billion in 2023), or 40.7% of total assets, and breaks down as follows: • Goodwill: €12.9 billion; • Intangible assets: €8.4 billion; • Property, plant and equipment: €58.0 billion. To ensure that assets are recognized for a value that does not exceed their recoverable amount, your Group performs impairment tests in accordance with IAS 36 "Impairment of assets". Goodwill impairment tests are performed annually at the lowest level at which the goodwill is monitored for internal management purposes and, in the case of assets, at the level of Cash Generating Units (CGUs) as defined by your Group when there is an indication of impairment. As at December 31, 2023, goodwill therefore breaks down as follows between the various operating segments: • Infrastructure: €5.4 billion; • Renewables: €2.2 billion; • Energy supply: €1.8 billion; • Energy Solutions: €1.2 billion; • Thermal: €1.1 billion; • Nuclear: €0.8 billion; • Other: €0.3 billion.	We • examined the definition of CGUs as well as the allocation of goodwill to the operating segments; • assessed the Group's measures aimed at identifying indications of impairment losses or reversals of impairment losses as well as the procedures used by Management for approving the estimates. • analyzed the data and key assumptions used to determine the recoverable amount of assets, assessed the sensitivity of the measurements to these assumptions and verified the calculations performed by your Group with the support of our valuation experts. For goodwill and CGUs presenting a specific impairment loss risk that we deemed material, our work on values in use mainly covered: • the assumptions of the Group's long-term reference scenario (trends in electricity and gas prices and demand, price of CO_2, inflation) for which we have assessed the consistency with external studies carried out by international organizations or energy experts, particularly with regard to the climate and energy mix;

Key audit matter

For assets which your Group intends to hold on a going concern basis, the recoverable amount corresponds, in most cases, to the value in use, determined based on:

- cash flow projections on the basis of the 2024 budget and 2025-2026 medium-term business plan approved by the Executive Committee and the Board of Directors;
- beyond this timeframe, extrapolated future cash flow projections determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates) and price projections featured in your Group's reference scenario, reviewed and validated by the Executive Committee and prepared by your Group for the period 2027-2050 based on fundamental supply and demand equilibrium models, the results of which approximate those of the International Energy Agency with its APS (Announced Pledges Scenario) model or ADEME ("green technology"). The considered climate and energy mix assumptions mainly include:
  - long-term CO2 price projections in line with the targets of a 55% emissions reduction by 2030 and climate neutrality by 2050, set by the European Commission in the "European Green Deal" presented in December 2019 and July 2021,
  - a medium and long-term electricity price trajectory covered in the report produced by your Group as part of the Task Force on Climate-Related Financial Disclosures (TCFD) initiative, which opted for a balanced mix including renewable gas as well as carbon dioxide capture and storage to guarantee an energy system with the best levels of efficiency and resilience.

The commitments undertaken specifically by your Group with regard to climate-related issues, as set out in Note 1.3.3, in particular the complete withdrawal from coal activities by 2027 according to the outlook specific to each asset, are reflected in the values in use. These values are also based on key assumptions, presented in Note 13.4 to the consolidated financial statements, relating to the market outlook and changes in the regulatory environment of which any modification could have a material impact on the values in use considered.

For goodwill which had the greatest risk of impairment in our opinion, valuations are primarily based on the following decisive assumptions:

- for the Nuclear activity: your Group considered in particular,
  - the 10-year extension beyond 2025 of the operation of the Doel 4 and Tihange 3 units only within a dedicated legal structure, equally owned by the Belgian state and your Group, according to an economic model based on a contract for difference mechanism guaranteeing the value of the extension investments with a limited incentive for the industrial operator to achieve a favorable technical and economic performance at the plants;
  - until 2025 for Belgian nuclear units and for the period covering the drawing rights for nuclear power plants in France, the values allocated to the price of fuel and CO_2, electricity demand and price trends, power plant availability, future market outlook as well as changes in the regulatory framework,
  - the extension of drawing rights agreements for French nuclear plants beyond the current operating periods;

Our response

- the operational and regulatory assumptions used to prepare cash flow forecasts for which we have assessed the consistency of the assets' operating conditions and their intrinsic performance as well as the applicable regulations to date and expected changes thereto;
- methods for determining cash flow forecasts for which we assessed:
  - the consistency of the baseline data with the budget, the medium-term business plan and, beyond, your Group's reference scenario,
  - the consistency with past performance and market outlook;
- the discount rates for which we examined the determination methods and the consistency with the underlying market assumptions, using internal valuation specialists;
- Management's sensitivity analysis to the key price, operational and regulatory assumptions for which we assessed the relevance.

Regarding nuclear production assets in Belgium, we analyzed the agreement signed between your Group and the Belgian government on June 29, 2023, that became binding on July 21, and whose implementation was specified in the settlement agreements signed on December 13, 2023, and assessed its direct or indirect impacts on the valuation of assets and all the obligations relating to nuclear waste.

For assets which your Group has decided to sell, we analyzed the highly probable nature of such sale, the items considered to assess the recoverable amount as well as the classification process in accordance with *IFRS 5 – Non-current assets held for sale and discontinued operations*."

Finally, we assessed the appropriateness of the disclosures in Notes 1.3, 9.1 and 13.4 to the consolidated financial statements, notably on sensitivity analyses carried out by your Group.

- regarding gas Infrastructure activities in France, your Group considered:
  - by 2050, maintaining its gas infrastructure network or its conversion to enable the supply of green gases (biomethane, hydrogen, etc.) that will gradually replace natural gas, due to the vital role of gas which represents a reliable energy source, able to supplement intermittent renewable energy sources that by nature are uncontrollable and difficult to store,
  - cash flow projections established using tariffs negotiated with the regulator (CRE) and terminal values corresponding to the expected value of the regulated asset base (RAB) for the valuation of its activities in France.
Finally, the recoverable amount of the non-strategic assets which your Group intends to sell is based on market value less costs of disposal.
We considered the measurement of the recoverable amount of goodwill, intangible assets and property, plant and equipment to be a key audit matter due to
- their materiality in your Group's financial statements;
- the sensitivity of assessments to macroeconomic, sector and financial assumptions;
- the resulting judgments and estimates that Management is required to make in an uncertain economic and financial environment linked in particular to the high volatility of the commodity markets, geopolitical tensions and climate issues whose consequences make it difficult to assess the medium-term economic outlook.	

Measurement of provisions relating to the back-end of the nuclear fuel cycle and the dismantling of nuclear facilities in Belgium

[Notes 1.3 "Use of estimates and judgment", 17 "Provisions" and 17.2 "Obligations relating to nuclear facilities" to the consolidated financial statements]

Key audit matter	Our response
As a nuclear operator, your Group has obligations relating to the management of radioactive nuclear fuel consumed and the dismantling of nuclear facilities operated in Belgium. Pursuant to the Belgian law of April 11, 2003, partially repealed and amended by the law of July 12, 2022, the management of corresponding provisions is entrusted to the Group's subsidiary Synatom which submits a report every three years to the Commission for Nuclear Provisions (CNP) describing the core inputs and the main assumptions underlying the assessment of these provisions. The CNP issues its opinion based on the opinion issued by the Belgian agency for radioactive waste and enriched fissile material (ONDRAF) which reviews all of the characteristics and technical and financial parameters of the report.	As part of the 3-year review of the provisions in 2022, we (i) examined the conclusions, observations and recommendations expressed in the opinions of the ONDRAF and CPN, as well as the new adapted proposal delivered by your Group to the CPN on February 14, 2023, explaining the reasons why it considered that it could not follow up on some of its comments, (ii) assessed the measures implemented by your Group to assess the provisions raised for the obligations relating to nuclear production facilities, and verified the bases on which the provisions had been assessed, and (iii) assessed the sensitivity of the valuations to the technical assumptions, industrial scenarios and assumptions involving costs, the schedule of operations and the inflation and discount rates applied to cash flows. In 2023 which was marked by the finalization of the 2022 3-year review process and the conclusion of an overall agreement with the Belgian government on the extension of the operating life of the Doel 4 and Tihange 3 nuclear reactors and the transfer of obligations relating to the costs of managing spent fuel and nuclear waste in consideration for a lump-sum discharge payment of €15 billion, we (i) examined the conclusions expressed by the CPN in its definitive opinion of July 7, 2023 and (ii) assessed the impact on the financial statements of the agreement signed with the Belgian government. Our procedures primarily consisted in reviewing:

Key audit matter	Our response
As of December 31, 2023, these nuclear provisions, which totaled €23.9 billion, were estimated using the current legal and contractual framework and the comments and assumptions adopted by the CPN in its final opinion of July 7, 2023, issued at the end of the 2022 3-year review process, which mainly gave rise in 2023 to a reduction in the provision for dismantling by €0.6 billion. Nuclear provisions as of December 31, 2023 also include an additional amount of €5.1 billion (including €0.4 billion relating to the share of the Electrabel partners in certain power plants), corresponding to the difference between the liabilities already set aside by the obligations relating to the costs of managing spent fuel and nuclear waste and a lump-sum discharge amount of €15 billion resulting from the agreement signed between your Group and the Belgian government on June 29, 2023, that became binding on July 21, and whose implementation was specified in the settlement agreements signed on December 13, 2023. In addition to the 10-year extension of the Doel 4 and Tihange 3 nuclear reactors, this agreement provides for the transfer to the Belgian state of the financial responsibility for managing nuclear waste and spent fuel, within the limit of a volumetric credit covering all the nuclear waste produced by the Belgian power plants during their legal operating life, from their commissioning to their dismantling, in consideration for the lump-sum discharge amount of €15 billion. The closing of this agreement, which implies the removal of the conditions precedent relating to (i) the vote by the Belgian parliament and the coming into effect of the draft laws included in the contract and (ii) the European Commission's approval of State aid, was considered as probable by your Group. Your Group will settle this lump-sum discharge amount of €15 billion in two installments, i.e. first payment of €11.5 billion at the moment of closing, for category B and C waste, then a second payment of €3.5 billion during the restart of the extended units at the end of 2025, for category A waste. Following payment of these installments, your Group will primarily retain responsibility (i) for the on-site storage of fuel until the end of dismantling operations and no later than 2050, as well as their compliance with the contractual criteria for the transfer of waste to ONDRAF, (ii) and the definitive shutdown and dismantling of the nuclear power plants, including the treatment of category A and B waste resulting from these operations in accordance with the contractual transfer criteria. Finally, the Belgian State is also expected to pay the additional costs of deoptimizing the dismantling activities of the various units resulting from the 10-year extension of Doel 4 and Tihange 3, which could reach M€ 500 to M€ 600 according to an assessment by your Group. Pending an agreement with the Belgian state on the exact amount of compensation receivable, under the ultimate control of the CPN, no additional liability was included in the nuclear provisions recognized as of December 31, 2023. We considered the measurement of these provisions to be a key audit matter due to their respective material amounts and their sensitivity to the macroeconomic assumptions applied (inflation and discount rates), as well as to the industrial scenarios used and the associated cost estimates.	• the bases on which the provisions were assessed as of December 31, 2023, including the final and intermediate agreements between your Group and the Belgian government as well as the impacts of the CPN's decision of July 7, 2023; • the distinction between the obligations transferred to the Belgian State in accordance with the agreement signed with the government in consideration for a lump-sum discharge payment and the obligations retained by your Group, particularly with regard to the on-site storage of spent fuel, the definitive shutdown and dismantling of nuclear power plants as well as treatment and compliance of spent fuel and waste with the contractual criteria for the transfer to ONDRAF; • the virtual certainty of the €0.4 billion receivable held with the Electrabel partners in certain power plants for their share in the additional €5.1 billion included in the lump-sum discharge amount; • the possible collateral impacts on the other assets and liabilities directly relating to the operation of nuclear power plants in Belgium; • the consistency of the industrial scenarios adopted with regard to the current legal and regulatory environment as well as the consistency with such forecast cost assumptions by nature and the payment schedules. Finally, we evaluated the appropriateness of the disclosures in Notes 1.3, 17 and 17.2 to the consolidated financial statements, notably on the impact of the agreement signed with the Belgian government as well as the sensitivity of provisions relating to the obligations retained by your Group to changes in the key assumptions underlying their assessment.

Main estimates and judgments relating to revenue

[Notes 1.3 "Use of estimates and judgment", 7.1 "Revenue" and 7.2.1 "Trade receivables and other debtors, contract assets" to the consolidated financial statements]

Key audit matter	Our response
Your Group makes estimates and uses judgments notably for the recognition of (i) sales of electricity and gas delivered, not metered and not invoiced (known as "energy in the meter") and, (ii) specifically for the financial year ended December 31, 2023, gas and electricity sales made in France under the Government's "tariff shield" scheme. ***Revenue relating to un-metered and unbilled delivered sales of electricity and gas ("energy in the meter")*** The measurement of revenue relating to sales of electricity and gas for customers which are only metered during the accounting period represents a material estimate at the year-end. Indeed, as the meter readings are sometimes communicated by grid operators several months after the actual delivery date, your Group is required to estimate the energy delivered but not metered at the year-end. As at December 31, 2023, receivables relating to revenue in the meter (delivered gas and electricity that is unbilled and un-metered) totaled €5.3 billion and involved mainly France and Belgium. These receivables are determined on the basis of a method that takes into account an estimate of customers' consumption based on the previous bill, or on the last metering not yet billed, in line with the volume of energy allocated by grid operators, using measurement and modeling tools developed by your Group. The volumes are measured at the average energy price, taking into account the customer type and the age of the energy in the meter. ***Compensation relating to sales of gas and electricity in France under the French Government's "tariff shield" scheme*** The strong volatility observed in the energy markets and the resulting substantial increase in natural gas and electricity prices led the French government to introduce "tariff shield" measures for natural gas in 2021 and electricity in 2022. The 2023 Finance Law (law 2022-1726 of December 30, 2022) renewed and amended the tariff shield measures for gas (until June 30, 2023) and electricity (until January 31, 2024). The revenue losses incurred by your Group involve expenses attributable to public service obligations and are covered by compensation guaranteed by the French State, calculated according to the application methods published by the French Energy Regulatory Commission. In this context, your Group has exercised its judgment to determine how to recognize the compensation receivable. Considering the amount of revenue at stake and the sensitivity of the estimates to assumptions regarding average energy volumes and prices, and the judgments exercised, we have considered (i) the estimate of the portion of un-metered revenue delivered and (ii) the compensation receivable at the year-end under the tariff shield scheme to be a key audit matter.	***Revenue relating to un-metered and unbilled delivered sales of electricity and gas ("energy in the meter")*** The procedures conducted on the estimate of unmetered revenue recognized in France and Belgium consisted mainly in: • obtaining an understanding of the internal control procedures implemented by the Group about the billing process, and the processes securing the reliability of the accounting estimates for the metered energy; • assessing the relevance of the models used by your Group and investigating the computation methods for the estimated volumes by including an algorithm specialist in our audit team; • comparing the information on the volumes delivered and determined by the Group with the metering data provided by the grid operators; • examining that the methods used for the computation of the average price of the un-metered delivered power take account of its age in the meter and the different kinds of customers; • analyzing the consistency of the volumes committed in the employment operations (sales, injections and stocks) with energy resources (purchases, withdrawals and stock) on the networks; • assessing the regular clearance of the metered energy during the year ended December 31, 2023; • assessing the age of the energy in the meter at the year-end. ***Compensation relating to sales of gas and electricity in France under the French Government's "tariff shield" scheme*** Regarding the impacts arising from the implementation of the "tariff shield" scheme in France, our procedures consisted mainly in: • examining the legal provisions voted under the 2023 Finance Act ("Loi de Finance 2023") as well as the deliberations of the Energy Regulatory Commission regarding the methods of applying "tariff shield" schemes; • analyzing the financial impacts for your Group of the application of the various "tariff shield" provisions, as well as the valuation of the compensation receivable for the year ended December 31, 2023; • assessing the accounting treatment and the methods of presenting the income to be recognized in the income statement. For revenue relating to un-metered and unbilled delivered sales of electricity and gas ("energy in the meter") and the compensation relating to gas and electricity sales in France as part of the governmental "tariff shield" scheme, we assessed the appropriateness of the disclosures in Notes 1.3, 7.1 and 7.2.1 to the consolidated financial statements.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information relating to the Group given in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L. 225-102-1 of the French Commercial Code (*Code de commerce*) is included in the information relating to the Group given in the management report, it being specified that, in accordance with Article L. 823-10 of said Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained therein. This information should be reported on by an independent third party.

Report on Other Legal and Regulatory Requirements

Format of preparation of the consolidated financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by statutory auditors regarding the annual and consolidated financial statements prepared in the European single electronic format, that the preparation of the consolidated financial statements intended to be included in the annual financial report mentioned in Article L. 451-1-2, I of the French Monetary and Financial Code (*Code monétaire et financier*), prepared under the Chief Executive Officer's responsibility, complies with the single electronic format defined in Commission Delegated Regulation (EU) No. 2019/815 of December 17, 2018. Regarding consolidated financial statements, our work includes verifying that the tagging thereof complies with the format defined in the above-mentioned regulation.

On the basis of our work, we conclude that the preparation of the consolidated financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

Due to the technical limitations inherent to the block-tagging of the consolidated financial statements according to the European single electronic format, the content of certain tags of the notes may not be rendered identically to the accompanying consolidated financial statements.

We have no responsibility to verify that the consolidated financial statements that will ultimately be included by your Company in the annual financial report filed with the AMF *(Autorité des marchés financiers)* agree with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed as statutory auditors of ENGIE by your Shareholders' Meeting held on May 19, 2008 for ERNST & YOUNG et Autres and on July 16, 2008 for DELOITTE & ASSOCIES.

As at December 31, 2023, we were in the sixteenth year of total uninterrupted engagement.

ERNST & YOUNG Audit was previously statutory auditor between 1995 and 2007.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these consolidated financial statements.

As specified in Article L. 821-55 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management in the consolidated financial statements;
- Assesses the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report significant deficiencies, if any, in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France as set out in particular in Articles L. 821-27 to L. 821-34 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics for Statutory Auditors *(Code de déontologie de la profession de commissaire aux comptes)*. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Défense, March 5, 2024

The Statutory Auditors

French original signed by

DELOITTE & ASSOCIES		**ERNST & YOUNG et Autres**	
Patrick E. Suissa	Nadia Laadouli	Charles-Emmanuel Chosson	Guillaume Rouger

6.4 PARENT COMPANY FINANCIAL STATEMENTS AT DECEMBER 31, 2023

6.4.1 PARENT COMPANY FINANCIAL STATEMENTS

Balance sheet

Assets

In millions of euros		Note	Dec. 31, 2023 Gross	Dec. 31, 2023 Depreciation, amortization and impairment	Dec. 31, 2023 Net	Dec. 31, 2022 Net
NON-CURRENT ASSETS						
Intangible assets		3	2,173	1,543	630	576
Property, plant and equipment		3	944	598	346	375
Financial fixed assets		4				
Equity investments			75,967	12,070	63,897	60,255
Other financial fixed assets			82	8	74	77
TOTAL NON-CURRENT ASSETS	I		79,166	14,219	64,946	61,283
CURRENT ASSETS						
Inventories		5				
Gas reserves			1,959	-	1,959	3,676
Energy savings certificates			312	-	312	492
Other			721	-	721	727
Advances and downpayments given on orders			43	-	43	93
Operating receivables		6				
Trade and other receivables			10,105	936	9,169	16,653
Other operating receivables			1,226	-	1,226	1,483
Miscellaneous receivables						
Current accounts with subsidiaries			7,828	-	7,828	10,105
Other miscellaneous receivables			8,225	4	8,221	6,085
Marketable securities		7	4,751	-	4,751	6,062
Cash and cash equivalents			1,425	-	1,425	641
TOTAL CURRENT ASSETS	II		36,594	940	35,654	46,017
Accruals	III	8	6,073	-	6,073	9,019
Unrealized foreign exchange losses	IV	8	270	-	270	292
TOTAL ASSETS	(I TO IV)		122,103	15,159	106,944	116,612

NB: Amounts in tables are generally expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals or changes.

Equity and liabilities

In millions of euros		Note	Dec. 31, 2023	Dec. 31, 2022
EQUITY				
SHAREHOLDERS' EQUITY		9		
Share capital			2,435	2,435
Additional paid-in capital			23,916	25,667
Revaluation adjustments			38	38
Legal reserve			244	244
Other reserves			22	-
Retained earnings			100	-
Net income/(loss)			500	1,697
Interim dividend			-	-
Tax-driven provisions and investment subsidies		10.2	1,122	1,036
Total shareholders' equity	I		**28,375**	**31,117**
Other equity	II		**1**	**1**
Total equity	I+II		**28,376**	**31,118**
Provisions for contingencies and losses	III	10.1	**3,520**	**3,127**
Liabilities		11		
Borrowings and debt		11		
Borrowings			37,499	31,864
Amounts payable to equity investments			4,000	4,850
Current accounts with subsidiaries			4,946	3,551
Other borrowings and debt			639	620
Total borrowings and debt	IV		**47,084**	**40,885**
Current liabilities				
Advances and downpayments received on orders			73	5
Trade and other payables			10,625	19,543
Tax and employee-related liabilities			2,198	1,806
Other liabilities			7,367	9,438
Total current liabilities	V		**20,264**	**30,793**
Total liabilities	IV+V		**67,348**	**71,678**
Accruals	VI	12	**7,260**	**10,237**
Unrealized foreign exchange gains	VII	12	**440**	**452**
TOTAL EQUITY AND LIABILITIES	(I TO VI)		**106,944**	**116,612**

NB: Amounts in tables are generally expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals or changes.

Income statement

In millions of euros	Note	Dec. 31, 2023	Dec. 31, 2022
Energy sales		49,653	63,735
Other production sold		4,496	4,765
Revenues	**13.1**	**54,149**	**68,500**
Production taken to inventory		-	-
Production for own use		11	16
Total production		**54,161**	**68,516**
Energy purchases and change in reserves		(47,967)	(61,006)
Other purchases and external charges		(7,375)	(7,099)
Value added		**(1,181)**	**411**
Subsidies received		1,908	2,202
Taxes and duties		(386)	(188)
Personnel costs	13.2	(531)	(503)
Gross operating income/(loss)		**(190)**	**1,922**
Net additions to depreciation, amortization and impairment		(146)	(796)
Net additions to provisions	13.3	(346)	(134)
Expense transfers		22	5
Other operating income and expenses		(327)	54
Net operating income/(loss)		**(987)**	**1,051**
Net financial income/(loss)	**14**	**662**	**1,786**
Net recurring income/(loss)		**(325)**	**2,837**
Net non-recurring income/(loss)	**15**	**578**	**(1,461)**
Income tax benefit/(expense)	**16.2**	**247**	**321**
NET INCOME/(LOSS)		**500**	**1,697**

NB: Amounts in tables are generally expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals or changes.

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Cash flow statement

In millions of euros		Dec. 31, 2023	Dec. 31, 2022
Cash flow from operations	1	507	3,349
Change in inventories		(1,902)	2,750
Change in trade receivables (net of trade receivables with a credit balance)		(7,534)	5,380
Change in trade payables		8,918	(5,567)
Change in other items		3,276	(2,870)
Change in working capital requirements	2	2,757	(308)
CASH FLOW FROM/USED IN OPERATING ACTIVITIES	(1-2) = I	(2,250)	3,657
Property, plant and equipment and intangible assets		293	245
Financial fixed assets		3,400	4,272
Change in amounts payable on investments		-	-
Cash flow used in investing activities	1	3,693	4,517
Third-party contributions		-	-
Net proceeds from asset disposals		509	6,922
Decrease in financial fixed assets		73	83
Cash flow from investing activities	2	582	7,005
CASH FLOW FROM/USED IN INVESTING ACTIVITIES	(1-2) = II	3,111	(2,487)
CASH FLOW AFTER OPERATING AND INVESTING ACTIVITIES	(I-II) = III	(5,361)	6,145
Increase/decrease in capital	1	-	32
Dividends and interim dividends paid to shareholders	2	(3,427)	(2,083)
Bonds		8,622	650
Group borrowings		-	-
Short- and medium-term credit facilities and other borrowings		151	6,414
Financing raised on capital markets	3	8,774	7,064
Bonds and short- and medium-term credit facilities		(4,139)	(8,013)
Repayments and redemptions	4	(4,139)	(8,013)
CASH FLOW FROM/USED IN FINANCING ACTIVITIES	(1+2+3+4) = IV	1,207	(2,999)
CHANGE IN CASH AND CASH EQUIVALENTS	(III+IV) = V	(4,154)	3,146

NB: Amounts in tables are generally expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals or changes.

6.4.2 NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

NOTE 1 Summary of significant accounting policies

The 2023 financial statements have been drawn up in euros in compliance with the general principles prescribed by the French chart of accounts, as set out in Regulation No. 2014-03 issued by the French accounting standards-setter (Autorité des Normes Comptables – ANC), as updated by all subsequent amending regulations, and with the recommendations published by the ANC.

Financial transactions involving equity investments, securities and the related receivables, especially impairment charges or reversals, are included in nonrecurring items rather than financial items. In accordance with Article 121-3 of the French chart of accounts, ENGIE SA considers that this non-benchmark classification gives a more faithful view of the income statement because all items of income and expenses relating to equity investments can be shown together with capital gains or losses on disposals under non-recurring items.

Use of estimates and judgment

The preparation of financial statements requires the use of estimates and assumptions to determine the value of assets and liabilities and contingent assets and liabilities at the reporting date, as well as income and expenses reported during the period.

Developments in the economic and financial environment, particularly relating to highly volatile commodities markets, and the war in Ukraine have prompted the Group to step up its risk oversight procedures, mainly in measuring financial instruments, and assessing counterparty and liquidity risk. The estimates used by the Group, among other things, to test for impairment and to measure provisions, also take into account this environment and the sharp market volatility.

Accounting estimates are made in a context that remains sensitive to energy market developments, therefore making it difficult to apprehend medium- and short-term economic prospects. Particular attention has been paid to the consequences of fluctuations in the price of gas and electricity.

Due to uncertainties inherent to the estimation process, ENGIE SA regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used in preparing ENGIE SA's financial statements relate mainly to:

- measurement of equity investments (*see Note 4*)

  The recoverable amount of equity investments is based on estimates and assumptions, regarding in particular the expected market outlook and changes in the regulatory framework, which are used for the measurement of cash flows, whose sensitivity varies depending on the activity, and the determination of the discount rate. Any changes in these assumptions could have a material impact on the measurement of the recoverable amount and could result in the recognition of impairment losses or adjustments to impairment losses already recognized;

- fair value of financial instruments (*see Note 17*)

  To determine the fair value of financial instruments that are not listed on an active market, ENGIE SA uses valuation techniques that are based on certain assumptions. Any change in these assumptions could have a significant impact on the resulting calculations.

  Derivative financial instruments used by ENGIE SA to hedge and manage its currency, interest rate and commodity risk are disclosed in off-balance sheet commitments.

  Changes in the fair value of any such instruments that do not qualify for hedge accounting are recognized in the balance sheet. A provision is booked for unrealized losses, valued based on homogeneous groups of financial instruments with an equivalent underlying asset or liability, whether they are traded over-the-counter or exchange-traded.

  In the case of contracts that qualify as hedging instruments, gains or losses are taken to income symmetrically with the gain or loss on the hedged items.

  If the hedged item ceases to exist, the contract is unwound and any gains or losses taken to income.

  ENGIE SA uses internal models representative of market practices to value financial derivative instruments that are not listed on financial markets.

  Option premiums are deferred and recognized in income over the life of the hedge. The premium or discount on forward currency transactions is recognized in income in the initial value of the hedged item;

- energy in the meter (*see Note 6*)

  The amounts receivable in respect of delivered, unmetered and unbilled gas and electricity are calculated using mathematical models including estimated customer consumption and estimated selling prices. The amount of energy in the meter calculated at the closing date varies depending on the assumptions about volume and price (see section on *Other operating receivables* below);

- measurement of provisions for contingencies and losses (*see Note 10*)

  Provisions for contingencies and losses are estimated on the basis of various assumptions. A change in those assumptions could lead to a significant adjustment to the amount of the provisions;

- measurement of off-balance sheet pension and other employee benefit obligations (*see Note 18*)

  Pension commitments are measured on the basis of actuarial assumptions. Any change in the assumptions used by ENGIE SA could have a significant impact on the valuation of these commitments.

Intangible assets

This caption mainly comprises the purchase cost or production cost of software, amortized over its estimated useful life.

A useful life of between five and seven years is generally used to calculate software amortization.

Other development costs are capitalized provided they meet specific criteria, particularly as regards the pattern in which the intangible asset is expected to generate future economic benefits.

Research costs are expensed in the year in which they are incurred.

Royalties from software used in a SaaS (Software as a Service) model are capitalized once they contribute to the creation of fixed assets and are amortized over their useful life. In other cases, they are expensed as and when the related services are rendered.

Property, plant and equipment

All items of property, plant and equipment are carried at purchase cost or production cost, including ancillary expenses, with the exception of assets acquired prior to December 31, 1976, which are shown at their revalued amount at that date.

Almost all items of property, plant and equipment are depreciated on a straight-line basis.

Assets are depreciated over their useful lives, based on the period over which they are expected to be used. The useful lives for the main asset classes are as follows:

- buildings: 20 to 60 years;
- other: 3 to 15 years.

Borrowing costs incurred in financing an asset are recognized as an expense and amortized over the financing period.

Components

When the components of a given asset cannot be used separately, the overall asset is recognized. If one or more components have different useful lives at the outset, each component is recognized and depreciated separately.

Financial fixed assets

Equity investments

Equity investments represent long-term investments providing ENGIE SA with control or significant influence over the issuer, or helping it to establish business relations with the issuer.

Newly-acquired equity investments are recognized at purchase price plus directly attributable external transaction fees.

Investments which ENGIE SA intends to hold on a long-term basis are written down if their value in use has fallen below their book value. Value in use is assessed by reference to (i) the intrinsic value, which corresponds to net assets plus unrealized gains, or (ii) the yield value, which corresponds to the average of the last 20 stock market prices of the year, or (iii) expected cash flows, using the discounted cash flow (DCF) or dividend discount model (DDM), taking into account any currency hedges.

Investments which ENGIE SA has decided to sell are written down if their estimated sale price is lower than their book value. If sale negotiations are ongoing at the end of the reporting period, the book value of the investments is determined based on a best estimate.

Technical loss

The technical loss arising on a merger is allocated to the underlying assets, which, in this case, are equity investments.

The portion of the loss allocated to an underlying asset is written down if the value of the asset falls below its net book value plus the portion of the loss allocated to it. The write-down is first allocated to the portion of the loss.

In the event of a disposal, the portion of the loss relating to the assets sold is reversed through income.

Amounts receivable from equity investments

This caption consists of loans granted by ENGIE SA to equity investments.

They are recognized at face value. In line with the treatment adopted for equity investments, these amounts are written down if their value in use falls below their face amount.

Provisions for contingencies may be booked if the Company considers that the cost of its commitment exceeds the value of the assets held.

Other financial fixed assets

Investments other than equity investments that ENGIE SA intends to hold on a long-term basis but which do not meet the definition of equity investments are mainly included under this caption.

A write-down may be taken against other financial fixed assets in accordance with the criteria described above for equity investments.

Liquidity agreement and treasury stock

ENGIE SA has signed a liquidity agreement with an investment service provider, whose role is to trade on the market on a daily basis and buy or sell ENGIE SA shares in order to ensure liquidity and an active market for the shares on the Paris and Brussels stock exchanges.

The amounts paid to the investment services provider are included in "Other long-term investments". An impairment loss is recognized against the shares when their average price for the month in which the accounts are closed is lower than their book value.

Inventories

Natural gas reserves

Gas injected into underground reservoirs is included in inventories. It is measured at average purchase cost including domestic and international freight costs upon entering the transportation network regardless of its source, and including any regasification costs. Outflows are measured on a monthly basis using the weighted average unit cost method.

An impairment loss is recognized when the net realizable value of inventories, representing the selling price less costs directly and indirectly attributable to distribution, is lower than weighted average cost.

Energy savings certificates (ESC)

ENGIE SA applies the provisions of the French chart of accounts on the accounting treatment of ESC covered by the "energy savings" model. Energy sales generate energy savings obligations which are settled by procurement of the certificates, obtaining certificates by carrying out energy-saving work, or paying to the French Treasury (*Trésor Public*) the fines provided for in Article L.221-4 of the French Energy Code (*Code de l'énergie*).

Energy savings certificates are accounted for as follows:

- inventory inflows: certificates obtained from the French State in exchange for qualifying energy savings expenditure are recorded at acquisition or production cost;
- inventory outflows: certificates are derecognized using the weighted average cost method as and when energy sales generate energy savings obligations or upon disposal, gains or losses on which are recognized in operating income.

At the closing date, the net position is recognized in the financial statement as follows:

- an asset (inventories) is recognized when energy savings obligations are lower than energy savings. Inventories correspond to certificates that have been acquired, obtained or are in the process of being obtained, and that will cover future energy savings obligations. They will subsequently be consumed when energy sales are made, which generate energy savings obligations, or on disposal;
- a liability is recognized when energy savings obligations are higher than energy savings and corresponds to the cost of measures required to settle the obligations related to energy sales made. The liability will subsequently be settled by procurement of certificates or incurring energy savings expenditure that qualify for certificates.

Capacity remuneration mechanism (CRM)

The capacity mechanism introduced by France's "NOME" (*Nouvelle Organisation du Marché de l'Électricité*) law of December 7, 2010 came into effect on January 1, 2017. It aims to secure the supply of electricity in France on a sustainable basis, by ensuring a long-term balance between production and consumption.

For each calendar year:

- electricity suppliers have an obligation to hold capacity guarantees in an amount sufficient to cover their customers' peak-period consumption;
- capacity, production and curtailment operators commit to a certain level of availability during winter peak periods and in exchange receive capacity guarantees;
- capacity guarantees are traded on Epex Spot (auctions) or under over-the-counter contracts.

In accordance with the deliberation of the French energy regulator (Commission de Régulation de l'Énergie – CRE) of February 28, 2019, as of delivery year 2020, the capacity difference reference price (PREC) is defined as the last auction price before the beginning of a given delivery year.

The Epex Spot capacity guarantee auction for delivery years 2024 and 2025 took place on November 16, 2023. At this auction, capacity guarantees were exchanged at a price of €35,380/MW for 2024 and €25,000/MW for 2025.

The last Epex Spot capacity guarantee auction for delivery year 2024 took place on December 7, 2023. Capacity guarantees were exchanged at €6,200/MW for 2024 and €9,368/MW for 2025. The capacity difference reference price (PREC) for 2024 is therefore €6,200/MW.

ENGIE SA markets curtailment offers that are inseparable from the supply of electricity to some customers and is also an obligee as an electricity provider.

In the absence of a specific ANC Regulation on accounting for capacity certificates, ENGIE SA applies the provisions of the French chart of accounts on operating inventories of energy savings certificates – energy savings model:

- inventory inflows are measured based on the costs incurred during the relevant period to purchase or obtain guarantees, leading to the calculation of a weighted average unit cost of inventories;
- inventory outflows upon derecognition are valued using the weighted average cost method.

Operating receivables

This caption includes all receivables arising on the sale of goods, and other receivables arising in the ordinary course of operations.

Energy delivered but unbilled

Receivables also include unbilled revenues for energy delivered, regardless of whether or not the meters have been read. This caption concerns customers not billed monthly (mainly residential customers) and customers whose billing period is not aligned with the consumption period of a given month.

The amounts receivable in respect of delivered, unmetered and unbilled gas and electricity ("energy in the meter") are calculated using a direct method taking into account estimated customer consumption based on the most recent customer bill or unbilled reading, in line with the allocation of the distribution grid manager over the same period, using measurement and modeling tools developed by the Group.

These amounts are measured at the average energy price, which takes account of the category of customer and the age of the delivered unbilled "gas in the meter". The estimated portion of unbilled revenue at the reporting date is sensitive to the average price and volume assumptions used.

Customers (mainly residential customers) can opt to pay on a monthly basis. In this case, the Company recognizes a monthly advance and a bill is issued at the anniversary date of the contract giving rise to the payment (or refund) of any difference between the amount billed and the advance payments already received.

Unbilled revenues in respect of delivered unbilled natural gas are reduced by the amount of advances already collected by the Company from customers billed monthly.

Impairment of trade receivables

Bad debt risk is analyzed on a case-by-case basis for the Company's largest customers.

Receivables from other customers are written down using rates that increase in line with the age of the related receivables.

The potential bad debt risk arising on amounts receivable in respect of delivered unbilled energy is also taken into account.

"Tariff Shield" system

Tariff shield for gas

The exceptional crisis in wholesale natural gas prices prompted the French government to introduce a series of emergency measures, starting in 2022, to limit the increase in consumers' gas bills.

The tariff shield for gas provides that the loss of revenue incurred from November 1, 2021 by the natural gas supplier qualifies as expenses attributable to public service obligations and is eligible for State-guaranteed compensation up to an amount sufficient to cover the supply costs actually incurred and approved by the CRE when the pricing formula was established.

A catch-up mechanism was introduced in July 2022 to compensate energy suppliers for their losses.

The 2023 Finance Act renewed the tariff shield principle and limited the increase in regulated natural gas tariffs, which are used as a reference for calculating aid, to an average of 15% as of January 1, 2023. For low-income households, this increase was offset by the provision of a one-off energy voucher from December 2022.

From January 1, 2023, the tariff shield for gas for individual consumers was extended to all residential consumers who consume over 30 MWh/year and to homeowner associations that consume over 150 MWh/year, regardless of the nature of the contract (*i.e.*, regulated natural gas tariffs or a market offering, contracts indexed to regulated natural gas tariffs or fixed price contracts). This measure is also known as a collective tariff shield for gas.

Tariff shield for electricity

The exceptional crisis in wholesale electricity prices prompted the French government to introduce a series of emergency measures, starting in 2022, to limit the increase in consumers' electricity bills.

The 2023 Finance Act provides as follows:

- the reduction in the domestic tax on end-use electricity (TICFE) to its minimum rate remains unchanged until January 31, 2024. This measure is provided for in the national budget;
- as an exception to the provisions of the French Energy Code (*Code de l'énergie*), Article 181 allows the government to block the CRE's proposal to increase regulated electricity tariffs, limiting their increase to an average of 15% including tax from February 1, 2023 (2023 tariff shield).

The tariff shield extended to 2023, which was initially intended for individual customers, has been extended since 2023 to very small businesses with an electricity meter rated at less than 36 kilovoltamperes (kVA). This extension is included in the 2023 Finance Act.

The aid (*amortisseur électricité*) set up for small and medium size enterprises, microenterprises and local authorities not benefiting from tariff shields, was effective from January 1, 2023 to December 31, 2023.

Specific aid (covering the period from July 1, 2022 through to the end of 2023) for households living in collective housing heated collectively with electricity (collective electricity shield) was introduced by Decrees No. 2022-1764 and No. 2022-1763.

The CRE has set an ARENH (*i.e.*, historical regulated access to nuclear energy) price of €42/MWh for 2023, and a maximum overall volume at the standard level of 100 TWh per year.

Article 181 of the 2023 Finance Act, confirms that revenue losses borne by energy suppliers between February 1, 2023 and February 1, 2024 qualify as expenses attributable to public service obligations for 2023 and are therefore eligible for compensation.

Accordingly, ENGIE SA has recognized a subsidy in respect of the compensation for public service charges arising from the price freeze on gas sales at regulated natural gas tariffs and from revenue losses borne by electricity suppliers (see Note 6).

As part of its decisions of January 19, 2023, the CRE also included a catch-up component in 2023, to compensate for losses incurred by electricity suppliers in 2022. A reversion charge has therefore been recognized between February 2023 and January 2024.

Other operating receivables

Other operating receivables include the current account with ENGIE Finance, as well as margin calls. Items for which there is a risk of non-collection are written down.

Marketable securities

Marketable securities are shown on the balance sheet at cost.

When the market value of securities at December 31 is lower than their book value, a write-down is recognized for the difference.

For listed securities, market value is determined based on the market price at the end of the reporting period.

Shareholders' equity

Additional paid-in capital

External costs directly attributable to capital increases are deducted from additional paid-in capital. Other costs are expensed as incurred.

Revaluation adjustments

This caption results from the legal revaluation of non-amortizable assets not operated under concessions carried out in 1959 and 1976.

Merger premium

External expenses directly attributable to the merger between Gaz de France SA and SUEZ in 2008 are deducted from the merger premium.

Tax-driven provisions

Accelerated depreciation

Accelerated depreciation is recognized whenever an asset's useful life (which is used in accounting for the depreciation of property, plant and equipment) differs from that used for tax purposes or when a different depreciation method is used.

Provision for price increases

The provision for price increases was introduced by Article 39-1-5 of the French Tax Code (*Code général des impôts*) to allow companies to temporarily deduct a portion of profits used for inventory replenishment from their tax base in the event of sharp price increases.

Provisions for contingencies and losses

A provision is recognized when the Company has a legal or constructive obligation resulting from a past event which is expected to result in an outflow of resources embodying economic benefits that can be measured reliably.

The provision represents the best estimate of the amount required to settle the present obligation at the end of the reporting period.

Provisions for rehabilitating land on which former gas production plants were located

A provision for site rehabilitation and clean-up costs for former gas production plants is set aside in the books of ENGIE SA for the sites concerned. These provisions reflect the best estimate of the future costs required to complete the rehabilitation work, based on current technical knowledge and regulatory requirements.

Movements in these provisions are shown under operating items.

Provision for employee bonus share awards

The provision for employee bonus share awards is recognized on a straight-line basis over the vesting period. The provision ultimately covers the disposal loss equal to the book value of treasury stock granted free of consideration to employees. Movements in this provision and any related costs are shown in personnel costs.

Pensions and other employee benefit obligations

Companies belonging to the electricity and gas industries sector

ENGIE SA employees qualify for the disability, pension and death benefits available under the special plan for companies belonging to the electricity and gas industries sector (see Note 18).

Accounting treatment

ENGIE SA recognizes provisions under liabilities for benefits granted to employees whose rights have already begun to vest (annuities for occupational accidents and illnesses, temporary incapacity or disability benefits), or benefits due during the employee's working life (long-service awards and exceptional end-of-career vacation).

As part of the 2008 merger between SUEZ and Gaz de France with retroactive effect from January 1, 2008, provisions for pensions and other employee benefits (pensions, retirement indemnities and healthcare) carried by SUEZ at December 31, 2007 were transferred to ENGIE SA.

No further amounts are set aside to these provisions in respect of newly vested employee rights or the unwinding of discounting adjustments on the provisions transferred within the scope of the merger. These provisions are written back in line with the settlement of the corresponding obligations.

No provisions are set aside in liabilities for other commitments. These are disclosed in Note 17 on offbalance sheet commitments.

Basis of measurement and actuarial assumptions

Benefit obligations are measured using the projected unit credit method. The present value of the obligations of ENGIE SA is calculated by allocating vested benefits to periods of service under the plan's benefit formula. When an employee's service in later years leads to a materially higher level of benefits than in earlier years, the Group allocates the benefits on a straight-line basis.

Future payments in respect of these benefits are calculated based on assumptions as to salary increases, retirement age, mortality and employee turnover.

The rate used to discount future benefit payments is determined by reference to the yield on investment grade corporate bonds based on maturities consistent with the benefit obligation.

Borrowings and debt

Subordinated perpetual notes

Subordinated perpetual notes issued by the Company in euros and foreign currencies are recognized in accordance with Opinion No. 28 issued by the French association of public accountants (Ordre des Experts-Comptables – OEC) in July 1994, *i.e.*, taking into account their specific characteristics.

Accordingly, they are classified as debt as their redemption period is not perpetual.

Bond redemption premiums and issue costs

Bond issue costs are recognized on a straight-line basis over the life of the instruments. These issue costs mainly consist of advertising expenses (for public issues) and fees due to financial intermediaries.

Bonds carrying a redemption premium are recognized in liabilities for their total amount including redemption premiums. The matching entry for these premiums is recorded in assets under accruals, and amortized over the life of the bonds pro rata to interest.

Derivative instruments

In accordance with the principles reaffirmed by ANC Regulation No. 2015-05 whose application has been mandatory as of January 1, 2017, financial instruments used by ENGIE SA to hedge and manage its currency, interest rate and commodity risk are disclosed in off-balance sheet commitments.

Unrealized gains on transactions that do not qualify for hedge accounting are not recognized. A provision is recognized for unrealized losses on these transactions, however.

In the case of contracts that qualify for hedge accounting, gains or losses are taken to income symmetrically with the gain or loss on the hedged items.

If the hedged item ceases to exist, the contract is unwound and any gains or losses taken to income.

ENGIE SA uses internal models representative of market practices to value financial derivative instruments that are not listed on financial markets.

Foreign currency transactions

Income and expenses denominated in foreign currencies are recorded at their equivalent value in euros at the transaction date.

Foreign currency receivables, payables and cash and cash equivalents are converted at the exchange rate prevailing at the year-end.

Translation differences are taken to income when they arise on cash and cash equivalents, or to the balance sheet under unrealized foreign exchange gains or losses when they arise on receivables and payables. A provision is set aside for unrealized losses after taking account of any associated hedging instruments.

Income tax

Since January 1, 1988, ENGIE SA has been part of the tax consolidation regime introduced by Article 68 of Law No. 87-1060 of December 30, 1987. ENGIE SA is head of a tax consolidation group within the meaning of Articles 223-A *et seq.* of the French Tax Code.

The contribution of subsidiaries in the tax consolidation group to the Group's income tax expense equals the amount of tax for which they would have been liable if they had not been members of the tax consolidation group.

The impacts of tax consolidation are recorded under the income tax expense of ENGIE SA, as parent company.

ENGIE SA also records a provision for any tax savings generated by subsidiaries' tax losses. These savings initially benefit ENGIE SA as parent company, and are recovered by the subsidiaries once they return to profit (hence the provision booked).

NOTE 2 Significant events during the year and comparability of periods presented

Significant events during the year

None

Comparability of periods presented

The same accounting methods were used in 2023 and 2022.

NOTE 3 Property, plant and equipment and intangible assets

3.1 Gross values

Changes in the gross value of these assets can be analyzed as follows:

In millions of euros	Dec. 31, 2022	Increases	Decreases	Reclassifications	Dec. 31, 2023
Intangible assets	**2,041**	**239**	**(115)**	**8**	**2,173**
Software	1,464		(105)	203	1,562
Technical loss (1)	-				-
Other	370	-	(2)	-	368
Intangible assets in progress (1)	207	239	(7)	(195)	243
Property, plant and equipment	**937**	**53**	**(38)**	**(8)**	**944**
Land	36	1	-	1	37
Dismantling assets	3	-	-	-	3
Buildings	372	-	(3)	5	374
Plant and equipment	315	-	(18)	11	308
General plant and equipment, and miscellaneous fixtures and fittings	135	-	(14)	2	123
Other	25	-	(1)	4	28
Property, plant and equipment in progress	51	51	(2)	(30)	71
Advances and downpayments	-	-	-	-	-
TOTAL	**2,978**	**292**	**(153)**	-	**3,117**

(1) Intangible assets in progress essentially concern IT projects.

3.2 Depreciation, amortization and impairment

Changes in depreciation and amortization were as follows:

In millions of euros	Dec. 31, 2022	Increases	Decreases	Dec. 31, 2023
Intangible assets	**1,356**	**181**	**(84)**	**1,453**
Software	1,115	159	(83)	1,191
Other	241	22	(1)	262
Property, plant and equipment	**540**	**35**	**(30)**	**545**
Land	-	1	-	1
Dismantling assets	3			3
Buildings	271	9	(3)	277
Plant and equipment	156	15	(15)	156
General plant and equipment, and miscellaneous fixtures and fittings	88	10	(12)	86
Other	22	1	(1)	22
Property, plant and equipment in progress	-	-	-	-
TOTAL	**1,896**	**215**	**(114)**	**1,999**

Changes in impairment were as follows:

In millions of euros	Dec. 31, 2022	Additions	Reversals	Dec. 31, 2023
Intangible assets	108		(19)	89
Property, plant and equipment	22	38	(6)	54
TOTAL	**130**	**38**	**(25)**	**143**

Movements in depreciation, amortization and impairment can be broken down as follows:

In millions of euros	Dec. 31, 2022	Dec. 31, 2023
Depreciation, amortization and impairment	**199**	**196**
Straight-line method	198	196
Declining-balance method	1	
Depreciation of dismantling assets	-	-
Exceptional amortization	**20**	**19**
Reversals	-	-

3.3 Net values

The net value of intangible assets and property, plant and equipment breaks down as follows:

In millions of euros	Gross values	Accumulated depreciation and amortization	Impairment	Net value at Dec. 31, 2023	Net value at Dec. 31, 2022
Intangible assets	**2,173**	**(1,453)**	**(89)**	**630**	**576**
Software	1,561	(1,191)	(1)	369	346
Other	368	(262)	(88)	19	23
Intangible assets in progress	243	-	-	243	207
Property, plant and equipment	**944**	**(544)**	**(54)**	**346**	**375**
Land	37	(1)	-	36	35
Dismantling assets	3	(3)	-	-	-
Buildings	374	(276)	(6)	92	94
Plant and equipment	308	(156)		152	159
General plant and equipment, and miscellaneous fixtures and fittings	123	(86)	(12)	25	35
Other	28	(22)	(36)	(30)	3
Property, plant and equipment in progress	71	-		71	50
Advances and downpayments	-	-	-	-	-
TOTAL	**3,117**	**(1,998)**	**(144)**	**976**	**952**

NOTE 4 Financial fixed assets

4.1 Gross values

Changes in the gross value of these assets can be analyzed as follows:

In millions of euros	Dec. 31, 2022	Increases	Decreases	Other	Dec. 31, 2023
Equity investments	**73,039**	**3,425**	**(466)**	**(31)**	**75,967**
Consolidated equity investments	72,644	3,014	(56)	-	75,602
Consolidated equity investments – technical loss (1)	32	-	-	-	32
Non-consolidated equity investments	363	411	(410)	(31)	333
Other financial fixed assets	**153**	**431**	**(503)**	**-**	**81**
Other long-term investments	40	1	-	-	41
Amounts receivable from equity investments	72	4	(76)	-	-
Loans	16	13	(14)	-	15
Other financial fixed assets	25	413	(413)	-	25
TOTAL	**73,192**	**3,856**	**(969)**	**(31)**	**76,048**

(1) Technical loss arising on the 2008 merger of SUEZ with Gaz de France, mainly involving Electrabel shares.

Movements in treasury stock are detailed in Note 9.1.

Equity investments and amounts receivable from these investments are detailed in Note 4.4.

The year-on-year change in equity investments at December 31, 2023 is essentially attributable to the following transactions:

- sale of Reservoir SUN shares (€56 million);
- subscription to the capital increase carried out by ENGIE Energy Services International (€2,200 million);
- subscription to the capital increase carried out by IT (€310 million);
- subscription to the capital increase carried out by GRDF (€250 million);
- subscription to the capital increase carried out by ENGIE Management Company (€150 million);
- subscription to the capital increase carried out by ENGIE New Business (€94 million);
- liquidation of Celizan (€31 million);
- acquisition of ENGIE Hydrogen International (€10 million).

Of the change in amounts receivable from equity investments, €69 million was due to the repayment of the loan granted to VILOREX.

At December 31, 2023, “Other financial fixed assets” comprised:

- deposits paid (€15 million);
- shares held under liquidity agreements (€10 million).

4.2 Impairment

In millions of euros	Dec. 31, 2022	Additions	Reversals	Other	Dec. 31, 2023
Consolidated equity investments	12,473	1,114	(1,801)	-	11,786
Consolidated equity investments – technical loss (1)	31	-	-	-	31
Non-consolidated equity investments	281	5	(2)	(31)	253
Other long-term investments	7	1	-	-	8
Amounts receivable from equity investments	69	-	(69)	-	-
Loans	-	-	-	-	-
TOTAL	**12,861**	**1,120**	**(1,872)**	**(31)**	**12,078**

(1) Technical loss arising on the 2008 merger of SUEZ with Gaz de France, mainly involving Electrabel shares.

The change in impairment mainly reflects:

- additions to provisions for impairment against equity investments:
  - ENGIE Energy Services International (€485 million),
  - ENGIE New Business (€258 million),
  - ENGIE IT (€191 million),
  - ENGIE Management Company (€150 million),
  - ENGIE China Investment Company (€16 million),
  - ENGIE New Ventures (€10 million);
- reversals of impairment provisions against equity investments:
  - Electrabel (€1,766 million),
  - Celizan (€31 million),
  - GENFINA (€28 million).

The value in use of the equity investments used to calculate impairment is assessed by reference to:

- for private equity firms, the intrinsic value, which corresponds to net assets plus unrealized gains;
- for listed companies, the yield value, which corresponds to the average of the last twenty stock market prices of the year;
- for other operating subsidiaries, value in use, which corresponds to the cash flows or dividends (DCF or DDM model) expected to be generated by subsidiaries that directly or indirectly hold operating activities.

In most cases, the recoverable amounts are determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2024 budget and the 2025-2026 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on the basis of extrapolated cash flows beyond that time frame.

Cash flow projections are determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates), and price forecasts resulting from the Group's reference scenario for 2027-2050 as revised and validated by the Executive Committee in July 2023. The forecasts and projections included in the reference scenario were determined on the basis of the following inputs:

- forward market prices over the liquidity period for fuel (coal, oil and gas), CO_2 and electricity on different markets against a backdrop of highly volatile energy prices;
- beyond this period, medium- and long-term energy prices were determined by the Group based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO_2 are in line with the 2030 emissions reduction target of 55% and the 2050 climate neutrality objective set by the European Commission as part of the "European Green Deal" presented in December 2019 and July 2021. Among the external scenarios, the Group's scenario is similar to that of the International Energy Agency, with its APS (Announced Pledges Scenario) model, and that of ADEME ("green technology");
- more specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO_2 prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system. ENGIE has opted for a balanced mix, integrating renewable gas and carbon dioxide capture and storage in order to guarantee an energy system with the best levels of efficiency and resilience. This trajectory has been included in the Group's report as part of the "Task Force on Climate Related Financial Disclosures" (TCFD) initiative. The risk factors arising from climate and environmental issues are also detailed in the Group's Universal Registration Document.

Electrabel owns, either directly or through equity investments in Europe or outside Europe, the following main operating activities:

- power generation and sale:
  - nuclear power plants in Belgium,
  - thermal power plants, mainly in Belgium, the Netherlands, Italy, Spain, Portugal, Australia, Singapore, Brazil, Puerto Rico, Chile, Mexico, Peru and the Middle East,
  - renewable power generation plants, mainly in Belgium, the Netherlands, Italy, Spain, Portugal, Germany, the United Kingdom, Brazil, Chile and Mexico;
- natural gas and power generation in Belgium, the Netherlands, Italy, the United Kingdom, Australia and Singapore;
- management and optimization of portfolios of physical and contractual assets.

4.3 Net values

In millions of euros	Gross values	Impairment	Net value at Dec. 31, 2023	Net value at Dec. 31, 2022
Equity investments	**75,967**	**(12,070)**	**63,897**	**60,254**
Consolidated equity investments	75,602	(11,786)	63,816	60,171
Consolidated equity investments – technical loss [(1)]	32	(31)	1	1
Non-consolidated equity investments	333	(253)	80	82
Other financial fixed assets	81	(8)	73	77
Other long-term investments	41	(8)	33	33
Amounts receivable from equity investments	-	-	-	3
Loans	15	-	15	16
Other financial fixed assets	25	-	25	25
TOTAL	**76,048**	**(12,078)**	**63,970**	**60,331**

(1) Technical loss arising on the 2008 merger of SUEZ with Gaz de France, mainly involving Electrabel shares.

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4.4 Subsidiaries and investments

Some of the data in the table are unaudited.

In millions of euros	Share capital	Other equity	% capital held	Book value of shares held		Loans and advances granted	Sureties and endorse-ments	Revenues	Net income/ (loss)	Dividends received in 2023	Year-end
				Gross	Provisions						
Name											
A – Detailed information concerning subsidiaries and investments whose gross value exceeds 1% of ENGIE SA capital (*i.e.*, €24,352,850)											
1. Subsidiaries (more than 50%-owned by ENGIE SA)											
Aguas Provinciales de Santa Fe	-	(180)	64.19%	39	(39)	-	-	-	(12)	-	Dec. 2020
COGAC	1,717	888	100.00%	3,430	-	-	-	-	1,062	-	Dec. 2023
Electrabel	5,790	8,008	99.13%	34,148	(7,925)	-	-	14,681	(3,568)	-	Dec. 2023
Electrabel France	507	235	100.00%	1,641	-	-	-	44	(269)	20	Dec. 2023
ENGIE Alliance	100	(13)	64.00%	62	-	(42)	-	-	(13)	-	Dec. 2023
ENGIE China Invest Company	43	(34)	100.00%	123	(114)	-	-	-	-	-	Dec. 2023
ENGIE Energy Services	699	821	100.00%	2,933	-	-	-	2,926	145	600	Dec. 2023
ENGIE Energy Services International	2,936	1,797	100.00%	6,108	(911)	-	-	-	(98)	-	Dec. 2023
ENGIE Finance	5,460	142	100.00%	5,567	-	5,956	-	-	18	109	Dec. 2023
ENGIE IT	142	(24)	100.00%	538	(419)	-	-	433	(24)	-	Dec. 2023
ENGIE Management Company	30	(32)	100.00%	265	(265)	-	-	164	(32)	-	Dec. 2023
ENGIE New Business	458	(769)	100.00%	461	(461)	-	-	-	(569)	-	Dec. 2023
ENGIE New Ventures	69	(70)	100.00%	92	(60)	-	-	-	(22)	-	Dec. 2023
ENGIE Rassembleur d'Energies	50	(24)	100.00%	50	(13)	-	-	-	(2)	-	Dec. 2023
GDF International (ENGIE group Participations from Jan. 1, 2024)	3,972	319	100.00%	3,972	-	-	-	3	382	-	Dec. 2023
GENFINA	100	440	100.00%	2,627	(1,322)	-	-	-	10	-	Dec. 2023
GRDF	1,836	1,067	100.00%	8,655	-	-	-	3,252	(178)	366	Dec. 2023
GRT Gaz	640	4,270	60.79%	1,901	-	-	-	2,188	429	300	Dec. 2023
S.F.I.G	2	3	100.00%	94	(86)	-	-	2	(2)	-	Dec. 2023
Sopranor	-	1	100.00%	245	(243)	-	-	-	(2)	-	Dec. 2023
Storengy SAS	2,733	234	100.00%	2,733	-	-	-	73	209	126	Dec. 2023
50FIVE	41	(38)	63.29%	34	(34)	-	-	30	(1)	-	Dec. 2023
2. Equity investments (less than 50%-owned by ENGIE SA)											
Aguas Argentinas	1	(8)	48.20%	145	(145)	-	-	-	-	-	Dec. 2020
B – Information concerning other subsidiaries and investments											
1. Subsidiaries not included in section A											
French companies	-	-	-	62	(26)	-				3	
Foreign companies (data in local operating currency)	-	-	-	9	-	-				-	
2. Equity investments not included in section A											
French companies	-	-	-	14	(8)	-				-	
Foreign companies (data in local operating currency)	-	-	-	24	-						
3. Other long-term investments not included in section A											
French companies	-	-	-	38	(7)	-				6	
Foreign companies (data in local operating currency)	-	-	-	-	-	-	-	-	-	-	
TOTAL				**76,010**	**(12,078)**					**1,530**	

NOTE 5 Inventories

Changes in the gross value of these assets can be analyzed as follows:

In millions of euros	Gross values Dec. 31, 2022	Increases	Decreases	Gross values Dec. 31, 2023
Natural gas (including butane/propane)	3,675	2,126	(3,842)	1,959
Energy savings certificates	492	984	(1,164)	312
Capacity guarantees	724	173	(179)	718
Guarantees of origin	3			3
TOTAL	**4,894**	**3,283**	**(5,185)**	**2,992**

Inventory impairment can be analyzed as follows:

In millions of euros	Dec. 31, 2022	Additions	Reversals	Dec. 31, 2023
Natural gas (including butane/propane)	-	-	-	-
Energy savings certificates	-	-	-	-
Capacity guarantees	-	-	-	-
Guarantees of origin	-	-	-	-
TOTAL	**-**	**-**	**-**	**-**

The net value of inventories breaks down as follows:

In millions of euros	Gross values	Impairment	Net value at Dec. 31, 2023	Net value at Dec. 31, 2022
Natural gas (including butane/propane)	1,959	-	1,959	3,675
Energy savings certificates	312	-	312	492
Capacity guarantees	718	-	718	724
Guarantees of origin	3	-	3	3
TOTAL	**2,992**	**-**	**2,992**	**4,894**

5.1 Natural gas reserves

Gas reserves at end-December 2023 were €1,716 million lower than at end-December 2022, mainly due to lower prices for the quantities purchased.

5.2 Energy savings certificates

Energy Savings Certificates require certain suppliers of energy to meet energy savings targets imposed upon them by public authorities. The level of obligation is defined by savings obligation period and allocated between energy types. The suppliers concerned fulfill their obligation by obtaining Energy Savings Certificates equivalent to the number of TWh of cumac that must be saved.

The fifth energy savings period, which runs from January 1, 2022 to December 31, 2025, has seen several regulatory changes:

- Decree No. 2021-712 of June 3, 2021, which:
  - introduced a gradual change in the thresholds for electricity and gas over the period to extend the obligation to more suppliers and avoid a distortion due to competition between suppliers,
  - set an initial overall target for the fifth period of 2,500 TWh, *i.e.*, 1,770 TWh of cumac for the "traditional" obligation, and 730 TWh of cumac for the "fuel poverty" obligation, an increase of 37%,
  - refocuses the "fuel poverty" ESC obligation on the most vulnerable households,
  - changed the calculation of the obligation amount for each type of energy (Articles R.221-4 and R. 221-4-1 of the French Energy Code): the amount of obligations expressed in discounted cumulative KWh is divided by the volume of energy sold or released for consumption;
- rounded out by Decree No. 2022-1368 of October 27, 2022, which increased ESC obligations for 2023 to 2025 by 25%, *i.e.*, 200 TWh of cumac for the "traditional" obligation and 400 TWh of cumac for the "fuel poverty" obligation:
  - increase in "traditional" energy savings obligations coefficients provided for under Article R.221-4 of the French Energy Code,
  - increase in the "fuel poverty" energy savings obligations coefficients provided for under Article R.221-4-1 of the same Code.

The overall target for the fifth period is 3,100 TWh cumac, compared with 2,133 TWh cumac for the fourth period.

Pursuant to Decree No. 2022-1368, ENGIE SA's annual "traditional" Energy Savings Certificate (ESC) obligation is determined by applying the following coefficients to its sales:

- 0.485 kWh cumac/kWh sold for natural gas in 2023 and in subsequent years (compared with 0.422 kWh cumac/kWh sold in 2022);
- 0.478 kWh cumac/kWh sold for electricity in 2023 and in subsequent years (compared with 0.416 kWh cumac/kWh sold in 2022).

In addition to the "traditional" obligation, the "fuel poverty" obligation is calculated by applying a proportionality coefficient to the "traditional" obligation, equal to 0.620 in 2023 and in subsequent years (compared with 0.412 in 2022).

5.3 Capacity remuneration mechanism

Capacity obligations depend on electricity sales volumes.

In 2023, ENGIE SA's electricity sales volumes decreased and its CRM inventories therefore decreased accordingly to cover its obligations.

NOTE 6 Receivables

6.1 Maturity of receivables

		Due		
In millions of euros	**Gross amount at Dec. 31, 2023**	**End-2024**	**Between 2025 and 2028**	**2029 and beyond**
Non-current assets	**82**	**-**	**10**	**72**
Amounts receivable from equity investments	-	-	-	-
Loans	16	-	-	16
Liquidity agreements	-	-	-	-
Other financial fixed assets	66	-	10	56
Current assets	**27,427**	**27,241**	**138**	**48**
Trade and other receivables (1)	10,105	10,032	73	-
Current accounts with subsidiaries	7,828	7,828	-	-
Other operating receivables (2)	1,226	1,226	-	-
Other receivables	8,225	8,112	65	48
Advances and downpayments made on orders	43	43	-	-
TOTAL	**27,509**	**27,241**	**148**	**120**

(1) Sales of energy in the meter net of advances from customers billed on a monthly basis totaled €1,662 million including tax at December 31, 2023 (€1,166 million at December 31, 2022).

(2) €248 million in subsidies receivable in respect of compensation for public service charges arising from the price freeze on electricity sales, and €85 million in subsidies receivable in respect of the compensation for public service charges arising from the price freeze on gas sales made at regulated natural gas tariffs or indexed to such tariffs.

6.2 Impairment of receivables

In millions of euros	**Dec. 31, 2022**	**Additions**	**Reversals**	**Other**	**Dec. 31, 2023**
Amounts receivable from equity investments	69	-	(69)	-	-
Loans	-	-	-	-	-
Trade and other receivables	986	743	(793)	-	936
Other miscellaneous receivables	2	2	-	-	4
TOTAL	**1,058**	**745**	**(862)**	**-**	**940**

NOTE 7 Marketable securities

In millions of euros	Gross values	Impairment	Net value at Dec. 31, 2023	Net value at Dec. 31, 2022
Treasury shares held to cover bonus share plans	177	-	177	189
Money-market funds	3,587	-	3,587	4,402
Term deposits	986	-	986	1,471
TOTAL	**4,751**	**-**	**4,751**	**6,062**

The value of treasury shares at December 31, 2023 was €177 million and no impairment provisions were recognized, as all the treasury shares held are allocated to a plan.

These shares are measured at their price on the date of the Board of Directors' decision to set up the plan to which they are allocated, and are held at their carrying amount until delivery. Impairment provisions are recognized in liabilities for an amount corresponding to the expense deferral over the vesting period (see Note 10.1.2).

UCITS recorded in assets for a net value of €3,587 million had a market value of €3,633 million at December 31, 2023.

NOTE 8 Accruals (assets) and unrealized foreign exchange losses

In millions of euros	Dec. 31, 2022	Increases	Decreases	Dec. 31, 2023
Loan redemption premiums	145	68	(21)	192
Deferred loan issuance costs	43	22	(13)	52
Options contracts	3,234		(2,132)	1,102
Financial instruments	5,597	54	(925)	4,726
ACCRUALS (ASSETS)	**9,019**	**144**	**(3,091)**	**6,073**
UNREALIZED FOREIGN EXCHANGE LOSSES	**292**	**30**	**(52)**	**270**

Accruals

Accruals related to financial instruments comprise:

- premiums and issue costs to be amortized on ENGIE SA bonds;
- premiums on options intended to hedge commodity and/or interest rate and currency risk on debt;
- measurement at fair value of interest rate, currency and commodity derivatives not qualifying as hedges, and the currency portion of derivatives hedging the risk on debt denominated in foreign currencies.

Unrealized foreign exchange losses

Unrealized foreign exchange losses arise upon the translation at the year-end exchange rate of payables and receivables denominated in a currency other than the euro and upon the currency portion of derivatives hedging debt denominated in foreign currencies and/or commodity purchases and sales.

NOTE 9 Shareholders' equity

9.1 Share capital – shares issued and outstanding

The share capital is fully paid up. Each €1 share carries a single voting right.

Share capital	
Shares comprising the share capital at January 1, 2023	2,435,285,011
Total number of shares comprising the share capital	**2,435,285,011**

During the year, a total of 28,238,105 shares were purchased and 28,238,105 shares were sold under the liquidity agreement, generating a net capital gain of €321,537.71. At December 31, 2023, ENGIE SA no longer held any treasury shares under the liquidity agreement.

At December 31, 2023, ENGIE SA held 13,835,367 shares in connection with bonus share awards (see Note 9.3).

9.2 Change in shareholders' equity

Shareholders' equity at December 31, 2022	**31,117**
2022 dividends paid	(3,427)
Retained earnings	100
Tax-driven provisions - Investment subsidies	86
Income for the year	500
Shareholders' equity at December 31, 2023	**28,375**

In 2023, ENGIE SA paid:

- a dividend of €1.40 per share in respect of 2022, representing a total amount of €3,391.16 million, less the treasury shares held at the dividend payment date (€18.23 million);
- a loyalty dividend of €0.140 per share, representing a total payout of €36.1 million.

9.3 Employee bonus share awards and stock option plans

Bonus share policy and stock option policy

Bonus share awards are intended to involve all employees more closely in the Group's growth and performance. They are awarded to employees upon a decision of the Board of Directors, in accordance with decisions taken by the Shareholders' Meeting, subject to a minimum seniority of two years and a number of performance conditions.

In 2023, ENGIE SA awarded 676,341 bonus shares to certain ENGIE group employees.

In 2023, ENGIE SA delivered 4,450,881 shares to Group employees.

Based on all existing share plans, the number of beneficiaries and staff turnover assumptions, at December 31, 2023 ENGIE SA considered that it had an obligation to deliver 15,420,540 shares.

In view of the shares delivered in 2023, the Company holds 13,835,367 shares to cover ENGIE SA's bonus share obligations at December 31, 2023, representing a total amount of €177 million net of provisions. The market value was €220 million at December 31, 2023.

Details of bonus share and stock option plans in force	Number of shares awarded	Number of shares delivered	Per share value	Expense *(in millions of euros)* 2023	2022
Bonus shares awarded					
ENGIE Plan of December 13, 2017		-	-	-	1.59
Link Abondement Plan of August 2, 2018	279,557	271,826	13.440	(3.32)	(0.75)
ENGIE Plan of December 11, 2018	113,715	70,670	12.260	(1.33)	51.64
ENGIE Plan of February 27, 2019			-	-	1.13
ENGIE Plan of December 17, 2019	4,773,593	3,811,013	14.730	(63.77)	(21.54)
ENGIE Plan of February 26, 2020	129,442	117,503	15.640	(1.78)	1.14
ENGIE Plan of December 17, 2020	4,682,498	11,125	12.670	17.70	(17.83)
ENGIE Plan of February 25, 2021	280,822	143,590	12.605	(1.08)	(1.46)
ENGIE Plan of December 16, 2021	4,641,679	10,825	13.000	16.56	(16.60)
ENGIE Plan of February 14, 2022	414,476	5,829	14.298	2.50	(1.99)
ENGIE Plan of April 20, 2022	120,000		12.078	0.85	-
ENGIE Plan of December 8, 2022	4,375,789	8,500	14.292	18.99	(1.12)
Link Abondement Plan of December 22, 2022	228,935	-	13.614	0.62	(0.02)
ENGIE Plan of February 20, 2023	556,341	-	14.250	2.77	-
ENGIE Plan of April 20, 2023	120,000		14.250	0.48	
TOTAL	**20,716,847**	**4,450,881**		**(10.80)**	**(5.82)**

NOTE 10 Provisions

10.1 Provisions for contingencies and losses

In millions of euros	Dec. 31, 2022	Additions	Reversals (used provisions)	Reversals (surplus provisions)	Dec. 31, 2023
Provisions for site rehabilitation (Note 10.1.1)	225	8	(18)		216
Provisions relating to employees (Note 10.1.2)	214	65	(63)	(12)	204
Provisions for taxes (Note 10.1.3)	21	2			23
Provisions for tax consolidation (Note 10.1.4)	938	135	(92)	(3)	977
Vendor warranties	-	4			4
Risks arising on subsidiaries (Note 10.1.5)	288	311	(286)		313
Other provisions for contingencies and losses (Note 10.1.5)	1,441	1,627	(1,285)	-	1,783
TOTAL	**3,127**	**2,152**	**(1,744)**	**(15)**	**3,520**

10.1.1 Provisions for site rehabilitation

Provisions for site rehabilitation totaled €216 million at December 31, 2023 *versus* €225 million at end-2022, broken down as follows:

In millions of euros	Dec. 31, 2022	Additions	Reversals (used provisions)	Matching entry to dismantling assets	Dec. 31, 2023
Provisions for site rehabilitation (excluding PNC assets)	220	8	(18)	-	211
Provisions for site rehabilitation (PNC assets)	5	-	-	-	5
TOTAL	**225**	**8**	**(18)**	**-**	**216**

The €211 million provision for site rehabilitation (excluding PNC assets) at December 31, 2023 covers the costs of rehabilitating the land on which the former gas production plants were located for an amount of €210 million as well as the office sites (T2 tower) for an amount of €1 million.

It is broken down as follows:

- soil decontamination at former gas production plants for €136 million;
- soil decontamination at former gas production plants held for sale for €44 million;
- litigation at former gas production plants for €30 million;
- refurbishment of T2 tower for €1 million.

10.1.2 Provisions relating to employees

Provisions for employee benefits

At December 31, 2023, pension obligations amounted to €4 million. Pension obligations are covered by insurance funds.

Other post-employment benefits amounted to €10.2 million.

Provisions have been set aside for the full amount of disability benefits, allowances for occupational accidents, illnesses of active employees at year-end, long-service awards and asbestos, representing a total amount of €67.9 million.

These provisions represented a total amount of €82.1 million at December 31, 2023. Note 18.4 analyzes changes in these provisions in the periods presented.

The full amount of end-of-career indemnities is partially covered by insurance funds; the shortfall amounted to €13 million at December 31, 2023.

Provisions for employee bonus share awards

At December 31, 2023, provisions for employee bonus share awards amounted to €121 million (end-2022: €132 million). The provision for employer contributions related to the bonus share awards amounted to €1.8 million (no change from end-2022).

In 2023, ENGIE SA set aside a further €61 million to this provision to cover rights vested by employees. It also wrote back €72 million of the provision following the expiration of certain bonus share plans.

In addition to presence in the Group at the vesting date, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in accordance with the plans' regulations.

10.1.3 Provisions for taxes

ENGIE SA has set aside several tax risk provisions to cover various tax audits performed by the tax authorities.

The provision for income taxes amounted to €23 million at December 31, 2023 (end-2022: €21 million). It is chiefly related to the transfer price of LNG.

In connection with the sale of the Equans companies to Bouygues on October 22, 2022, and under the exit agreement signed with the French Equans companies that were formerly members of the tax group, ENGIE SA is fully liable for the reassessments notified by the tax authorities to the said companies. A tax risk provision has been recognized at December 31, 2023 for an amount of €1.5 million.

10.1.4 Provisions for tax consolidation

ENGIE SA has chosen to file consolidated tax returns. As a result, it sets aside a provision reflecting its obligation to transfer back to subsidiaries any tax losses utilized. In 2023, ENGIE SA recognized a provision charge of €135 million and a reversal of €36 million, bringing the total provision to €703 million at the year-end.

At December 31, 2007, GRDF was part of the tax consolidation group and the capital gain on the disposal of the gas distribution activity therefore had no tax impact. Since 2008, the subsidiary's statutory financial statements show tax savings relating to the amortizable component of the capital gain arising on the disposal of the gas distribution business. This excess amortization is canceled out at the level of the tax consolidation group. In accordance with the tax consolidation agreements signed with its subsidiaries, ENGIE SA recognized a provision for tax consolidation with respect to GRDF for a definitive amount of €1,938 million, based on the amortizable component. In 2023, the Company wrote back an amount of €59 million (€61 million in 2022), corresponding to the neutralization of the excess amortization on the amortizable component arising in the year.

Provisions for tax consolidation amounted to €977 million at end-2023, including €274 million relating to the amortizable component of GRDF's intangible assets.

10.1.5 Other provisions for contingencies and losses

Other provisions for contingencies and losses mainly include provisions for contingencies arising on other third parties, provisions for commercial litigation and claims, and provisions for currency and interest rate risk.

Movements in these provisions chiefly impact non-recurring and financial items.

Provisions for other contingencies and losses totaled €1,783 million at December 31, 2023, *versus* €1,441 million in 2022, and include the following amounts:

- onerous contracts: €1,132 million:
  - €316 million for long-term gas supply contracts, transmission and storage capacity contracts and an electricity swap contract that meet the accounting definition of onerous contracts. These contracts are no longer required for the Group's industrial needs and the unavoidable costs of meeting the obligations under the contracts exceed the expected economic benefits to be received under them,
  - €708 million for the CCTG Cartagena tolling contract (Spain) signed in 2011 and valid until 2028, which is considered as structurally and sustainably onerous given conditions in the Spanish electricity market,
  - €108 million related to two real estate contracts which have also met the criteria for onerous contracts since 2020;
- provisions for other risks: €447 million, mainly comprising the provision for negative fair value adjustments to commodities (€436 million);
- interest rate risk: €28 million;
- litigation: €58 million;
- restructuring: €85 million, of which €35 million for the Yellow provision and €18 million for the T2 provision;
- foreign exchange losses: €30 million;
- miscellaneous expenses: €3 million, most of which concern the provision for Yellow.

The provision for subsidiaries' risk amounted to €313 million at December 31, 2023 (€288 million at December 31, 2022).

10.2 Tax-driven provisions and investment subsidies

In millions of euros	Dec. 31, 2022	Additions	Reversals	Transfer	Dec. 31, 2023
Tax-driven provisions	**1,012**	**403**	**(315)**	**-**	**1,099**
Accelerated depreciation and amortization	568	360	(315)	-	612
Provision for price increases	444	43	-	-	487
Provision for investments	-		-		-
Investment subsidies	**24**	**-**	**(1)**	**-**	**22**
TOTAL	**1,036**	**403**	**(316)**	**-**	**1,122**

NOTE 11 Borrowings and debt

11.1 Summary of borrowings anad debt

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Borrowings	**37,499**	**31,864**
Hybrid bonds	3,393	3,393
Bonds	27,739	20,464
Other loans	6,368	8,007
Amounts payable to equity investments	**4,000**	**4,850**
Current accounts with subsidiaries	**4,946**	**3,551**
Other borrowings and debt	**639**	**620**
Deposits received from customers	84	74
Deposits received on derivatives	-	-
Tax consolidation	59	208
Current portion of interest due	457	269
Bank overdrafts	28	36
Miscellaneous	12	33
TOTAL	**47,084**	**40,885**

The €6,199 million increase in borrowings and debt is mainly due to:

- a €7,275 million increase in bonds (corresponding to €8,690 million in new issues for 2023 offset by bond maturities for €1,482 million);
- a €1,639 million decrease in other borrowings and debt (*i.e.*, a €1,667 million decrease in Negotiable European Commercial Paper (NEU CP), a €113 million decrease in United States Commercial Paper (USCP), and drawdown on a credit line of €150 million);
- the repayment of the ENGIE Alliance loan (€850 million);
- a €2,401 million increase in credit balances on current accounts with subsidiaries;
- a €1,395 million increase in the tax consolidation current account.

11.2 Maturities of borrowings, debt and payables

		Due		
In millions of euros	Dec. 31, 2023	End-2024	Between 2025 and 2028	2029 and beyond
Borrowings and debt	**47,084**	**16,369**	**12,108**	**18,607**
Hybrid bonds	3,393	338	2,350	705
Bonds	27,739	841	9,401	17,497
Other loans	6,368	5,606	357	405
Amounts payable to equity investments	4,000	4,000	-	-
Current accounts with subsidiaries	4,946	4,946	-	-
Other borrowings and debt	639	639	-	-
Trade and other payables	**10,625**	**10,625**	-	-
Tax and employee-related liabilities	**2,198**	**2,198**	-	-
Other liabilities	**7,367**	**7,367**	-	-
Advances from customers	882	882	-	-
Other	6,486	6,486	-	-
Advances and downpayments received on orders	**73**	**73**	-	-
TOTAL	**67,348**	**36,633**	**12,108**	**18,607**

11.2.1 Breakdown of hybrid bonds

	Dec. 31, 2023	Issue date	Interest repricing date	Interest	Listing
Public issues					
In millions of euros	338	06/2014	06/2024	3.875%	Paris
In millions of euros	1,000	01/2019	02/2025	3.250%	Paris
In millions of euros	500	07/2019	07/2025	1.625%	Dublin
In millions of euros	850	11/2020	11/2028	1.500%	Paris
In millions of euros	705	07/2021	07/2031	1.875%	Paris

11.2.2 Breakdown of bonds

	Dec. 31, 2023	Issue date	Maturity date	Interest	Listing
Public issues					
In millions of euros	300	03/2011	03/2111	5.950%	Paris
In millions of euros	1,246	05/2014	05/2026	2.375%	Paris
In millions of euros	750	03/2015	03/2026	1.000%	Paris
In millions of euros	500	03/2015	03/2035	1.500%	Paris
In millions of euros	480	03/2017	03/2024	0.875%	Paris
In millions of euros	800	03/2017	03/2028	1.500%	Paris
In millions of euros	750	09/2017	02/2029	1.375%	Paris
In millions of euros	750	09/2017	09/2037	2.000%	Paris
In millions of euros	750	06/2018	06/2028	1.375%	Paris
In millions of euros	343	09/2018	09/2025	0.875%	Paris
In millions of euros	500	09/2018	09/2033	1.875%	Paris
In millions of euros	750	06/2019	06/2027	0.375%	Paris
In millions of euros	750	06/2019	06/2039	1.375%	Paris
In millions of euros	627	09/2019	03/2027	0.000%	Paris
In millions of euros	900	10/2019	10/2030	0.500%	Paris
In millions of euros	600	10/2019	10/2041	1.250%	Paris
In millions of euros	604	03/2020	03/2025	1.375%	Paris
In millions of euros	750	03/2020	03/2028	1.750%	Paris
In millions of euros	750	03/2020	03/2032	2.125%	Paris
In millions of euros	575	06/2020	06/2027	0.375%	Paris
In millions of euros	750	10/2021	10/2029	0.375%	Paris
In millions of euros	650	09/2022	09/2029	3.500%	Paris
In millions of euros	750	10/2021	10/2036	1.000%	Paris
In millions of euros	1,175	01/2023	01/2035	4.000%	Paris
In millions of euros	750	01/2023	01/2043	4.250%	Paris
In millions of euros	1,100	01/2023	01/2030	3.625%	Paris
In millions of euros	500	09/2023	09/2027	3.750%	Paris
In millions of euros	800	09/2023	01/2031	3.875%	Paris
In millions of euros	800	09/2023	09/2034	4.250%	Paris
In millions of euros	900	09/2023	09/2042	4.500%	Paris
In millions of euros	600	12/2023	12/2026	3.625%	Paris
In millions of euros	900	12/2023	12/2033	3.875%	Paris
In millions of pounds sterling	500	10/2008	10/2028	7.000%	Luxembourg
In millions of pounds sterling	1,100	10/2010	10/2060	5.000%	Paris
In millions of pounds sterling	650	04/2023	04/2053	5.630%	Paris

	Dec. 31, 2023	Issue date	Maturity date	Interest	Listing
In millions of Swiss francs	175	10/2012	10/2024	1.625%	Zurich
In millions of Swiss francs	190	07/2023	01/2027	2.340%	Zurich
In millions of Swiss francs	225	07/2023	07/2031	2.490%	Zurich
Private placements					
In millions of euros	100	03/2013	03/2033	3.375%	Paris
In millions of euros	81	04/2013	04/2038	3.703%	None
In millions of euros	100	10/2015	10/2027	1.764%	Paris
In millions of euros	100	11/2015	11/2045	2.750%	Paris
In millions of euros	50	11/2015	11/2045	2.750%	Paris
In millions of euros	100	06/2017	06/2032	1.625%	Paris
In millions of euros	100	10/2017	09/2037	2.000%	Paris
In millions of euros	50	07/2018	07/2027	1.157%	Paris
In millions of euros	75	07/2018	07/2038	CMS	Paris
In millions of Norwegian krone	500	04/2013	04/2024	4.020%	Paris
In millions of yen	20,000	09/2015	01/2024	0.535%	Paris
In millions of Hong Kong dollars	1,400	10/2017	09/2032	2.650%	Paris
In millions of Hong Kong dollars	900	10/2017	10/2027	2.630%	Paris
In millions of US dollars	50	01/2019	12/2029	3.593%	None
In millions of Australian dollars	115	11/2015	11/2025	4.235%	Paris
In millions of Australian dollars	85	07/2018	07/2033	3.780%	Paris

11.2.3 Other borrowings and amounts payable to equity investments

At December 31, 2023, other borrowings mainly comprised negotiable commercial paper denominated in euros: €4,508 million of Negotiable European Commercial Paper (NEU CP): €1,098 million (equivalent to USD 1,213 million) of the United States Commercial Paper (USCP). These borrowings all fall due in less than one year.

ENGIE SA has credit lines on which €759 million was drawn at the year-end.

The loan from ENGIE Alliance was repaid in an amount of €850 million, while the loan from ENGIE Finance remained stable at €4,000 million at the reporting date.

11.2.4 Other borrowings and debt

Other borrowings and debt (accrued interest on borrowings and debt, current accounts with a credit balance, deposits received from customers, bank overdrafts, bank facilities, etc.) are chiefly denominated in euros.

11.3 Analysis of borrowings and debt by currency and interest rate

11.3.1 Analysis by interest rate

In millions of euros	After hedging		Before hedging	
	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
Floating rate				
Bonds	5,669	7,473	75	175
Amounts payable to equity investments	4,000	4,850	4,000	4,850
Other loans	4,662	6,188	4,026	5,389
Current accounts with subsidiaries	4,946	3,551	4,946	3,551
Other borrowings and debt	-	49	-	9
Fixed rate				
Hybrid bonds	3,393	3,393	3,393	3,393
Bonds	22,070	12,991	27,664	20,289
Amounts payable to equity investments	-	-	-	-
Other loans	1,705	1,819	2,341	2,619
Other borrowings and debt	639	571	639	610
TOTAL	**47,084**	**40,885**	**47,084**	**40,885**

11.3.2 Analysis by currency

In millions of euros	After hedging		Before hedging	
	Dec. 31, 2023	Dec. 31, 2022	Dec. 31, 2023	Dec. 31, 2022
In euros				
Hybrid bonds	3,393	3,393	3,393	3,393
Bonds	27,739	20,464	23,906	17,735
Amounts payable to equity investments	4,000	4,850	4,000	4,850
Other loans	6,367	8,008	5,269	6,797
Current accounts with subsidiaries	4,032	2,535	4,032	2,535
Other borrowings and debt	578	619	578	594
In foreign currency				
Hybrid bonds	-	-		
Bonds	-	-	3,833	2,729
Amounts payable to equity investments	-	-		
Other loans	-	-	1,098	1,211
Current accounts with subsidiaries	914	1,016	914	1,016
Other borrowings and debt	61	-	61	25
TOTAL	**47,084**	**40,885**	**47,084**	**40,885**

NOTE 12 Accruals (liabilities) and unrealized foreign exchange gains

In millions of euros	Dec. 31, 2022	Increases	Decreases	Dec. 31, 2023
Options contracts	5,803		(3,546)	2,257
Financial instruments	4,434	620	(51)	5,003
ACCRUALS (LIABILITIES)	**10,237**	**620**	**(3,597)**	**7,260**
UNREALIZED FOREIGN EXCHANGE GAINS	**452**	**43**	**(55)**	**440**

Accruals

Accruals related to financial instruments comprise:

- premiums on options intended to hedge commodity and/or interest rate and currency risk on debt;
- measurement at fair value of interest rate, currency and commodity derivatives not qualifying as hedges, and the currency portion of derivatives hedging the risk on debt denominated in foreign currencies.

A contingency and loss provision is recognized in respect of unrealized foreign exchange losses on contracts that do not qualify for hedge accounting (see Note 10.1.5).

Unrealized foreign exchange gains

Unrealized foreign exchange gains arise upon the translation at the year-end exchange rate of payables and receivables denominated in a currency other than the euro and upon the currency portion of derivative financial instruments intended to hedge currency risk on debt and/or commodity purchases and sales.

NOTE 13 Net operating income/(loss)

13.1 Breakdown of revenues

Revenues by region

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Energy sales		
• France	22,765	22,282
• International	26,888	41,453
Works, research and services provided	3,518	3,871
Revenues from non-core activities and other	978	894
TOTAL	**54,149**	**68,500**

The fall in revenues was due to negative price and volume effects, mainly in sales to other gas operators.

Revenues by business activity

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Energy sales		
• Natural gas	23,583	48,097
• Electricity	26,070	15,639
Other production sold		
• Works, research and services provided	3,518	3,871
• Revenues from non-core activities and other	978	894
TOTAL	**54,149**	**68,500**

At December 31, 2023, unbilled, un-metered revenues (energy in the meter) amounted to €2,788 million excluding tax.

13.2 Personnel costs

Change in headcount by category

In number of employees	Dec. 31, 2022	Change	Dec. 31, 2023
Operating staff	174	(6)	168
Senior technicians and supervisory staff	1,422	(58)	1,364
Managerial-grade staff	2,539	(97)	2,442
TOTAL	**4,135**	**(161)**	**3,974**

The number of employees at December 31, 2023 was 3,974, compared with 4,135 in 2022.

Personnel costs break down as follows:

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Wages and salaries	(297)	(292)
Payroll expenses	(126)	(159)
Profit sharing	(16)	(17)
Other	(92)	(34)
TOTAL	**(531)**	**(503)**

Employee profit sharing

An employee profit-sharing agreement based on performance criteria was set up in compliance with the legal conditions prescribed by Order 86-1134 of October 21, 1986.

These profit-sharing mechanisms are treated as personnel costs.

13.3 Net additions to provisions

In millions of euros	Dec. 31, 2023	Dec. 31, 2022
Provision for capital renewal and replacement liabilities regarding concessions	-	-
Provision for site rehabilitation	(10)	208
Other provisions for losses	(3)	(23)
Other provisions for contingencies	358	(51)
TOTAL	**346**	**134**

Other contingency and loss provisions mainly comprised:

- net reversal of provisions for onerous contracts (€75.2 million);
- net addition to provisions for employee disputes (€3.9 million);
- net addition to provisions for contingencies (€417.6 million), mainly comprising the provision for unrealized capital losses (negative fair value of derivative financial instruments) on commodities (€414.3 million);
- net addition to provisions for commercial litigation (€11.5 million);
- net reversal of provisions for site rehabilitation (€9.6 million);
- net reversal of provisions for miscellaneous expenses (€2.7 million).

13.4 Operating expense transfers

Expense transfers are included in other operating income and amounted to €22 million in 2023 (mainly management and job reallocation costs), compared with €5 million in 2022.

13.5 Operating subsidies

Operating subsidies include the compensation for public service charges to be received as a result of the price freeze on regulated tariffs for gas and electricity sales at regulated tariffs over the year.

NOTE 14 Net financial income/(loss)

			Total	
In millions of euros	Expenses	Income	Dec. 31, 2023	Dec. 31, 2022
Other interest income and expenses	(2,005)	991	(1,014)	(544)
Income from amounts receivable from equity investments	-	-	-	8
Foreign exchange gains/(losses)	(574)	768	194	(281)
Dividends received	-	1,530	1,530	2,552
Movements in provisions for financial items	(50)	1	(49)	52
TOTAL	**(2,628)**	**3,290**	**662**	**1,786**

NOTE 15 Net non-recurring income/(loss)

			Total	
In millions of euros	Expenses	Income	Dec. 31, 2023	Dec. 31, 2022
Disposals of property, plant and equipment, and intangible assets	(39)	3	(36)	(37)
Disposals of financial fixed assets	(466)	506	41	1,018
Provision for price increases	(43)	-	(43)	(324)
Accelerated depreciation and amortization	(360)	315	(45)	22
Movements in provisions relating to equity investments	(1,431)	2,158	727	(1,635)
Other	(164)	98	(66)	(505)
TOTAL	**(2,502)**	**3,080**	**578**	**(1,461)**

"Other" mainly includes various restructuring costs and exceptional software impairment.

NOTE 16 Tax position

16.1 Tax consolidation

The current option to file consolidated tax returns is automatically renewed every five years.

16.2 Income tax benefit/(expense)

The income tax rate in 2023 was 25.82%, including the 3.3% social contribution.

	2023			2022		
In millions of euros	Income before tax	Income tax*	Net income/ (loss)	Income before tax	Income tax*	Net income/ (loss)
Income tax due by ENGIE SA for the period (excluding tax consolidation group)						
• on recurring income	(325)		(325)	2,838		2,838
• on non-recurring income	578		578	(1,461)		(1,461)
Income tax expense (income tax payable by subsidiaries/provision for transfer of tax savings to entities in the tax consolidation group)		**247**	**247**	-	**321**	**321**
• income tax relating to subsidiaries within the tax consolidation group	233				204	
• net change in provisions for income tax	(41)				97	
• other (mainly adjustments to research and CICE tax credits held in 2022/2023)	55				20	
TOTAL	**253**	**247**	**500**	**1,377**	**321**	**1,698**

* *A positive figure signifies a tax benefit.*

In 2023, unlike in 2022, ENGIE SA generated an income tax loss on an individual company level. Dividends received from subsidiaries are eligible for "parent/subsidiary" tax treatment and are therefore exempt, subject to adding back a share of expenses equal to 1% or 5%, as applicable.

The income tax benefit amounted to €246.8 million in 2023 *versus* an income tax benefit of €320.6 million in 2022, chiefly reflecting:

- a tax consolidation benefit of €233.3 million in 2023 *versus* €204 million in 2022. This tax consolidation gain arises from the difference between:
  - the €232.8 million contribution to Group income tax due in 2023 to ENGIE SA by subsidiaries reporting a profit (€338.6 million in 2022),
  - the income tax benefit of the tax consolidation group of €0.5 million in 2023, *versus* an income tax expense of €134.6 million in 2022,
- a net addition of €41.1 million to the income tax provision in 2023 compared with a net reversal of €97 million in 2022, chiefly reflecting:
  - a €98.5 million net addition in respect of the utilization of tax losses by consolidated subsidiaries of ENGIE SA *versus* €36.2 million in net reversals in 2022,
  - a net addition of €1.2 million for tax risks, compared with zero in 2022,
  - €58.6 million in reversals of provisions relating to the excess amortization during the period of the amortizable portion of the capital gain generated on the sale of gas distribution activities in 2007, compared to €60.9 million in 2022;
- other miscellaneous items representing a net tax credit of €54.6 million in 2023, compared with €19.6 million in 2022, mainly due to the change in the internal contribution of subsidiaries included in the tax consolidation group in 2022 for an amount of €28.8 million and an adjustment of research tax credits in an amount of €18.3 million in 2023.

16.3 Deferred tax

The deferred tax position shown in the table below results from temporary differences between the treatment of income and expenses for tax and accounting purposes.

	2023	2022
In millions of euros	25.82%	25.82%
Year of reversal	**2024 and beyond**	**2023 and beyond**
Deferred tax liabilities		
• Unrecognized deductible expenses	270	293
• Untaxed income recognized	67	84
Deferred tax assets		
• Temporary non-deductible expenses recognized	1,903	1,872
• Unrecognized taxable income	514	497
Net deferred tax base	**2,080**	**1,994**
• Theoretical impact of deferred tax	537	515

NOTE 17 Off-balance sheet commitments (excluding employee benefit obligations)

17.1 Financial commitments

The ENGIE group's Finance Division is responsible for managing all financial risks (interest rate, currency, liquidity and credit risks).

17.1.1 Liquidity risk

The Group's financing policy is based on:

- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

The centralization of financing needs and cash flow surpluses for the Group is provided by its financing vehicles (long-term and short-term), as is automated cash centralization *via* its cash pooling vehicles.

Short-term cash requirements and cash surpluses for Europe are managed by dedicated financial vehicles in France (ENGIE Finance) and Luxembourg (ENGIE Treasury Management). These vehicles centralize virtually all of the cash requirements and surpluses of companies controlled by the Group, ensuring that counterparty risk and the investment strategy are managed consistently.

The Group seeks to diversify its long-term sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues NEU CP (Negotiable European Commercial Paper) in France as well as USCP (United States Commercial Paper) in the United States.

Long-term capital markets are accessed chiefly by ENGIE SA in connection with the Group's new bond issues, and in connection with commercial paper.

As commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural fashion to finance its short-term cash requirements. However, all outstanding commercial paper is backed by confirmed bank lines of credit so that the Group could continue to finance its activities if access to this financing source were to dry up.

The Group's liquidity is based on maintaining cash and cash equivalents and access to confirmed credit facilities. ENGIE SA can therefore access facilities readily convertible into cash, enabling it to meet its cash requirements in the ordinary course of business or to serve as a bridge to finance external growth operations:

- ENGIE SA has credit facilities with various banks under which €10,955 million remains undrawn. These facilities include two syndicated credit lines, respectively for €4,500 million and €4,000 million, maturing in September 2028 and December 2028. At December 31, 2023, ENGIE SA had drawn down €759 million on these facilities. These facilities are not subject to any covenants or credit rating requirements;
- ENGIE SA also has access to short-term debt markets through short-term debt issues: USCP for USD 1,213 million (€1,097 million) and NEU CP for €4,508 million at December 31, 2023.

17.1.2 Counterparty risk

ENGIE SA is exposed to counterparty risk arising on its operating and financing activities.

To manage counterparty risk arising on operating activities, the Group has put in place monitoring procedures adapted to the characteristics of the counterparties concerned (private corporations, individuals, and public authorities). Customers representing a major counterparty for the Company are covered by procedures applicable to the financial activities described below, thereby providing broad-ranging oversight of the corresponding counterparty risk.

For its financing activities, ENGIE SA has put in place procedures for managing and monitoring risk based on:

- accreditation of counterparties according to external credit ratings;
- objective market data (credit default swaps, market capitalization);
- their financial strength; and
- risk exposure limits put in place.

ENGIE SA also draws on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls) to reduce its exposure to counterparty risk. The oversight procedure for managing counterparty risk arising from financing activities is managed by a middle office reporting to the Group's Finance Division.

17.1.3 Interest rate risk

ENGIE SA has adopted a policy for optimizing the cost of its net debt using a combination of financial instruments (interest swaps and options) according to market conditions.

ENGIE SA takes care to ensure that the difference between its floating-rate debt and its cash surpluses invested at a floating rate has a low degree of exposure to adverse changes in short-term interest rates.

Positions are managed centrally and are reviewed each quarter or whenever any new financing is raised. Management must approve in advance any transaction that causes the interest rate mix to change significantly.

	Notional amount at Dec. 31, 2023						
In millions of euros	Due in 1 year or less	Due in 1 to 5 years	Due in 6 to 10 years	Due after 10 years	Total	Fair value including accrued interest	Notional amount at Dec. 31, 2022
Interest rate swap							
Fixed-rate borrower/floating-rate lender	439	3,272	2,600	5,735	12,046	949	12,216
Floating-rate borrower/fixed-rate lender	3,225	6,997	5,500	5,835	21,557	(819)	18,064
Swaptions							
Floating-rate borrower/fixed-rate lender					-		1,000
TOTAL EUR	**3,664**	**10,269**	**8,100**	**11,570**	**33,603**	**130**	**31,280**
Interest rate swap							
Fixed-rate borrower/floating-rate lender		1,206			1,206	37	2,801
Floating-rate borrower/fixed-rate lender					-		-
TOTAL USD	-	**1,206**	-	-	**1,206**	**37**	**2,801**
TOTAL	**3,664**	**11,475**	**8,100**	**11,570**	**34,809**	**167**	**34,081**

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	Notional amount at Dec. 31, 2023						
In millions of euros	Due in 1 year or less	Due in 1 to 5 years	Due in 6 to 10 years	Due after 10 years	Total	Fair value including accrued interest	Notional amount at Dec. 31, 2022
Currency swap							
Fixed-rate borrower/fixed-rate lender			638	2,031	2,669	(397)	1,929
Fixed-rate borrower/floating-rate lender					-		-
TOTAL GBP	**-**	**-**	**638**	**2,031**	**2,669**	**(397)**	**1,929**
Currency swap							
Floating-rate borrower/fixed-rate lender					-	-	128
Fixed-rate borrower/fixed-rate lender	149				149	(22)	149
TOTAL JPY	**149**	**-**	**-**	**-**	**149**	**(22)**	**277**
Currency swap							
Fixed-rate borrower/fixed-rate lender	-	-	231	-	231	14	-
Floating-rate borrower/fixed-rate lender	144	195			339	58	144
TOTAL CHF	**144**	**195**	**231**	**-**	**570**	**72**	**144**
Currency swap							
Fixed-rate borrower/fixed-rate lender			44		44	3	44
Fixed-rate borrower/floating-rate lender					-		-
Floating-rate borrower/floating-rate lender					-		-
Floating-rate borrower/fixed-rate lender	-				-	-	-
TOTAL USD	**-**	**-**	**44**	**-**	**44**	**3**	**44**
Currency swap							
Fixed-rate borrower/fixed-rate lender	67		-	-	67	(22)	67
TOTAL NOK	**-**	**-**	**-**	**-**	**67**	**(22)**	**67**
Currency swap							
Fixed-rate borrower/fixed-rate lender	-	75	54	-	129	(2)	129
TOTAL AUD	**-**	**75**	**54**	**-**	**129**	**(2)**	**129**
Currency swap							
Fixed-rate borrower/fixed-rate lender	-	98	153	-	251	22	251
TOTAL HKD	**-**	**98**	**153**	**-**	**251**	**22**	**251**
Currency swap							
Floating-rate borrower/floating-rate lender	-	-	-	-	-	-	-
Total MXN	**-**	**-**	**-**	**-**	**-**	**-**	**-**
TOTAL	**293**	**368**	**1,120**	**2,031**	**3,879**	**(346)**	**2,841**

Interest rate hedges outstanding at December 31, 2023 are described below:

- ENGIE SA entered into short-term swaps (maturing in less than six months) to hedge the interest rate risk on its short-term cash management transactions (NEU CP issues). These are floating-rate borrower (Ester)/fixed-rate lender swaps with a notional amount of €636 million;
- in line with the Group's interest rate risk policy and with due reference to market conditions, interest rate risk is managed centrally through the use of interest rate swaps and options within the framework of an annual risk mandate;
- as part of the Group's interest rate risk management policy, since 2009 ENGIE SA has set up interest rate hedges indexed to the dollar, fixing the interest rate on the Group's USD debt, for a nominal amount of US$763 million at end-2023 (€690 million);
- ENGIE SA has a portfolio of 2024 forward interest rate pre-hedges with a maturity in 2034 to protect the refinancing interest rate on a portion of its debt at the Group level.

17.1.4 Currency risk

Foreign currency exchange risk ("FX" risk) is reported and managed based on a Group-wide approach, reflected in a dedicated Group policy that is approved by the Group Management Committee. At ENGIE SA level, there are three main sources of currency risk:

- regular transaction risk: this risk arises on commercial transactions involving the purchase and sale of natural gas in a currency other than the euro. Gas purchase and sale contracts are often indexed to the price of oil-based products, mostly listed in US dollars;
- financial transaction risk: all significant exposures related to cash, financial debt, etc. are systematically hedged;
- translation risk: this involves consolidated entities that do not have the euro as their functional currency. The main exposures to translation risk correspond to assets in USD, BRL and GBP.

The exposure to currency risk on these transactions is managed and monitored as follows:

- pass-through mechanisms are applied in determining (i) sale prices for eligible customers, and (ii) regulated rates;
- the margin on fixed-price sale contracts or contracts indexed by financial swaps is hedged;
- translation risk is managed centrally, with a focus on securing the net asset value.

There is a time lag between the impact of fluctuations in the US dollar on procurement costs and their repercussions on sales prices, reflecting mainly the effect of rolling averages and the inventory cycle.

To manage its exposure to fluctuations in exchange rates, ENGIE SA mainly uses forward currency purchase or sale contracts and currency swaps to hedge its gas purchases and its financing activities.

To limit the impact of translation risk on certain amounts receivable from equity investments and on future foreign currency purchases, and to hedge the net asset risk arising on consolidation, ENGIE SA has taken new positions or reinforced existing positions in forward currency transactions that allow it to cancel out or minimize translation adjustments on these deposits and loans or other future operations.

At December 31, 2023, commitments corresponding to translation and financial risk were as follows:

	Fixed portion of commitments at Dec. 31, 2023					
In millions of euros	Maturity					
Forward contracts	2024	2025	2026 and beyond	Euro equivalent at Dec. 31, 2023	Exchange rate fluctuations at Dec. 31, 2023	Fixed portion of commitments at Dec. 31, 2022
Long positions						
AUD	72	68	-	140	1	199
CAD	-	-	-	-	-	1
CHF	39	-	-	39	-	19
CNH	5	-	-	5	-	26
GBP	38	-	-	38	1	150
NZD	-	-		-	-	-
PLN	-	-	-	-	-	-
USD	1,698	63	-	1,761	(24)	1,362
Short positions						
AUD	-	-	-	-	-	-
CAD	-	-		-	-	20
CHF	39	-	-	39	-	19
CNH	5	-	-	5	-	26
GBP	148	-	-	148	-	96
NZD	-	-		-	-	-
PLN	1	-	-	1	-	1
USD	1,576	63	2,612	4,251	(111)	4,196

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17.1.5 Other financial commitments given

		Maturity		
In millions of euros	Total at Dec. 31, 2023	End-2024	Between 2025 and 2028	2029 and beyond
Market-related commitments				
Performance and other guarantees	289	199	89	1
Performance and other guarantees given on behalf of subsidiaries	6,980	1,527	1,291	4,162
Financing commitments				
Personal sureties given	3	3		
Guarantees and endorsements given to subsidiaries	7,794	1,763	1,132	4,899
Collateral given	-			
Credit lines	-			
Other commitments given				
Contractual guarantees for sales of businesses	4,251	463	3,621	167
Operating lease commitments	809	63	265	481
Finance lease commitments	-			
Commitments relating to LNG tankers	-			

Market-related commitments totaling €7,269 million at end-2023 comprise performance and other guarantees given by ENGIE SA with respect to operating contracts, both on its own behalf and on behalf of its subsidiaries.

Financing commitments totaling €7,797 million comprise payment guarantees granted by ENGIE SA to third parties on behalf of its subsidiaries (€7,794 million) and to personal sureties (€3 million).

Contractual guarantees for sales of businesses totaling €4,251 million relate mainly to commitments given on the disposals of:

- GRTgaz to Société d'Infrastructures Gazières (SIG). ENGIE SA has given SIG a 20-year warranty against any losses incurred by SIG due to inaccurate representations regarding the non-pollution of the land owned or exploited by GRTgaz and the cost of the resulting clean-up work payable by GRTgaz not covered by the tariffs. The amount of the warranty is €167 million and is proportional to the percentage interest in GRTgaz (25%) acquired by SIG in July 2011;
- ENGIE Exploration & Production (EPI), following the sale of the 30% minority interest to Fullbloom Investment Corporation (FIC), a wholly-owned subsidiary of China Investment Corporation (CIC) in 2011, for an amount of up to €2,851 million expiring in 2026;
- 10% of train 1 of the Atlantic LNG facility in Trinidad and Tobago, for an amount of up to €769 million expiring in 2026;
- Culturespaces on January 14, 2022, expiring on March 30, 2026, for a total amount of €0.9 million;
- Equans and Bouygues for a maximum amount of €350 million for customary representations and warranties expiring in April 2024 (except for certain fundamental and tax representations, which expire no later than the applicable limitation period) and for a maximum amount of €112.5 million for a specific warranty on certain Equans contracts.

Operating lease commitments totaling €809 million relate to the present value of lease payments outstanding through to maturity of the property leases within the scope of ENGIE SA's operations. Commitments for the Campus and Urban Garden projects remain stable at €581 million and €34 million respectively. As certain property lease expenses are rebilled to Group subsidiaries, the corresponding commitments are shown in commitments received.

Other commitments have been given in respect of performance and completion guarantees:

- to the Hong Kong authorities, in respect of contracts awarded to Sita (which became SUEZ Environnement and then SUEZ), which counter-guaranteed ENGIE SA for the same amounts. These contracts relate to:
  - the operation of the Nent landfill in partnership with the Newworld and Guandong groups until 2063,
  - the operation of various landfill sites, including Went and NWNT until 2033 and Pillar Point until 2036, initially in partnership with Swire Pacific Ltd. When Swire Pacific sold its interest in the Swire SITA Waste Services joint venture to its partner SUEZ Environnement in December 2009, these guarantees were reissued by ENGIE SA. However, if a guarantee is called in respect of the period during which the subsidiary was under joint control, the Swire Group has agreed in principle to share the ultimate liability equally between the two groups;
- to the Lord Mayor, Aldermen and Burgesses of Cork, in respect of a contract for the construction and operation until 2024 of the Cork City wastewater purification plant awarded to a consortium comprising two ENGIE SA subsidiaries, Vinci Group subsidiary Dumez GTM, PJ Hegarty & Sons and Electrical & Pump Services. Each consortium member and Vinci agreed to counter-guarantee ENGIE SA;
- in 2008, SUEZ Environnement (which became SUEZ in 2016) undertook to counter-guarantee all of the guarantees given by ENGIE SA for the Environment Division entities for which SUEZ was not yet counter-guaranteed;
- as part of the spin-off of water and wastewater activities in 2000, a performance guarantee expiring in 2028 was granted by ENGIE SA in the context of its transfer of local public service franchise contracts to Lyonnaise des Eaux. There were two such contracts at end-2023. The new entity, SUEZ, pledged an indemnity in respect of these contracts in 2022 that counter-guarantees ENGIE's commitment.

Following Veolia's takeover bid for SUEZ, ENGIE SA informed Veolia of the commitments and performance guarantees for certain contracts granted by ENGIE SA to SUEZ and its subsidiaries. Veolia undertook, as soon as it had obtained control of SUEZ – which is now the case – to use best efforts to take ENGIE's place in those commitments and guarantees and to counter-guarantee, either directly or through a subsidiary, all of ENGIE's obligations thereunder. Veolia has also undertaken to do its utmost to ensure the full and proper performance by SUEZ or its subsidiaries of the contracts covered by these commitments and guarantees.

17.1.6 Other financial commitments received

		Maturity		
In millions of euros	Total at Dec. 31, 2023	End-2024	Between 2025 and 2028	2029 and beyond
Market-related commitments				
Performance and other guarantees	392	345	47	-
Financing commitments				
Undrawn credit facilities	10,955	902	9,499	554
Personal sureties received	5	5		
Other financing commitments received	-	-	-	-
Other financing commitments received in relation to subsidiaries	-	-	-	-
Other commitments received				
Counter-guarantees for personal sureties	-			
Counter-guarantees for trading commitments	-	-	-	-
Operating lease commitments	170	60	86	24
Finance lease commitments	-	-	-	-
Commitments relating to LNG tankers	-	-	-	-

ENGIE SA secured a €5,000 million syndicated credit line in April 2014. It was initially due to mature in 2019 but has been extended to December 2028 with a reduction in the commitment to €4,500 million. A new €4,000 million syndicated credit line was secured in December 2021 maturing December 2026, however in 2023 it was extended through December 2028.

Operating lease commitments totaling €170 million correspond to the rebilling of rent for premises occupied by Group subsidiaries.

17.2 Commodity-related commitments

17.2.1 Natural gas and electricity commitments

Gas supplies in Europe are based partly on long-term contracts, including "take-or-pay" contracts. These long-term commitments make it possible to finance costly production and transmission infrastructures. The seller makes a long-term commitment to serve the buyer, subject to a commitment by the latter to buy minimum quantities regardless of whether or not it takes delivery thereof. These commitments are combined with backup measures (force majeure) and flexible volume arrangements, making it possible to manage any uncertainties affecting demand, primarily weather conditions, as well as any technical contingencies that may arise.

These types of contracts can run up to 25 years and are used by ENGIE SA to meet the demands of its customers for natural gas in the medium and long term.

The contracts provide for reciprocal commitments regarding specified quantities of gas:

- a commitment by ENGIE SA to purchase quantities of gas above a minimum threshold;
- a commitment by suppliers to provide these quantities at competitive prices.

The appeal of these contracts is provided by indexed price formulas and price adjustment mechanisms.

At December 31, 2023, ENGIE SA had commitments to purchase a minimum of 366 TWh within one year, 978 TWh between two and five years, and 1,184 TWh after five years.

ENGIE SA also entered into forward purchases and sales of natural gas, primarily at maturities of less than one year, as part of its trading activities. These consist of purchases and sales on short-term markets and offers featuring engineered prices for other operators.

At December 31, 2023, commitments given by ENGIE SA totaled 10 TWh under forward purchase contracts and 218 TWh under forward sale contracts.

To meet its commitments to take delivery of specified volumes, ENGIE SA has entered into long-term contracts to reserve land and sea transmission capacities.

At December 31, 2023, commitments given by ENGIE SA totaled 69 TWh under forward electricity purchase contracts and 90 TWh under forward electricity sale contracts.

17.2.2 Commodity derivatives

As part of its energy brokerage activities, ENGIE SA uses energy derivatives to adjust its exposure to fluctuations in prices of natural gas, electricity and oil products.

Commodity derivatives (natural gas, oil and electricity) consist mainly of swaps, futures and options set up to manage price risk within the scope of ENGIE SA's trading activities. These instruments are traded with third parties by the Company's specialized subsidiary, ENGIE Global Markets on organized or over-the-counter markets.

These derivatives are contracted to manage risks arising on:

- price engineering transactions designed to meet the growing demand among customers for tight controls on gas and electricity price risk. These products are primarily intended to guarantee a commercial margin regardless of trends in the commodity indexes included in the prices offered to customers, even when they differ from the commodity indexes to which ENGIE SA purchases are pegged. Options (calls and puts) are set up to guarantee maximum and minimum prices;
- measures taken to optimize procurement costs. Energy procurement costs, assets used in electricity production and reservations of available transmission and storage capacity not required to supply customers are systematically valued on the market.

The exposure to commodity price risk on commercial transactions is managed and monitored as follows:

- pass-through mechanisms are applied in determining (i) sale prices for eligible customers, and (ii) regulated rates;
- the margin on fixed-price sale contracts or contracts indexed by financial swaps is hedged.

Depending on the nature of the hedged items, gains and losses on these transactions are recognized either in revenue or in energy purchase cost.

There is a time lag between the impact of changes in commodity prices on procurement costs and their repercussion on sales prices, reflecting mainly the effect of rolling averages and the inventory stocking/run-down cycle.

17.2.2.1 Instruments not recognized as hedges

	Notional amount at Dec. 31, 2023				Fair value at Dec. 31, 2023	Notional amount at Dec. 31, 2022
	(in GWh by maturity)					
	x < 1 year	1 year < x < 2 years	x > 2 years	*(in millions of euros)*	*(in millions of euros)*	*(in GWh)*
Swaps (long position)						
Natural gas	70,646	35,003	12,053	2,977	(1,135)	165,301
Oil-based products	2,228	385	-	53	53	18,859
Electricity	1,334	-	-	218	(127)	923
CER EUA – CO_2 (1)	-	-	-	-	-	-
Swaps (short position)						
Natural gas	(62,081)	(27,573)	(11,306)	(1,841)	1,046	(132,634)
Oil-based products	(911)	(31)	-	(8)	(8)	(8,192)
Electricity	(4,000)	(939)	(302)	(541)	(180)	(1,877)
CER EUA – CO_2 (1)	-	-	-	-	-	-
Options (long position)						
Natural gas	49,384	-	-	55	10	20,065
Oil-based products	-	-	-	-	-	-
Electricity	1,145	-	-	1	-	-
Options (short position)						
Natural gas	(7,560)	(1,262)	625	(76)	(39)	(2,736)
Oil-based products	-	-	-	-	-	-
Electricity	(14,069)	(556)	579	(38)	(11)	-

(1) In kg of CO_2 quotas.

17.2.2.2 Instruments recognized as hedges

Hedge accounting is not used in ENGIE SA's parent company financial statements.

17.2.2.3 Physical delivery contracts

	Notional amount at Dec. 31, 2023 (in GWh by maturity)				Fair value at Dec. 31, 2023 (in millions of euros)	Notional amount at Dec. 31, 2022 (in GWh)
	x < 1 year	1 year < x < 2 years	x > 2 years	(in millions of euros)		
Forwards (long position)						
Natural gas	780,338	152,042	56,079	48,646	(17,143)	1,168,034
Oil-based products	-	-	-	-	-	-
Electricity	53,890	21,603	2,582	11,836	(6,152)	68,929
CER EUA – CO_2 (1)	-	-	-	-	-	-
Forwards (short position)						
Natural gas	(771,348)	(152,189)	(43,575)	(48,944)	17,568	(1,189,982)
Oil-based products	-	-	-	-	-	-
Electricity	(33,815)	(7,522)	(1,271)	(6,496)	3,052	(56,150)
CER EUA – CO_2 (1)	-	-	-	-	-	-
Options (long position)						
Natural gas	-	-	-	148	148	1,396
Oil-based products	-	-	-	-	-	-
Electricity	11,095	353	-	825	250	6,389
Options (short position)	-	-	-	-	-	-
Natural gas	-	-	-	(442)	(382)	(864)
Oil-based products	-	-	-	-	-	-
Electricity	(24,797)	(15,925)	(1,084)	(2,514)	(372)	6,061

(1) *In kg of CO_2 quotas.*

17.3 Insurance of eligible risks

ENGIE SA systematically transfers all material risks based on an identification of risks eligible for insurance – particularly relating to Company assets and damages caused to third parties. Insurance policies offer extensive coverage in order to limit the financial impact of any claims on the Group's accounts.

To ensure a consistent approach, insurance policies are managed at Group level. As a result, new projects developed by subsidiaries can be incorporated within existing policies to enable the parent company to fully assume its role for its majority-owned subsidiaries.

NOTE 18 Pensions and other employee benefit obligations

Overview of obligations

In millions of euros	EGI sector plan Dec. 31, 2023 [(1)]	EGI sector plan Dec. 31, 2022	Non-EGI sector plan Dec. 31, 2023	Non-EGI sector plan Dec. 31, 2022	Total Dec. 31, 2023	Total Dec. 31, 2022
Pension benefits	**1,536**	**1,503**	**221**	**242**	**1,756**	**1,745**
Pension plan	1,536	1,503	221	242	1,756	1,745
End-of-career and other post-employment benefits	**274**	**139**	**15**	**18**	**289**	**158**
Reduced energy and water prices	194	63	3	3	197	66
End-of-career indemnities	33	31	-	-	33	31
Immediate bereavement benefits	35	34	-	-	35	34
Other [(2)]	12	11	12	15	24	26
Other employee benefits	**68**	**66**	**-**	**-**	**68**	**66**
Disability benefits and other	61	60	-	-	61	60
Long-service awards	6	6	-	-	6	6
TOTAL	**1,878**	**1,708**	**236**	**260**	**2,114**	**1,969**

(1) Including €82 million covered by a provision in the parent company financial statements (see Note 18.4).
(2) Indemnities for the partial reimbursement of educational expenses, exceptional end-of-career vacation and the former SUEZ supplementary healthcare plan.

Actuarial assumptions

The actuarial assumptions were determined together with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

	Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
EGI sector plan	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**
Discount rate	3.55%	3.72%	3.54%	3.73%	3.43%	3.92%	3.51%	3.81%
Inflation rate	2.02%	2.13%	2.02%	2.13%	2.02%	2.13%	2.02%	2.13%
Average remaining working years of participating employees	20 years	20 years	20 years	20 years	20 years	20 years	20 years	20 years

Non-EGI sector plan	Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
Former SUEZ	2023	**2022**	2023	**2022**	2023	**2022**	2023	**2022**
Discount rate	4.04%	3.15%	-	-	-	-	4.04%	3.15%
Inflation rate	2.15%	2.27%	-	-	-	-	2.15%	2.27%
Average remaining working years of participating employees								

Non-EGI sector plan	Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
Former Cie Financière	2023	**2022**	2023	**2022**	2023	**2022**	2023	**2022**
Discount rate	4.04%	3.15%	-	-	-	-	4.04%	3.15%
Inflation rate	2.15%	2.27%	-	-	-	-	2.15%	2.27%
Average remaining working years of participating employees								

According to the Group's estimates, a 1% increase or decrease in the discount rate would result in a change of 16% in the projected benefit obligation.

18.1 Pensions

The main defined-benefit plans operated by ENGIE SA comprise:

- pensions falling within the scope of the special plan for companies belonging to the electricity and gas industries sector ("EGI");
- pension plans taken over following the merger of SUEZ into ENGIE SA:
  - the 1953 supplementary pension plan, closed since December 31, 1988,
  - plans operated by the former Compagnie de SUEZ (annuity plans based on end-of-career salaries),
  - supplementary pension plans for senior managers operated by all water companies (annuity plans based on end-of-career salaries).

French government order No. 2019-697 on top-up pension plans, which was published on July 4, 2019 pursuant to the European Directive of April 16, 2014, abolished the defined-benefit pension plans governed by Article L.137-11 of the French Social Security Code (known as "Article 39 plans"), froze the rights of existing members and closed the plans to any new members as of that date.

Following the plan's closure and crystallization of rights accrued in 2019, in 2020 the Group transferred the rights of beneficiaries, including Executive Committee members, to a defined contribution plan (known as an "Article 82" plan).

EGI sector pension plan

Salaried employees and retirees of EGI sector companies have been fully affiliated to the Caisse Nationale des Industries Électriques et Gazières (CNIEG) since January 1, 2005. The CNIEG is a private welfare body placed under the joint responsibility of the ministries in charge of social security and the budget. The conditions for calculating benefit entitlements under the EGI plan are set out in the national statute for EGI sector employees (Decree of June 22, 1946) and determined by the government. By law, companies cannot amend any of these conditions.

Unregulated past specific benefits (at December 31, 2004) are funded by EGI sector entities to the extent defined by Decree No. 2005-322 of April 5, 2005. For ENGIE SA, this funding obligation represents 3.25% of the past specific benefit obligations of all EGI sector companies.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective share of the electricity and gas market as measured in terms of total payroll costs.

The special EGI pension plan has been closed to new members since September 1, 2023.

Calculation of pension obligations

ENGIE SA's pension obligations are calculated using a yield-to-maturity method in line with ANC Recommendation 2013-02 of November 7, 2013. The method used is known as the projected unit credit method and is based on assumptions regarding end-of-career salaries, retirement ages, changes in the population of retired employees and payment of benefits to surviving spouses.

The obligations are calculated as follows:

- based on the rights vested at the measurement date, under both the EGI plan and statutory pension plans;
- for all active and retired employees in the EGI sector, and all employees and eligible beneficiaries for former SUEZ plans;
- actuarial gains and losses are recognized immediately.

18.2 Other employee benefit obligations

Benefits payable to active and retired employees of EGI sector companies (excluding pensions) are described below:

- post-employment benefits:
  - reduced energy prices,
  - end-of-career indemnities,
  - exceptional end-of-career vacation,
  - death in service benefits (*régime des capitaux décès*),
  - assistance with educational expenses;
- long-term benefits:
  - allowances for occupational accidents and illnesses,
  - temporary and permanent disability allowances,
  - long-service awards,
  - asbestos benefit.

Retired employees of former SUEZ are eligible for post-employment benefits consisting of a cash contribution to the costs of their water supply and complementary healthcare insurance.

The obligation is calculated using the projected unit credit method.

The Group's main obligations are described below.

18.2.1 Reduced energy prices

Under Article 28 of the national statute for EGI sector personnel, all current and former employees are entitled to benefits in kind which take the form of energy. This benefit entitles employees to electricity and gas supplies at a reduced price.

The amount of the obligation regarding gas supplied to ENGIE SA and EDF employees corresponds to the likely present value of the power (kWh) supplied to the employees or their dependents during the retirement phase, assessed based on the unit cost of the energy. The amount of the obligation also takes account of the likely value of the price of the energy exchange agreement with EDF.

18.2.2 End-of-career indemnities

As of July 1, 2008, retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities which increase in line with the length-of-service within the EGI sector, capped at 40 years.

18.2.3 Allowances for occupational accidents and illnesses

Like other employees under the standard pension plan, EGI sector employees are entitled to compensation for accidents at work and other occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries suffered on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

18.3 Change in present value of benefit obligations

	EGI sector plan						Non-EGI sector plan							
	Pension benefits		End-of-career and other post-employment benefits		Long-term benefits		Pension benefits		End-of-career and other post-employment benefits		Long-term benefits		Total	
In millions of euros	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Present value of benefit obligation at January 1	**1,503**	**2,174**	**139**	**224**	**66**	**87**	**242**	**290**	**18**	**24**	**-**	**-**	**1,967**	**2,799**
Impact of mergers and spin-offs	(2)	-	(1)	-	(1)	-	-	-	-	-	-	-	(4)	-
Past service cost: plan amendments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current service cost	13	27	4	8	6	9	-	-	-	-	-	-	23	44
Interest cost	57	26	5	3	3	1	9	3	-	-	-	-	74	33
Actuarial gains and losses due to financial assumption changes	41	(670)	140	(77)	2	(20)	(14)	(36)	(2)	(4)	-	-	167	(807)
Actuarial gains and losses due to demographic assumption changes	(1)	(29)	(5)	(9)	-	(4)	-	-	-	-	-	-	(6)	(42)
Actuarial gains and losses due to experience adjustments	(18)	48	4	(4)	1	1	-	1	-	-	-	-	(12)	45
Benefits paid under all plans (funded and unfunded) (1)	(77)	(73)	(10)	(7)	(9)	(7)	(15)	(15)	(2)	(2)	-	-	(113)	(104)
Impact of pension reform	21		(2)		-								19	-
Other		-		-		-	-	-	-	-	-	-	-	-
Present value of benefit obligation at December 31	**1,536**	**1,503**	**274**	**139**	**68**	**66**	**222**	**242**	**14**	**18**	**-**	**-**	**2,114**	**1,967**

(1) The aggregate impact on income of benefits paid under all plans totaled €113 million in 2023 versus €104 million in 2022.

18.4 Provisions

At year-end, ENGIE SA sets aside provisions in respect of allowances for occupational accidents and illnesses, and temporary and permanent disability benefits for active employees, as well as for benefits due during employees' active working lives (long-service awards and exceptional end-of-career vacation). Provisions for pensions and other employee benefit obligations transferred by SUEZ at the time of the 2008 merger are also recognized by ENGIE SA in liabilities. These provisions are written back as and when the corresponding liabilities for which they were set aside at end-2007 are extinguished. No further amounts are set aside to these provisions in respect of rights newly vested or the unwinding of discounting adjustments.

At December 31, 2023, ENGIE SA booked provisions of €83 million compared to €80 million at end-2022, representing an increase of €3 million in employee-related provisions.

Changes in provisions for employee benefit obligations

	EGI sector plan						Non-EGI sector plan							
	Pension benefits (1)		End-of-career and other post-employment benefits (2)		Long-term benefits (3)		Pension benefits (1)		End-of-career and other post-employment benefits (2)		Long-term benefits (3)		Total	
In millions of euros	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Present value of benefit obligation at January 1 (provisioned)	-	-	10	13	66	87	4	5	-	-	-	-	80	105
Impact of mergers and spin-offs	-	-	-	-	(1)	-	-	-	-	-	-	-	(1)	-
Current service cost	-	-	1	1	6	9	-	-	-	-	-	-	7	10
Interest cost	-	-	-	-	3	1	-	-	-	-	-	-	3	1
Actuarial gains and losses due to financial assumption changes	-	-	-	(3)	2	(20)	-	-	-	-	-	-	2	(23)
Actuarial gains and losses due to demographic assumption changes	-	-	-	-	-	(4)	-	-	-	-	-	-	-	(4)
Actuarial gains and losses due to experience adjustments	-	-	2	-	1	1	-	-	-	-	-	-	3	1
Benefits paid under all plans (funded and unfunded)	-	-	(2)	(1)	(9)	(7)	-	(1)	-	-	-	-	(12)	(9)
Impact of pension reform			-		-									
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Present value of benefit obligation at December 31 (provisioned)	-	-	10	10	68	66	4	4	-	-	-	-	82	80

(1) Excluding EGI sector companies in both 2023 and 2022.
(2) Exceptional vacation (€10 million), complementary health insurance for retired former SUEZ employees (zero) and water bonus (zero) in 2023.
(3) Allowances for occupational accidents and illness (€54 million), temporary and permanent disability allowances (€6 million), asbestos (€2 million) and long-service awards (€6 million).

18.5 Insurance contracts

ENGIE SA has taken out insurance contracts with several insurance firms to cover its obligations in respect of pensions and end-of-career indemnities. An amount of €91 million was paid to these insurance firms in 2023.

The value of these insurance contracts stood at €1,706 million at December 31, 2023 (€1,686 million at December 31, 2022).

18.6 Change in the fair value of plan assets

	EGI sector plan						Non-EGI sector plan							
	Pension benefits		End-of-career and other post-employment benefits		Long-term benefits		Pension benefits		End-of-career and other post-employment benefits		Long-term benefits		Total	
In millions of euros	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Fair value of plan assets at January 1	1,443	1,702	20	24	-	-	223	229	-	-	-	-	1,686	1,955
Impact of mergers and spin-offs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Expected return on plan assets	55	21	1	-	-	-	9	2	-	-	-	-	65	24
Premiums net of handling fees	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Actuarial gains and losses on plan assets	52	(232)	1	(3)	-	-	(6)	5	-	-	-	-	46	(231)
Benefits paid out of plan assets	(75)	(47)	(1)	(1)	-	-	(15)	(14)	-	-	-	-	(91)	(63)
Other	-	-	-	-	-	-			-	-	-	-	-	-
Fair value of plan assets at December 31	1,475	1,443	21	20	-	-	210	223	-	-	-	-	1,706	1,686

Return on plan assets

	EGI sector plan						Non-EGI sector plan					
	Pension benefits		End-of-career and other post-employment benefits		Long-term benefits		Pension benefits		End-of-career and other post-employment benefits		Long-term benefits	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Actual return on plan assets	7.7%	-13.0%	7.7%	-13.0%	-	-	3.0%	1.8%	-	-	-	-

The actual return on EGI sector plan assets was 7.7% in 2023.

The actual return on non-EGI sector plan assets was 2.11% in 2023.

The allocation of plan assets by principal asset category can be analyzed as follows:

	EGI sector plan		Non-EGI sector plan	
	2023	2022	2023	2022
Equities	27%	31%	10%	9%
Bonds	58%	58%	79%	82%
Other (including money market securities)	15%	11%	11%	9%
	100%	100%	100%	100%

Collective life insurance policies contracted with insurers to cover employee-related liabilities under the EGI sector plan are unit-linked. These contracts are available to ENGIE SA and to Group subsidiaries belonging to the “Group employee benefits management agreement”. A small portion of these contracts may be invested in financial instruments issued by ENGIE SA, mainly equities.

Based on unit-linked contracts attributable to ENGIE SA, the portion of plan assets invested in financial instruments issued by ENGIE SA amounted to €9.8 million at December 31, 2023, representing less than 1% of the total value of the fund at that date. Plan assets are not invested in properties occupied by ENGIE SA or in other assets used by ENGIE SA.

18.7 Supplementary defined-contribution plan

Employees eligible for the EGI plan also benefit from an additional defined-contribution plan set up in 2009. Employer contributions paid in respect of this scheme remained stable in 2023 and 2022 at €5 million.

NOTE 19 Legal and anti-trust proceedings

19.1 GEMS

At the beginning of the fourth quarter of 2022, ENGIE initiated an arbitration procedure against Gazprom Export LLC seeking, in particular to obtain (i) recognition of Gazprom Export LLC’s non-performance of its gas delivery obligations towards ENGIE under long-term gas delivery agreements and (ii) payment of contractual penalties as well as compensation for damage resulting from this non-performance from Gazprom Export LLC.

This arbitration procedure is due to the significant delivery shortages by Gazprom Export LLC to ENGIE as of mid-June 2022, followed by Gazprom Export LLC’s unilateral decision at the end of summer 2022 to reduce its deliveries to ENGIE due to a disagreement between the parties on the application of the agreements.

19.2 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse Dailly sale by SUEZ (now ENGIE) of a disputed withholding tax (*précompte*) receivable in 2005 for an amount of €995 million (receivable relating to the *précompte* paid in respect of the 1999-2003 fiscal years). The Montreuil Administrative Court handed down a judgment in ENGIE’s favor in 2019, which led the French tax authorities to appeal the decision before the Versailles Court of Appeal, which overturned the prior Court’s decision in 2021. On April 14, 2023, the Conseil d’État overturned the Court’s ruling on the grounds that the assigned claim should be classified as an advance repayment of non-deductible tax, irrespective of the fact that the State had not authorized its repayment by the bank assigning the claim, and that the repayment was only partial. The Conseil d’État referred the case back to the Versailles Administrative Court of Appeal to decide on the basis of a procedure that made the tax treatment of the disputed assignment of receivables in 2005 dependent on the outcome of the *précompte* litigation itself. The Court of Appeal’s decision is expected in 2024.

Regarding the dispute over the *précompte* itself, on February 1, 2016, the Conseil d’État dismissed the appeal before the Court of Cassation seeking the repayment of the *précompte* in respect of the 1999, 2000 and 2001 fiscal years. On June 23, 2020, the Versailles Administrative Court of Appeal found in favor of ENGIE as regards the cases seeking repayment of the précompte in respect of the 2002 and 2003 fiscal years but rejected the case in respect of the 2004 fiscal year. As the *précompte* receivables for 2002/2003 have been assigned, the relevant amounts have been repaid to the assignee banks. The case has been referred to the Conseil d’État by the two parties. On March 27, 2023, the Conseil d’État dismissed ENGIE’s appeal in light of the Conseil Constitutionnel’s decision of October 2022. On June 30, 2023, the Conseil d’État upheld the Court’s ruling and dismissed the Minister’s appeal in respect of the 2002 claim. It accordingly referred the matter back to the Versailles Administrative Court of Appeal, which was tasked with quantifying the amount of the 2003 *précompte* claim to be refunded in the light of the rules it had laid down, taking into account the prior decisions of the Court of Justice of the European Union and the Conseil Constitutionnel. On January 9, 2024, the Court validated the calculation of the refundable *précompte* proposed by the tax authorities, without responding to ENGIE’s arguments. The latter intends to appeal the decision before the Conseil d'État.

Furthermore, after ENGIE and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the Conseil d'État did not comply with European Union law when handing down decisions in disputes regarding the *précompte*, such as those involving ENGIE. On July 10, 2017, the European Commission referred the matter to the Court of Justice of the European Union on the grounds of France's failure to comply. On October 4, 2018, the Court of Justice of the European Union ruled partially in favor of the European Commission. Following this decision, France must revisit its methodology in order to determine the *précompte* repayment amounts in closed and pending court cases. No action has been initiated to date due to parallel litigation proceedings on the basis of Directive 90/435/EC.

NOTE 20 Information concerning related parties

All material transactions between ENGIE SA and related parties were carried out on an arm's length basis. Accordingly, no disclosures are required pursuant to the amending decree of Article R.123-198-11 of March 9, 2009.

Relations with the French State

The French State's interest in the Group at December 31, 2023 remained unchanged at 23.64% compared with the previous year. This entitles it to three of the 14 seats on the Board of Directors (one Director representing the State appointed by decree, and two Directors appointed by the Shareholders' Meeting at the proposal of the French State).

The French State holds 33.80% of the theoretical voting rights (33.95% of exercisable voting rights) compared with 33.56% at end-2022.

On May 22, 2019, the PACTE Act ("Action plan for business growth and transformation") was enacted, enabling the French State to dispose of its ENGIE shares without restriction.

In addition, the French State holds a golden share aimed at protecting France's critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE if it considers they could harm France's interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals and revenues from storage capacities, are all regulated.

The Law on Energy and Climate enacted on November 8, 2019 will put an end to regulated gas tariffs and will restrict regulated electricity tariffs for consumers and small businesses. The Regulated Gas Tariffs (TRV) came to an end on July 1, 2023.

Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks. Enedis, a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and December 31, 2007, respectively, and act in accordance with the agreement previously signed by the two incumbent operators. With the deployment of smart meters for both electricity and gas, the "common" activities operated by the two distributors evolved significantly. The remaining mixed activities are mainly in the areas of inventory management, human resources, medical field, local IT and accountancy.

Relations with the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of the Group who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées* – ENN), are described in Note 18 "Post-employment benefits and other long-term benefits".

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NOTE 21 Compensation due to members of the Board of Directors and Executive Committee

Total compensation (gross salary, bonuses, profit-sharing incentives and benefits in kind, including related employer contributions) paid to the Chief Executive, and members of the Executive Committee came to €23.2 million for 2023.

French government order No. 2019-697 on top-up pension plans, which was published on July 4, 2019 pursuant to the European Directive of April 16, 2014, abolished the defined-benefit pension plans governed by Article L.137-11 of the French Social Security Code (known as “Article 39 plans”), froze the rights of existing members and closed the plans to any new members as of that date.

Following the plan’s closure and crystallization of rights accrued in 2019, in 2020, the Group transferred the rights of beneficiaries, including Executive Committee members, to a defined contribution plan (known as an “Article 82” plan).

Members of the Board of Directors, except for the executive corporate officers, Directors representing employees and employee shareholders, received compensation for their terms of office. The total amount for 2023 was €0.9 million, being specified that Directors appointed by the Shareholders' Meeting on a proposal of the French State received 85% of their compensation. This amount of €0.9 million includes the portion paid to the State, i.e., €0.2 million, corresponding to the outstanding 15% of the compensation payable to them and the compensation awarded to the Director representing the French State and appointed by a State order.

NOTE 22 Subsequent events

No significant subsequent events have occurred since the closing of the accounts at December 31, 2023.

6.4.3 TOTAL AND PARTIAL TRANSFERS OF ASSETS, SUBSIDIARIES, AND EQUITY INVESTMENTS REQUIRING STATUTORY DISCLOSURE

This Note discloses crossings of thresholds of 10% and 50%, which correspond to the percentage holdings above which an entity becomes, respectively, an equity investment and a subsidiary according to the French Commercial Code (*Code du commerce*).

Total and partial transfers of assets

	% at Dec. 31, 2022	% at Dec. 31, 2023	Reclassification within the Group	Sale outside the Group	Net book value of shares sold *(in euros)*	Business sector
Subsidiaries [(1)]						
Celizan	100.00%	0.00%	X		26,034.22	Shell company
Reservoir Sun	50.00%	0.00%		X	49,977,600.00	Development of photovoltaic projects
Equity investments [(2)]						

(1) *More than 50%-owned by ENGIE SA.*
(2) *Less than 50%-owned by ENGIE SA.*

Total and partial purchases of assets

	% at Dec. 31, 2022	% at Dec. 31, 2023	Reclassification within the Group	Acquisition outside the Group	Net book value of shares held *(in euros)*	Business sector
Subsidiaries [(1)]						
ENGIE hydrogen International	0.00%	100.00%	X		10,214,704.80	Development of hydrogen production and supply projects
ENGIE Invest 88	0.00%	100.00%	X		40,000.00	Shell company
Equity investments [(2)]	-					

(1) *More than 50%-owned by ENGIE SA.*
(2) *Less than 50%-owned by ENGIE SA.*

6.4.4 FIVE-YEAR FINANCIAL SUMMARY

	2023	2022	2021	2020	2019
Capital at year-end					
Share capital *(in euros)*	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011
Number of ordinary shares issued and outstanding	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011
Maximum number of shares to be issued:					
• by converting bonds	-	-	-	-	-
• by exercising stock options	-	-	-	-	-
Results of operations for the year *(€ millions)*					
Revenues, excluding VAT	54,149	68,500	36,224	19,272	17,282
Income before tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	169	4,148	659	1,444	378
Income tax (negative figures = benefit)	(247)	(321)	(474)	(532)	(377)
Employee profit-sharing and incentive payments for the year	-	-	-	-	-
Income after tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	500	1,697	1,780	(3,928)	(196)
Total dividends paid (including on treasury shares)	3,482	3,409	2,070	1,291	-
Earnings per share *(in euros)*					
Earnings per share after tax and employee profit-sharing, but before depreciation, amortization, provisions and transfer of concession termination amortization	0.17	1.84	0.47	0.81	0.31
Income after tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	0.21	0.70	0.73	(1.61)	(0.08)
Dividend per share (1)	1.43	1.40	0.85	0.53	-
Headcount					
Average number of employees during the year	3,974	4,135	4,294	4,477	4,534
Total payroll	297	292	277	283	273
Total employee benefit obligations paid (social security taxes and contributions to pension plans, welfare plans, etc.)	234	210	229	239	197

(1) Subject to approval by the Board of Directors.

Shareholders at the AGM held to approve the 2023 financial statements will be asked to approve a dividend of €1.43 per share, representing a total amount of €3,482 million, based on the number of outstanding shares at December 31, 2023. The dividend per share of €1.43 will be increased by 10% for all shares held by the same person for more than two years as of December 31, 2023 provided they are still held on the dividend payment date.

6.5 STATUTORY AUDITORS' REPORT ON THE FINANCIAL STATEMENTS

This is a free translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Company presented in the management report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

Year ended December 31, 2023

To the Engie Shareholders' Meeting,

Opinion

In compliance with the engagement entrusted to us by your Shareholders' Meeting, we have audited the accompanying financial statements of ENGIE for the year ended December 31, 2023.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as of December 31, 2023 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the "Statutory Auditors' Responsibilities for the Audit of the Financial Statements" section of our report.

Independence

We conducted our audit engagement in compliance with independence requirements of the French Commercial Code (*code de commerce*) and the French Code of Ethics (*code de déontologie*) for statutory auditors, for the period from January 1, 2023 to the date of our report, and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L. 821-53 and R. 821-180 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

Measurement of equity investments

(Notes 1 - "Accounting principles" and 4 - "Financial fixed assets" to the financial statements)

Key Audit Matter	Our response

Equity investments amounted to €76.0 billion as of December 31, 2023 (net value of €63.9 billion).
Newly-acquired equity investments are recognized at purchase price plus directly attributable transaction fees.
The equity investments which your Company intends to hold on a long-term basis are written down if their value in use has fallen below their book value, including the allocated technical losses, as stated in the Note 1 "Financial fixed assets" to the financial statements.
Value in use is determined by reference to (i) the intrinsic value which corresponds to restated net assets plus unrealized gains for investment entities, (ii) the yield value which corresponds to the average of the last twenty stock market prices of the period for listed entities, or (iii) expected cash flows or dividends ("Discounted Cash Flow" or "Dividend Discount Model") of operating entities, and by taking into account any currency hedges.
As indicated in Note 4.2 to the financial statements, expected cash flows are drawn from the 2024 budget and 2025-2026 medium-term business plan approved by the Executive Committee and the Board of Directors and beyond this period, extrapolated future cash flow projections are determined on the basis of macroeconomic assumptions and price projections featured in your Group's long-term reference scenario for 2027-2050 reviewed and approved by the Executive Committee.
As mentioned in Note 4.2 to the financial statements, the net provision reversal recognized in 2023 for €0.8 billion mainly covers the equity investments in Electrabel (€1.8 billion).
The measurement of equity investments is considered to be a key audit matter given their importance on the balance sheet (60% of total assets) and Management's judgments and estimates that are required to assess their value in use and the sensitivity of assessments to the assumptions adopted in an economic and financial environment that remains sensitive to changes in the energy markets and the consequences of which make it difficult to assess the medium-term economic outlook.
	We assessed Management's procedures for approving estimates of equity investments.
	We examined the main data and key assumptions used to determine the values in use, assessed the sensitivity of measurements to these assumptions and verified the calculations made by your company with the support of our valuation specialists.
	Our work mainly consisted in:
	• examining the measurement methods used to estimate values in use;
	• assessing the consistency of assumptions with your Group's long-term reference scenarios (electricity and gas prices and demand, price of CO_2, inflation) with external studies carried out by international organizations or energy experts;
	• verifying the consistency of the operational and regulatory assumptions used to prepare cash flow forecasts for each of the entities;
	• examining the discount rates for which we have verified the determination methods and the consistency with the underlying market assumptions;
	• assessing the methods for determining cash flow forecasts while verifying:
	  • the consistency of the basic data with the budget, the medium-term business plan and beyond, the Group's reference scenario,
	  • the consistency with past performances and market outlook.
	We also assessed the appropriateness of the disclosures in Notes 1 and 4 to the financial statements.

Main estimates and judgments on revenue

(Notes 1 "Accounting principles", 6.1 "Debt maturity schedule" and 13.1 "Breakdown of revenue" to the financial statements)

Key Audit Matter	Our response
Your Company makes estimates and uses judgments notably for the recognition of (i) sales of electricity and gas delivered, not metered and not invoiced (known as "energy in the meter") and, (ii) specifically for the financial year ended December 31, 2023, gas and electricity sales made in France under the Government's "tariff shield" scheme. ***Revenue relating to un-metered and unbilled delivered sales of electricity and gas ("energy in the meter"):*** The measurement of revenue relating to sales of electricity and gas for customers which are only metered during the accounting period represents a material estimate at the year-end. As the meter readings are sometimes communicated by grid managers several months after the actual delivery date, your Company is required to estimate the energy delivered but not metered at the year-end. As of December 31, 2023, receivables relating to revenue in the meter (delivered gas and electricity that is unbilled and un-metered) totaled €2.8 billion. These receivables are determined on the basis of a method that takes into account an estimate of customers' consumption based on the previous bill, or the last metering not yet billed, in line with the volume of energy allocated by grid managers, using measurement and modeling tools developed by your Company. The volumes are measured at the average energy price, which takes account of the category of customers and the age of the energy in the meter. ***Compensation relating to sales of gas and electricity in France under the French government's "tariff shield" scheme*** The strong volatility observed in the energy markets and the resulting substantial increase in natural gas and electricity prices led the French government to introduce "tariff shield" measures for natural gas in 2021 and electricity in 2022. The 2023 Finance Law (law 2022-1726 of December 30, 2022) renewed and amended the tariff shield measures for gas (until June 30, 2023) and electricity (until January 31, 2024). The revenue losses incurred by your Company involve expenses attributable to public service obligations and are covered by compensation guaranteed by the French State, calculated according to the application methods published by the French Energy Regulatory Commission. In this context, your Company exercised its judgment to determine how to recognize the compensation receivable. Considering the amounts of revenue at stake and the sensitivity of the estimates to assumptions regarding average energy volumes and prices, and the judgments exercised, we have considered (i) the estimate of the portion of un-metered revenue delivered and (ii) the compensation receivable at the year-end under the tariff shield scheme to be a key audit matter.	***Revenue relating to un-metered and unbilled delivered sales of electricity and gas ("energy in the meter")*** The procedures carried out on the estimation of metered energy mainly consisted in: • considering the internal control procedures about the billing process, and the processes securing the reliability of the accounting estimates for the energy in the meter; • assessing the relevance of estimation models and reviewing the methods of calculating the estimated energy volumes by including a algorithm specialist in our audit team; • comparing the information about the volumes delivered and determined by the Company with the metering data provided by the grid operators; • examining that the methods used for the computation of the average price of the un-metered delivered power take account of its age in the meter and the different kinds of customers; • analyzing the consistency of the volumes committed in the employment operations (sales, injections and stocks) with the energy resources (purchases, withdrawals and stocks) on the networks; • assessing the regular clearance of the metered energy during the period; and finally; • assessing the age of the energy in the meter at the year-end. ***Compensation relating to sales of gas and electricity in France under the French government's "tariff shield" scheme*** Regarding the impacts arising from the implementation of the tariff shield scheme, our procedures mainly consisted in: • examining the legal provisions voted under the 2023 Finance Law as well as the deliberations of the Energy Regulatory Commission regarding the methods of applying "tariff shield" schemes; • analyzing the financial impacts for your Company of the application of the various tariff shield provisions, as well as the measurement of the compensation receivable for the year ended December 31, 2023; • assessing the accounting treatment and methods of presenting the income to be recognized in the income statement; • We also assessed the appropriateness of the disclosures in Notes 1, 6.1 and 13.1 to the financial statements.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law and regulations.

Information given in the management report and in the other documents addressed to the shareholders with respect to the financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the other documents addressed to shareholders with respect to the financial position and the financial statements.

We attest the fair presentation and consistency with the financial statements of the information relating to payment deadlines mentioned in Article D. 441-6 of the French Commercial Code (code de commerce).

Report on Corporate Governance

We attest that the Board of Directors' report on corporate governance contains the information required by Articles L.225-37-4, L.22-10-10 and L.22-10-9 of the French Commercial Code.

Concerning the information given in accordance with the requirements of Article L. 22-10-9 of the French Commercial Code (code de commerce) relating to remunerations and benefits received by or awarded to the directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from controlled enterprises included in the scope of consolidation. Based on these procedures, we attest the accuracy and fair presentation of this information.

With respect to the information relating to items that your Company considered likely to have an impact in the event of a takeover bid or exchange offer, provided pursuant to Article L. 22-10-11 of the French Commercial Code (code de commerce), we have agreed this information to the source documents communicated to us. Based on these procedures, we have no observations to make on this information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of shareholders and holders of voting rights has been properly disclosed in the management report.

Other Legal and Regulatory Verifications or Information

Format of presentation of the financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by the statutory auditor relating to the annual and consolidated financial statements presented in the European single electronic format, that the presentation of the financial statements intended to be included in the annual financial report mentioned in Article L.451-1-2, I of the French Monetary and Financial Code (Code monétaire et financier), prepared under the responsibility of the Chief Executive Officer, complies with the single electronic format defined in the European Delegated Regulation No 2019/815 of December 17, 2018.

Based on the work we have performed, we conclude that the presentation of the financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

We have no responsibility to verify that the annual financial statements that will ultimately be included by your company in the annual financial report filed with the AMF are in agreement with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed statutory auditors of ENGIE by your Shareholders' Meeting on May 19, 2008 for Ernst & Young et Autres and on July 16, 2008 for Deloitte & Associés.

As of December 31, 2023, our firms were in their sixteenth year of uninterrupted engagement.

Ernst & Young Audit was previously statutory auditor between 1995 and 2007.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and, where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 821-55 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- Evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration referred to in Article 6 of Regulation (EU) no. 537-/2014, confirming our independence pursuant to the rules applicable in France as defined in particular by Articles L.821-27 to L.821-34 of the French Commercial Code and in the French Code of ethics for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Defense, March 5, 2024

The Statutory Auditors

ERNST & YOUNG et Autres		**Deloitte & Associés**	
Charles-Emmanuel CHOSSON	Guillaume ROUGER	Patrick E. SUISSA	Nadia LAADOULI

7

ADDITIONAL INFORMATION

7.1 GENERAL INFORMATION ON ENGIE AND ITS BYLAWS

7.1.1 COMPANY NAME AND TRADING NAME

The company name and trading name of the Company is: ENGIE.

7.1.2 REGISTRATION PLACE AND NUMBER AND LEI

ENGIE is registered in the Nanterre Trade and Companies Register under number 542 107 651.

Its APE (principal activity) code is 3523Z.

Its legal entity identifier (LEI) is: LAXUQCHT4FH58LRZDY46.

The name of the stock is ENGIE and its ticker symbol is “ENGI.”

7.1.3 DATE OF INCORPORATION AND TERM

The Company was incorporated as an EPIC (French public industrial and commercial enterprise) on April 8, 1946, and registered in the Trade and Companies Register on December 24, 1954. ENGIE is a French limited company since November 20, 2004.

The Company’s term is fixed at 99 years as of November 20, 2004, i.e. until November 17, 2103, unless it is dissolved early or the term is extended.

7.1.4 REGISTERED OFFICE, LEGAL FORM, LEGISLATION, ADDRESS AND WEBSITE

The registered office is located at: 1, place Samuel de Champlain 92400 Courbevoie, France.

Telephone number of registered office: +33 1 44 22 00 00

Website: www.engie.com/en

The information provided on the Company’s website does not form an integral part of this document, unless it is incorporated by reference.

ENGIE is a public limited company (*société anonyme*) with a Board of Directors, governed by the legislative and regulatory provisions applicable to commercial limited companies, subject to specific laws governing the Company, and by its bylaws.

7.1.5 CORPORATE OBJECTIVE

Pursuant to Article 2.2 of the bylaws, ENGIE’s objective is the management and development of its current and future tangible and intangible assets, in France and abroad, by all means and especially to:

- prospect, produce, process, import, export, purchase, transport, store, distribute, supply and market natural gas of any kind, in all its forms, and electricity, as well as other forms of energy;
- conduct trading in any energy, particularly natural gas and electricity;
- supply to any type of customer the services related directly or indirectly to the aforementioned activities, including specific services to facilitate the energy transition;
- perform the public service missions assigned to it by the laws and regulations in force, particularly the Energy Code;
- study, design and implement all projects and all public or private work on behalf of any local authorities, companies and individuals; prepare and sign all treaties, public and private contracts relating to the execution of said projects and work;
- participate directly or indirectly in all operations or activities of any kind that may be related to one of the aforementioned objectives, or which could ensure the development of the corporate holdings, including research and engineering activities, via the formation of companies or new businesses, contribution, subscription or sales of securities or corporate rights, acquisitions of interests and stakes, in any form, in all existing or future businesses or companies, merger, association, or in any other manner;
- create, acquire, lease, take under lease-management all furnishings, buildings and businesses, lease, install and operate all establishments and businesses relating to one of the aforementioned objectives;
- register, acquire, operate, grant or sell all processes, patents and patent licenses relating to the activities connected with one of the aforementioned objectives;
- obtain, acquire, rent and operate, mainly via subsidiaries and holdings, all concessions and undertakings relating to the supply of drinking water to towns or water to industry, the evacuation and purification of wastewater, drainage and wastewater treatment operations, irrigation and transport, protection and pondage structures as well as all sales and service activities to public authorities and individuals in the development of towns and the management of the environment;
- and in general to carry out all industrial, commercial, financial, personal property or real estate operations and activities of any kind, including services, in particular insurance intermediation, acting as an agent or delegated agent in a complementary, independent or research position; these operations and activities being directly or indirectly related, in whole or in part, to any one of the aforementioned objectives, to any similar, complementary or related objectives and to those that may further the development of the Company’s business.

7.1.6 PURPOSE

Pursuant to Article 2.1 of the bylaws, the purpose of ENGIE is to act to accelerate the transition to a carbon-neutral economy, through low-energy solutions that are more respectful of the environment. This purpose brings together the company, its employees, customers and shareholders and reconciles economic performance and positive impact on people and the planet. ENGIE's action is assessed in its entirety and over time.

7.1.7 FISCAL YEAR

The Company's fiscal year lasts for 12 months, starting on January 1 and ending on December 31 of each year.

7.2 MATERIAL CONTRACTS

The Group's main contracts, other than contracts concluded in the ordinary course of business, are as follows:

7.2.1 CONTRACTS FINALIZED IN 2022

Contract for the disposal of the activities of EQUANS – see Note 4.1.2 of Section 6.2.2 "Notes to consolidated financial statements" of the 2022 Universal Registration Document.

Contract to acquire a 97.33% interest in Eolia Renovables – see Note 4.3 of Section 6.2.2 "Notes to consolidated financial statements" of the 2022 Universal Registration Document.

7.2.2 CONTRACTS IN PROGRESS AT THE END OF FISCAL YEAR 2022 AND FINALIZED IN 2023

None.

7.2.3 CONTRACTS SIGNED POST-CLOSING 2022

None.

7.2.4 CONTRACTS FINALIZED IN 2023

Contract to acquire 100% of Broad Reach Power – see Note 4.2 of Section 6.2.2 "Notes to consolidated financial statements."

7.2.5 CONTRACTS IN PROGRESS AT THE END OF FISCAL YEAR 2023

On June 29, 2023, ENGIE and the Belgian government signed an agreement on the extension of the Tihange 3 and Doel 4 nuclear reactors and all obligations related to nuclear waste. This became binding following the signing of the supplements to the initial agreements on July 21, 2023. Transactional agreements signed on December 13, 2023, clarified the implementation of these June and July agreements – see Note 17.2 of Section 6.2.2 "Notes to the consolidated financial statements."

7.2.6 CONTRACTS SIGNED POST-CLOSING 2023

Not significant.

7.2.7 BORROWING AND FINANCING CONTRACTS

See Notes 14.2 and 14.3 of Section 6.2.2 "Notes to consolidated financial statements" and Notes 11.2.1 and 11.2.2 of Section 6.4.2 "Notes to parent company financial statements."

7.3 LITIGATION AND ARBITRATION

In the course of its operations, the Group is engaged in a certain number of legal disputes and arbitration procedures and is also subject to investigations and procedures under competition law. The principal investigations and proceedings are described in Note 23 "Legal and anti-trust proceedings" of Section 6.2.2 "Notes to the consolidated financial statements" and Note 19 "Legal disputes" of Section 6.4.2 "Notes to the parent company financial statements."

7.4 PUBLIC DOCUMENTS

The documents relating to ENGIE that must be made available to the public (bylaws, reports, historical financial information on ENGIE, as well as on the Group subsidiaries included or mentioned in this Universal Registration Document and those relating to each of the two fiscal years prior to the filing of this Universal Registration Document) may be consulted at ENGIE's corporate headquarters for as long as this Universal Registration Document remains valid.

These documents may also be obtained in electronic format from the ENGIE website (www.engie.com/en) and some of them may be obtained from the AMF website (www.amf-france.org/en).

The ENGIE Universal Registration Document is translated into English. In case of contradiction, the original French version shall prevail.

As well as this Universal Registration Document, which is filed with the AMF, the Group publishes an integrated report each year.

The documents published on the website are available free of charge from ENGIE, 1, place Samuel de Champlain – 92400 Courbevoie, France.

7.5 PARTY RESPONSIBLE FOR THE UNIVERSAL REGISTRATION DOCUMENT

Party responsible for the Universal Registration Document

Catherine MacGregor, Chief Executive Officer.

Declaration by the party responsible for the Universal Registration Document containing the Annual Financial Report

"I hereby certify that the information contained in this Universal Registration Document is, to my knowledge, in accordance with the facts and makes no omission likely to affect its import.

I hereby certify that, to the best of my knowledge, the financial statements have been prepared in accordance with the applicable accounting standards and give a true and fair view of the assets and liabilities, financial position and profit or loss of the Company and all the undertakings included in the consolidation, and that the management report, whose sections are mentioned in Chapter 7 of this Universal Registration Document, presents a true and fair view of the development of the business, profit and loss and financial position of the Company and all the undertakings included in the consolidation, together with a description of the main risks and uncertainties to which they are exposed."

Courbevoie, March 7, 2024
The Chief Executive Officer
Catherine MacGregor

7.6 CONVERSION TABLE

1 kWh	0.09 m^3 of natural gas (i.e. 1 m^3 of gas = 11 kWh)
1 GWh	91,000 m^3 of natural gas
1 TWh or 1 billion kWh	91 million m^3
1 billion m^3 of gas	6.2 million barrels of oil equivalent (Mboe)

The units of conversion mentioned above are those routinely used by professionals in the energy sector. In this document they are provided solely for information purposes.

7.7 UNITS OF MEASUREMENT

A	Ampere
Bar	Unit of measurement of fluid pressure, particularly for natural gas (1 bar = 105 Pascal)
BOE	Barrel of oil equivalent (1 barrel = 159 liters)
CO_2 eq.	Carbon dioxide equivalent
G	Giga (billion)
GBq	Giga becquerel
GW	Gigawatt (billion watts)
GWh	Gigawatt-hour (million kilowatt-hours)
GWheeq	GWh electric equivalent
J	Joule
k	Kilo (one thousand)
kW	Kilowatt (one thousand watts)
kWh	Kilowatt-hour (one thousand watt-hours)
m	Meter
m^2	Square meter
m^3	Cubic meter
M	Mega (million)
Mboe	Million barrels oil equivalent
Mtpa	Million metric tons per annum
MW	Megawatt (million watts)
MWp	Megawatt-peak (unit of measurement for the power of solar power installations)
MWe	Megawatt electric
MWh	Megawatt-hour (thousand kilowatt-hours)
T	Tera (thousand billion)
TBq	Terabecquerel
t / h	Metric tons per hour
TWh	Terawatt-hour (billion kilowatt-hours)
V	Volt
W	Watt
Wh	Watt-hour

7.8 SHORT FORMS AND ACRONYMS

A

ACGC: Appointments, Compensation and Governance Committee

AMEA: Asia, Middle East, Africa

AMF: Autorité des Marchés Financiers (French Financial Markets Authority)

B

BtoB: Business to Business

BtoC: Business to Consumer

BtoT: Business to Territories

C

Capex: Capital expenditure

CCGT: Combined Cycle Gas Turbine

CER: Certified Emission Reduction – see Glossary

CO_2: Carbon dioxide

CPN: Commission des Provisions Nucléaires (Belgian Commission for Nuclear Provisions)

CRE: Commission de Régulation de l'Énergie (French energy regulator) – see Glossary

CRM: Capacity Remuneration Mechanism – see Glossary

CSR: Corporate Social Responsibility

E

E&P: Exploration & Production of hydrocarbon

EBIT: Earnings Before Interest and Taxes – see Glossary

EBITDA: Earnings before Interest, Tax, Depreciation and Amortization – see Glossary

EESDC: Ethics, Environment ans Sustainable Development Committee

EGI: Electric and Gas Industries – see Glossary

EMAS: Eco Management and Audit Scheme – see Glossary

EMTN: Euro Medium Term Note (program)

ERM: Enterprise Risk Management

ESC: European Works Council

ESC: Energy Savings Certificates

ESG: Environmental, Social and Governance

EUA: European Union Allowance

G

GBU: Global Business Unit

GDPR: General Data Protection Regulation

GEMS: Global Energy Management & Sales

GHG: Greenhouse Gases – see Glossary

H

HR: Human Resources

I

IAS: International Accounting Standards, drawn up internationally by the IASB until 2002

IASB: International Accounting Standards Board

IFRS: International Financial Reporting Standards, drawn up internationally by the IASB since 2002

INCOME: Internal Control Management Efficiency (ENGIE Group program)

IS: Information Systems

ISO: International Organization for Standardization – see Glossary

K

KPI: Key Performance Indicator

L

LNG: Liquefied Natural Gas – see Glossary

LTO: Long Term Operation

M

MtM: Mark to Market (fair value investment)

N

NFS: Non-financial statement

NGO: Non-governmental organization

NO_x: Nitrogen oxide

NRE: New and renewable energy sources: wind, solar, hydro, etc.

NRIgs: Net Recurring Income / (loss) Group share

O

OPEX: Operating expenses

P

PPA: Power Purchase Agreement (often long-term)

R

R: Revenues

R&D: Research and Development

R&I: Research and Innovation

ROACE: Return On Average Capital Employed

S

SBTi: Science-Based Targets initiative

SDG: Sustainable Development Goals

SEC: Social and Economic Committee

SITC: Strategy, Investment and Technology Committee

SO_2: Sulfur dioxide

T

TPA-d: Third party access to the distribution network – see Glossary

TCFD: Task Force on Climate-related Financial Disclosures

TRV: Tarifs Réglementés de Vente (Regulated Gas Tariffs)

TSR: Total Shareholder Return – see Glossary

U

UCITS: Undertakings for Collective Investment in Transferable Securities (money-market funds)

V

VaR: Value at Risk – see Glossary

7.9 GLOSSARY

Afep-Medef Code

Code of corporate governance for listed companies (in France), in the version published by Afep-Medef in December 2022.

Biogas

All gases resulting from the fermentation of organic waste (waste, sludge from sewage treatment plants, etc.) in a depleted air environment, such as methane and carbon dioxide. Such fermentation is the result of a natural or controlled bacterial activity. As such, biogas is classified as a renewable energy source.

Biomass

Mass of non-fossil organic matter of biological origin. A part of this deposit may be used as an energy source.

Biomethane

Green gas composed in a very large proportion of methane molecules. It is this gas that can be injected into the city gas network.

Capacity Remuneration Mechanism (CRM)

Instrument intended to complement energy markets with a capacity market that ensures the availability of sufficient capacity to ensure the supply of electricity.

Certified Emission Reduction (CER)

Certificate issued to industries that have invested in developing countries to reduce greenhouse gas emissions there. CERs cannot be directly traded, but may be used in place of CO_2 quotas, with one CER equal to one quota.

Cogeneration

A technique that uses a single fuel, which may be natural gas, to simultaneously produce thermal energy (steam or overheated water or a mixture of air and combustion products) and electricity.

Combined steam cycle plant

A power plant comprising a gas turbine generator, the exhaust gases of which power a steam boiler. The steam produced in the boiler drives a turbo-generator.

Commission de Régulation de l'Électricité et du Gaz – Belgium – CREG (Belgian electricity and gas regulator)

Independent body, responsible for advising the public authorities on the organization and operation of the liberalized gas and electricity markets. Moreover, the CREG monitors and controls the application of laws and regulations. A General Council, composed of representatives of federal and regional governments, organizations representing workers, employers and the middle classes, environmental groups as well as producers, distributors and consumers, oversees its work.

Commission de Régulation de l'Énergie – CRE (French energy regulator)

The CRE is an independent administrative authority. It was created by the Act of February 10, 2000 to regulate electricity and its scope was extended to include the gas sector with the Act of January 3, 2003. Its main mission is to ensure the effective, transparent and non-discriminatory implementation of access to electricity and gas networks.

More generally, its role is to ensure that the gas and electricity markets operate properly.

Corporate Power Purchase Agreement (Corporate PPA)

A corporate Power Purchase Agreement or corporate PPA is a long-term electricity supply agreement between an electricity producer and an electricity end-purchaser.

Desalination

A process used to reduce the salt concentration of sea water in order to make it fit for human or animal consumption as well as for other uses, especially industrial uses.

Distribution

Distribution networks are groups of physical structures consisting mainly of medium or low-pressure pipes. They route natural gas to consumers who are not directly connected to the main network or to a regional transmission network.

EBIT

Current Earnings Before Interest and Taxes, after share of net recurring income of equity-consolidated companies.

EBITDA

EBIT before net depreciation and amortization expenses.

Eco Management and Audit Scheme (EMAS)

Based on ISO 14001 certification and an environmental statement certified by European auditors accredited and published by the European Commission.

Electricity and Gas Industries (EGI)

All the companies that produce, transmit or distribute electricity or gas in France and which meet the requirements of the Nationalization Act of April 8, 1946. The EGI sector includes all companies with employees that fall under the status of EGI employees.

Energy trading

The act of exchanging physical or financial contracts on the short-term energy markets (over-the-counter markets and stock markets)

Gas pipeline

A pipeline that conveys fuel gas.

Green electricity

Certified electricity produced from renewable energy sources.

Greenhouse Gases (GHG)

Atmospheric gas that contributes to the retention of solar heat. Industries, automobiles, heating systems, livestock farming and other activities produce gases, some of which heighten the greenhouse effect. The greenhouse gas build-up produced by human activity is one of the causes of global warming and its impacts on the ecosystem.

International Standards Organization (ISO)

Organization that defines reference systems (industrial standards used as benchmarks).

Investment Services Provider (ISP)

Investment services provider approved by the Committee of European Bank Supervisors to transmit and process market orders.

ISO 14001

An international standard that verifies a company's organizational procedures and methods, as well as the effective implementation of environmental policy and objectives.

Joint venture

A term commonly used to describe a project in which two or more entities take part. For the consolidation principles and methods applicable to the different types of partnership under IFRS, please see Note 1 of Section 6.2.2 "Notes to the consolidated financial statements."

Liquefied Natural Gas (LNG)

Natural gas put into the liquid phase by lowering its temperature to –162°C, which makes it possible to reduce its volume by a factor of 600.

LNG terminal

An industrial facility that provides for the receipt, unloading, deposit and regasification of LNG and the delivery of natural gas in gaseous form to the transport network. Port facility, with ancillary facilities, to accommodate vessels carrying liquefied natural gas (LNG).

Load-matching

Term referring to the discrepancy between the actual conditions of a customer's gas consumption and those corresponding to standard purchases over the year of their average daily consumption. Variations (daily, weekly or seasonal) in consumption are generally covered by underground storage, to which customers and their suppliers may have access, either directly (in countries where third-party access to the facilities – regulated or negotiated – is provided) or via a load-matching service (as in the US).

Main network

All the high-pressure and large-diameter structures for transmitting natural gas that link the interconnection points with neighboring transmission networks, storage facilities and LNG terminals.

These structures are connected to regional networks as well as certain industrial consumers and distribution networks

Marketer

Seller of energy to third parties (end customer, distributor, etc.).

Natural Gas liquefaction

Transformation of natural gas from gaseous form to liquid form to be transported by ship and / or stored.

Qmax

A ship of Qmax size is 345 meters (1,132 feet) long, 53.8 meters (177 feet) wide and 34.7 meters (114 feet) high, with a draft of approximately 12 meters (39 feet).

It has an LNG capacity of 266,000 cubic meters (9,400,000 cubic feet), equal to 161,994,000 cubic meters (5.7208 ×109 cubic feet) of natural gas.

Regional network

All the high-pressure and large-diameter structures that link the interconnection points with neighboring transmission networks, storage facilities and LNG terminals.

Regional networks, distribution networks and certain industrial consumers are connected to them.

Regulated asset base (RAB)

The regulated asset base is the economic value, recognized by the regulator, of assets utilized by an operator of regulated networks.

Scopes 1, 2 and 3

ENGIE prepares an annual GHG report (Scopes 1, 2 and 3) within the scope of the Group calculated according to the principles of the GHG Protocol Corporate Standard:

- Scope 1 covers the production of electricity through the combustion of fossil fuels in power plants owned or controlled by ENGIE, methane emissions from networks controlled by ENGIE, and ENGIE vehicle fleets;
- Scope 2 covers the production of electricity, heating or cooling purchased and consumed by ENGIE for own use;
- Scope 3 covers, upstream, the purchase for resale of electricity and heating, the manufacture of goods, services or equipment purchased or leased by ENGIE (including their end of life), the upstream fuel chain (extraction and transport of raw materials), and, downstream, the final consumption of gas volumes sold by ENGIE, and the production of electricity in power plants not controlled (consolidated under the equity method) by ENGIE.

Smart energy

An economically efficient, durable and secure energy system in which production of renewable energy, the networks and consumption are integrated and coordinated locally through energy services, active users and digital technologies.

Storage

Facility that allows natural gas to be stored in the summer when consumption is at its lowest, and to take natural gas out of storage in winter when consumption is higher. Gas storage is an industrial facility, mainly underground, that enables natural gas suppliers to have a natural gas reserve.

Stress test

Test performed in order to assess resistance to a disaster scenario.

Take-or-Pay

Long-term contract where the producer guarantees the supply of gas to an operator and the operator guarantees payment, regardless of whether or not the operator takes delivery.

Thermal plant

Facility in which the chemical energy contained in solid, liquid, or gaseous fossil fuel is transformed exclusively into electricity using boilers and steam turbines.

Third Party Access to the Distribution Network (TPA-D)

The recognized right of each user (eligible customer, distributor, producer) to access a transmission or distribution network in return for payment for access rights.

Tolling

Contract for the transformation of a fuel (e.g. natural gas) into electricity on behalf of a third party.

Total Shareholder Return (TSR)

Return of a share over a given period that includes dividends paid and capital gains realized.

Transmission

Transmission networks are groups of physical structures consisting of high-pressure pipelines. These route natural gas to industrial consumers who are directly connected and to distribution networks.

Transmission capacity

The highest permissible continuous load of the transmission equipment with respect to the stability of its operating parameters and pressure drop.

Treasury stock

Shares of the Company purchased by the latter, by virtue of authorization given by the General Shareholders' Meeting. These shares do not carry voting rights.

Underground storage

Use of porous geological formations, natural or artificial cavities (saline or aquifer) to store liquid or gaseous hydrocarbons.

Value at Risk (VaR)

Value at Risk is a global indicator used to measure the exposure of a portfolio to the risks of price fluctuations and volatility. It measures the amount of potential losses that are expected to be exceeded only with a given probability over a given time horizon. This indicator is especially well suited for measuring market risks for trading activities.

For example, if the time horizon is one day and the confidence level 99%, VaR of €5 million indicates that the probability of losing more than €5 million each day is 1%, i.e., twice or three times per year.

Virtual Power Plant (VPP)

Virtual generation capacity. A system which involves providing a third party, in return for compensation, with a band of generation capacity without the third party owning a share in the asset and without it being the asset's operator.

7.10 THEMATIC INDEX

7.11 COMPARISON TABLE

Regulation (EU) 2017/1129 of June 14, 2017 (Prospectus) and Delegated Regulation (EU) 2019/980 of March 14, 2019

This comparison table enables the information required by Annex 1 (referred from Annex 2) of Delegated Regulation (EU) 2019/980 of March 14, 2019, supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council, according to the prospectus layout, to be identified and cross-referenced to the Sections of the 2023 Universal Registration Document:

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1.3 Declaration or report attributed to a person acting as an expert	N/A		NA
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To facilitate the reading of this document, the comparison table below enables the identification of the information which should be included in the management report, in accordance with the provisions of the French Commercial Code applicable to public limited companies with a Board of Directors.

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