2018 MANAGEMENT REPORT AND ANNUAL CONSOLIDATED FINANCIAL STATEMENTS

CONTENTS

01 MANAGEMENT REPORT

1 ENGIE 2018 RESULTS ... 6
2 REPORTABLE SEGMENT BUSINESS TRENDS ... 12
3 OTHER INCOME STATEMENT ITEMS ... 19
4 CHANGES IN NET DEBT ... 21
5 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION ... 25
6 PARENT COMPANY FINANCIAL STATEMENTS ... 26

02 CONSOLIDATED FINANCIAL STATEMENTS

INCOME STATEMENT ... 30
STATEMENT OF COMPREHENSIVE INCOME ... 31
STATEMENT OF FINANCIAL POSITION ... 32
STATEMENT OF CHANGES IN EQUITY ... 34
STATEMENT OF CASH FLOWS ... 36

03 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1 ACCOUNTING FRAMEWORK AND BASIS FOR PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS ... 39
Note 2 RESTATEMENT OF 2017 COMPARATIVE DATA ... 44
Note 3 MAIN SUBSIDIARIES AT DECEMBER 31, 2018 ... 55
Note 4 INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD ... 62
Note 5 MAIN CHANGES IN GROUP STRUCTURE ... 70
Note 6 FINANCIAL INDICATORS USED IN FINANCIAL COMMUNICATION ... 75
Note 7 SEGMENT INFORMATION ... 79
Note 8 REVENUES ... 84
Note 9 OPERATING EXPENSES ... 89
Note 10 FROM CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD TO INCOME/(LOSS) FROM OPERATING ACTIVITIES ... 90
Note 11 NET FINANCIAL INCOME/(LOSS) ... 94
Note 12 INCOME TAX EXPENSE ... 96
Note 13 EARNINGS PER SHARE ... 101
Note 14 GOODWILL ... 102
Note 15 INTANGIBLE ASSETS ... 111

Note 16 PROPERTY, PLANT AND EQUIPMENT 116
Note 17 FINANCIAL INSTRUMENTS 120
Note 18 RISKS ARISING FROM FINANCIAL INSTRUMENTS 138
Note 19 EQUITY 159
Note 20 PROVISIONS 163
Note 21 POST-EMPLOYMENT BENEFITS AND OTHER LONG-TERM BENEFITS 170
Note 22 FINANCE LEASES 179
Note 23 OPERATING LEASES 181
Note 24 SHARE-BASED PAYMENTS 183
Note 25 RELATED PARTY TRANSACTIONS 187
Note 26 EXECUTIVE COMPENSATION 189
Note 27 WORKING CAPITAL REQUIREMENTS, INVENTORIES, OTHER ASSETS AND OTHER LIABILITIES 190
Note 28 LEGAL AND ANTI-TRUST PROCEEDINGS 193
Note 29 SUBSEQUENT EVENTS 197
Note 30 FEES PAID TO THE STATUTORY AUDITORS AND TO MEMBERS OF THEIR NETWORKS 198
Note 31 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS 199

01 MANAGEMENT REPORT

1 ENGIE 2018 RESULTS 6
2 REPORTABLE SEGMENT BUSINESS TRENDS 12
3 OTHER INCOME STATEMENT ITEMS 19
4 CHANGES IN NET DEBT 21
5 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION 25
6 PARENT COMPANY FINANCIAL STATEMENTS 26

1 ENGIE 2018 RESULTS

The previously published financial data presented hereafter have been restated to take into account (i) impacts resulting from the application of the new standards IFRS 9 – Financial Instruments and IFRS 15 – Revenue from Contracts with Customers; and (ii) the presentation in the financial statements at December 31, 2017 (for the income statement, statement of comprehensive income and statement of cash flows) of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 as "Discontinued operations", as they represent a separate major line of business under IFRS 5 – Non-current Assets Held for Sale and Discontinued Operations. A reconciliation of the reported data with the restated comparative data is presented in Note 2 "Restatement of 2017 comparative data" to the consolidated financial statements.

Main 2018 financial milestones

- **2018 results in line with targets: net recurring income Group share at €2.5 billion**, net debt/EBITDA ratio at 2.3x.
- **Stable EBITDA demonstrates ENGIE's robust business model**, with positive underlying momentum in growth segments offsetting the unfavorable impacts of unscheduled maintenance at Belgian nuclear plants, negative foreign exchange effects and dilution from disposals.
- **Solid organic**(1) **growth in EBITDA (5%),** led by progress in the Group's key growth drivers: in particular Renewables and BtoB & BtoT Solutions.
- **Net debt reduction** (€1.4 billion vs. end 2017), due to a robust operating cash flow(2) and disposals. The Group's financial structure is solid, as confirmed by the rating agencies which position ENGIE as an industry leader in that respect.
- **Recap of 2016-2018 strategic delivery: a reconfigured asset portfolio, reduced commodity exposure, lower carbon intensity, and an improved growth profile**. Transformation driven by portfolio rotation (€16.5 billion(3) of disposals nearly closed), strategic investments (€14.3 billion(4) of growth capex reinvested), efficiency (€1.3 billion of cost savings since 2015), customer-centric commercial capability development and accelerating momentum in Renewables.

Consistent with the strategic repositioning initiated in 2016, ENGIE continued to develop its privileged businesses. **It strengthened its positions in Client Solutions through** (i) **targeted acquisitions** in Latin America, the United States, Germany and Singapore, (ii) **new contracts** in high-growth business segments (mobility, campus management and cooling networks), (iii) **order book growth** in installation activities, and (iv) an increase in the **sale of electricity and gas market offer contracts** in France. In **Infrastructures**, storage regulation has been implemented in France, the number of smart gas meters installed in France has reached 2.5 million, and our Latin American businesses continued to grow. In **Renewables**, 1.1 GW of wind and solar capacity were added in 2018. In **Thermal contracted**, new long-term contracts were signed.

For 2019, ENGIE expects growth in net recurring income Group share to a level between €2.5 and €2.7 billion(5). Looking ahead, ENGIE announces a new medium-term dividend policy, which provides for a 65%-75% targeted NRIgs payout ratio range. For the fiscal year 2019, it is ENGIE's current intention to target a dividend payout towards the upper end of this range.

---

(1) Gross variation without scope and foreign exchange impacts.
(2) Cash generated from operations before income tax and working capital requirement.
(3) Cumulative impacts from January 1, 2016 to December 31, 2018.
(4) Cumulative impacts from January 1, 2016 to December 31, 2018, net of DBpSO (Develop, Build, partial Sell & Operate) proceeds; excluding Capex related to E&P and upstream / midstream LNG and Corporate Capex.
(5) These targets and this indication assume average weather conditions in France, full pass through of supply costs in French regulated gas tariffs, no significant accounting changes except for IFRS 16, no major regulatory and macro-economic changes, commodity price assumptions based on market conditions as of December 31, 2018 for the non-hedged part of the production, average foreign exchange rates as follows for 2019: €/USD: 1.16; €/BRL: 4.42, and without significant impacts from disposals not already announced.

Financial data at December 31, 2018

In billions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	60.6	59.6	+1.7%	+1.7%
EBITDA	9.2	9.2	+0.4%	+4.7%
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	5.1	5.2	-0.9%	+5.1%
Net recurring income relating to continued operations, Group share	2.5	2.2	+10.1%	+17.3%
Net income, Group share	1.0	1.3	-21.7%	
Cash Flow From Operations (CFFO)	7.3	8.5	-€1.2 bn	
Net debt	21.1	22.5	-€1.4 bn	

1.1 Analysis of 2018 financial data

1.1.1. Revenues: €60.6 billion

Revenues were €60.6 billion in 2018, up 1.7% on both a reported and organic basis versus 2017.

Reported revenue growth was impacted by an adverse foreign exchange effect (€929 million), mainly due to the depreciation of the Brazilian real and US dollar against the euro, offset by an aggregate positive scope effect (€955 million). Changes to the scope of consolidation primarily included acquisitions in Client Solutions (Keepmoat Regeneration in the United Kingdom, MCI in France, and Talen and Unity in the United States), as well as two new hydro power concessions acquired in Brazil. These positive impacts were partly offset by the disposal of thermal generation businesses in the United Kingdom and Poland in 2017 and of the Loy Yang B coal-fired power plant in Australia in early 2018.

Organic revenue growth was primarily driven by tariff increases and new power supply contracts in Latin America, growth in hydro power sales in France and Brazil, higher retail power sales in France, higher energy sales in the United Kingdom, Romania and Australia, and improved business volumes in BtoB and BtoT Solutions in France and the rest of Europe. Revenue growth was partly offset by the new accounting treatment of long-term gas supply contracts in Europe since the end of 2017 (no impact on EBITDA), as well as a decrease in gas sales in France.

1.1.2. EBITDA: €9.2 billion

EBITDA was €9.2 billion, up 0.4% on a reported basis and up 4.7% on an organic basis versus 2017.

Reported EBITDA growth includes an adverse foreign exchange effect (€258 million), mainly due to the depreciation of the Brazilian real and, to a lesser extent, the US dollar against the euro, and a negative scope effect (€113 million). This scope effect stems chiefly from the sale of the Loy Yang B coal-fired power plant in Australia in early 2018 and of thermal generation assets in the United Kingdom at the end of 2017, partly offset by two hydro concessions acquired in Brazil in late 2017 and by various acquisitions in BtoB and BtoT Solutions, mainly in the United States and the Middle East.

Organic EBITDA growth was mainly driven by revenue-related developments. Additional contributions have come from energy management activities (due to favorable European markets and a new management model for certain long term contracts), the *Lean* 2018 performance program and the positive impact of new French gas storage regulation. These more than offset the negative impact of major unscheduled maintenance operations and a decrease in captured prices in the Belgian nuclear business.

Organic EBITDA performance by segment:

In billions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
North America	0.2	0.2	+0,1%	-7,5%
Latin America	1.8	1.7	+3,8%	+11,1%
Africa/Asia	1.1	1.3	-11,7%	+6,0%
Benelux	(0.2)	0.5	-133,7%	-133,5%
France	1.7	1.5	+14,2%	+14,2%
Europe excluding France & Benelux	0.7	0.6	+4,6%	+6,5%
Infrastructures Europe	3.5	3.4	+3,3%	+3,3%
GEM	0.2	(0.2)	NA	NA
Other	0.2	0.1	+56,6%	NA
TOTAL	9.2	9.2	+0,4%	+4,7%

- **North America** reported a 7.5% organic reduction in EBITDA due to 2017 and 2018 one-offs creating tough comparison and an increase in the cost of wind and solar development platforms expected to contribute as of 2019. These negative impacts were partly offset by growth in thermal and renewable power generation activities due to favorable climate conditions in the United States and Canada and to the contribution of the Holman solar farm in Texas commissioned in the second half of 2017.

- **Latin America** delivered strong 11.1% organic EBITDA growth, driven mainly by an improvement in power generation in Brazil (better hydrology and commissioning of new windfarms), tariff increases in gas infrastructures in Mexico and Argentina and new long-term power purchase agreements (PPA) in Chile, partly offset by the expiration of long term PPAs in Peru at the end of 2017.

- **Africa/Asia** reported buoyant 6.0% organic growth in EBITDA, driven mainly by the solar business in India and gas distribution business in Thailand.

- **Benelux** reported a very significant 134% organic decrease in EBITDA, mainly due to nuclear activities which were severely affected by unscheduled outages, leading to a very low availability rate in 2018 (52%), and by a decrease in captured prices.

- **France** delivered strong 14.2% organic EBITDA growth, driven primarily by a sharp increase in renewable hydro power generation, significant gains on partial disposals of wind and solar assets, and an increase in margins on BtoB and BtoT Solutions. These positive impacts were partly offset by declining margins in the retail gas market.

- **Europe excluding France & Benelux** reported 6.5% organic EBITDA growth, due mainly to improved performance in Client Solutions in the United Kingdom, Romania and Spain.

- **Infrastructures Europe** delivered 3.3% organic EBITDA growth following the introduction of gas storage regulation on January 1, 2018.

- **GEM (Global Energy Management)** delivered very strong organic EBITDA growth, driven by excellent performance in a favorable market environment (versus a weaker early 2017 comparable due to supply difficulties in southern France) and by a change of management model for some long-term contracts.

- In the **Other segment**, strong organic growth in EBITDA was driven by corporate cost savings under the Lean 2018 performance program and positive one-off items in the thermal generation business in Europe (favorable outcome of litigations), which offset the less favorable market conditions in 2018 compared with 2017.

EBITDA performance by activity:

In billions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Client Solutions	2.4	2.2	+9%	+5%
Of which BtoC	*0.7*	*0.7*	*-1%*	*+0%*
Of which BtoB and BtoT	*1.7*	*1.5*	*+13%*	*+7%*
Infrastructures	3.9	3.8	+4%	+5%
Renewables and Thermal contracted	2.8	2.5	+9%	+15%
Of which Renewables	*1.6*	*1.4*	*+17%*	*+25%*
Of which Thermal contracted	*1.1*	*1.1*	*-1%*	*+4%*
Merchant	0.5	0.8	-29%	-29%
Of which Nuclear	(0.5)	0.1	*NA*	*NA*
Of which Merchant excluding Nuclear	*1.1*	*0.6*	*+76%*	*+77%*
Others[1]	(0.4)	(0.1)	NA	NA
TOTAL	**9.2**	**9.2**	**+0.4%**	**+4.7%**

(1) Including activities sold or in the process of being sold.

Apart from Nuclear, all activities delivered reported and organic growth, despite a significant adverse foreign exchange effect.

- In **Client Solutions**, 9% reported EBITDA growth was driven by a strong overall performance in BtoB and BtoT Solutions and a stable performance in BtoC. BtoB and BtoT Solutions delivered 13% reported EBITDA growth, driven mainly by contributions from new acquisitions, good services volume and margin performance in Europe, and from gas and electricity sales to businesses in Europe and Latin America. BtoC was stable compared with 2017, with a decrease in gas volumes and margins in France offset by an increase in the electricity client portfolio in France and Australia and by positive one-offs in Europe.

- **Infrastructure** delivered 5% organic EBITDA growth despite an unfavorable temperature effect in France. Growth was driven primarily by the implementation of the French gas storage regulation on January 1, 2018, Mexican gas transportation tariff increases and gas distribution activities in Argentina and Thailand. These positive impacts were partly offset by the introduction of new contractual provisions in gas transportation business for low calorific gas conversion in the north of France.

- **Renewables and Thermal contracted** delivered 9% reported EBITDA growth and a strong 15% organic growth. The negative impact of the depreciation of the Brazilian real and, to a lesser extent, of the US dollar against the euro was partly offset by the contribution of the two hydro concessions in Brazil acquired at the end of 2017. Renewable power generation delivered strong 25% organic growth, driven primarily by a large number of wind and solar farm partial disposals in 2018 (DBpSO[1] model) and by growth in hydro power generation in France. **Thermal Contracted** power delivered 4% organic growth even though there were more significant positive one-offs in 2017 than in 2018. Growth was driven by new long-term PPAs obtained in Chile and the commissioning of the Safi power plant in Morocco, which more than offset the expiration of long-term PPAs in Peru.

- The **Nuclear** business reported a very significant decrease due to unscheduled outages leading to a very low availability rate of 52% in 2018 and due to a decrease in captured prices.

- **Merchant business excluding Nuclear** delivered very strong 76% growth in reported EBITDA and 77% organically, driven mainly by a good performance from Global Energy Management (GEM) and thermal power generation in Europe.

(1) Develop, Build, partial Sell & Operate.

1.1.3. Current operating income after share in net income of entities accounted for using the equity method: €5.1 billion

Current operating income after share in net income of entities accounted for using the equity method amounted to €5.1 billion, down 0.9% on a reported basis and up 5.1% on an organic basis compared with 2017, in line with EBITDA growth.

1.1.4. Net recurring income relating to continued operations, Group share of €2.5 billion and Net income Group share of €1.0 billion

Net recurring income Group share relating to continued operations amounted to €2.5 billion in 2018, a sharp increase of 10.1% compared with the previous year, driven by the continued improvement in current operating income after share in net income of entities accounted for using the equity method, coupled with an improvement in the recurring effective tax rate.

Net income Group share amounted to €1.0 billion compared with €1.3 billion in 2017. It includes mainly impairment losses, partially offset by the gain on disposal of the upstream LNG business ("Discontinued operations").

1.1.5. Net financial debt: €21.1 billion

Net financial debt stood at €21.1 billion, down €1.4 billion compared with December 31, 2017. This variation is mainly due to (i) cash flow from operations (€7.3 billion), (ii) the impacts of the portfolio rotation program (€4.4 billion, including the closing of the sale of the exploration-production and upstream LNG businesses, the Loy Yang B coal-fired power plant in Australia and the distribution business in Hungary, as well as the classification of Glow, a power plant operator in the Asia-Pacific region, as "Assets classified as held for sale"). These items were partially offset by (i) gross capital expenditure over the period (€7.6 billion[(1)]), and (ii) dividends paid to ENGIE SA shareholders (€1.7 billion) and to non-controlling interests (€0.8 billion).

Cash flow from operations (CFFO) amounted to €7.3 billion, down €1.2 billion compared with 2017. The decrease stems chiefly from the return to a normal level in working capital (€1.5 billion negative impact) and from a decrease in financial cash flows, partly offset by an increase in operating cash flow and lower tax expense.

At end December 2018, **net financial debt to EBIDTA ratio** amounted to 2.3x, below the target of less than or equal to 2.5x. The average cost of gross debt was 2.68%, up very slightly compared with 2017.

Economic net debt[(2)] to EBITDA ratio stood at 3.85x, stable compared with end 2017. Taking into account the future impact of IFRS 16 at EBITDA[(3)] level, the ratio stands at 3,66x.

1.2 Successful strategic repositioning for ENGIE

ENGIE successfully continued its strategic repositioning and reached the targets set in 2016:

- the disposal of its interest in Glow in Asia-Pacific (announced in June 2018) will reduce ENGIE's consolidated net debt by €3.2 billion. It will enable the Group to **complete its portfolio rotation program** initiated three years ago. To date €16.5 billion[(4)] of disposals were announced, of which €14.0 billion already booked.

(1) Net of disposal proceeds from DBpSO operations.

(2) Net economic debt amounted to €35.6 billion at the end of December 2018 (compared with €36.4 billion at the end of December 2017); it includes in particular nuclear provisions and post-employment benefits; details of its calculation are provided in the notes to the financial statements (see Note 6.7).

(3) Leases commitments included in economic net debt are restated in EBITDA (for approximately €0.5 billion), reflecting the implementation of IFRS 16 from 2019 onwards.

(4) Cumulative impacts from January 1, 2016 to December 31, 2018.

- the **capital expenditure program** has also been completed, with €14.3 billion(1) of growth investments since 2016, mainly in Renewables and Thermal contracted (48%), but also in Client Solutions (33%) and Infrastructure (15%).
- the **Lean 2018 performance program** achieved €1.3 billion in net gains at EBITDA level at the end of 2018, versus an initial cost reduction target of €1.0 billion.

In addition, this successful strategic repositioning also led to an improvement in the Group's capital efficiency and profitability, with in particular an increase in ROCEp(2) of more than 90 bps over the period 2016-2018 and an increase in Client Solutions current operating income margins of 30bps in 2018.

1.3 2019 financial targets

ENGIE anticipates for 2019 **a net recurring income Group share between €2.5 and €2.7 billion**. This guidance is based on an indicative range for EBITDA of €9.9 to 10.3 billion, after IFRS 16 – *Leases*(3) implementation.

For 2019, ENGIE anticipates:

- a net financial debt/EBITDA ratio below or equal to 2.5x, and
- an “A” category credit rating.

In order to monitor and communicate performance of this objective, segment information will be complemented from 2019 onwards. In accordance with the project, internal organization will need to be adapted, which will be announced shortly.

1.4 Dividend policy

For **fiscal year 2018**, ENGIE confirms the payment of a **0.75 euro per share dividend, payable in cash**.

From 2020(4), the annual dividend will be paid in one time, at the end of the Ordinary General Meeting (OGM) approving the annual accounts.

In order to offset the impact of this transition on shareholders in 2019, ENGIE will submit for shareholder approval at its OGM on May 17, an exceptional dividend of €0.37 per share, which will bring the total distribution decided by this General Meeting to €1.12 per share.

Looking ahead, ENGIE announces a **new medium-term dividend policy, in the range of 65 to 75% NRIgs payout ratio**. For the fiscal year 2019, ENGIE is aiming for a dividend at the upper end of this range.

(1) Cumulative impacts from January 1, 2016 to December 31, 2018, net of DBpSO proceeds; excluding Capex related to E&P and upstream/midstream LNG and Corporate Capex.

(2) Return on Productive Capital Employed, excluding non-productive capital employed and with NOPAT restated for share of entities accounted for using the equity method in non-recurring items.

(3) Impact of around €0.5 billion (without any impact on NRIgs).

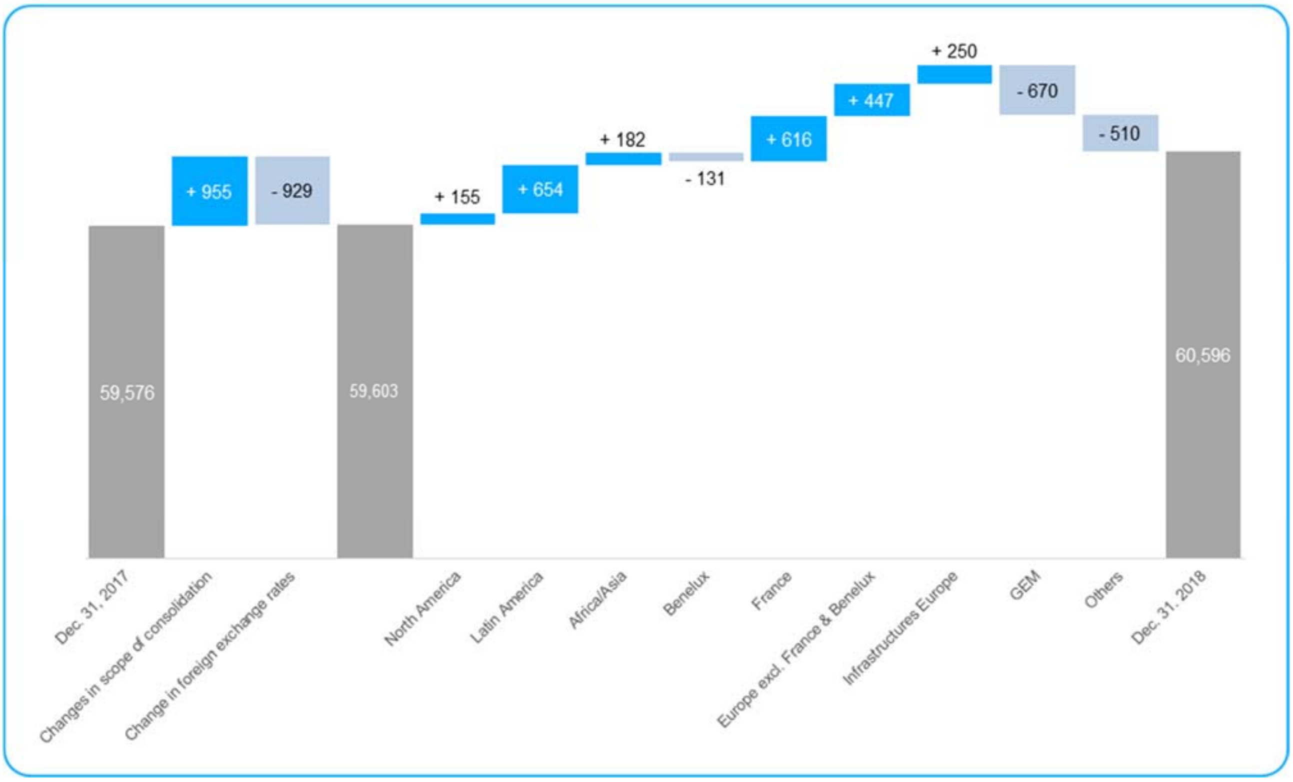
(4) Based on the distributable amount for the year ended December 31, 2019 for the dividend paid in 2020.

2 REPORTABLE SEGMENT BUSINESS TRENDS

In millions of euros	Dec. 31, 2018	Dec 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	60,596	59,576	+1.7%	+1.7%
EBITDA	9,236	9,199	+0.4%	+4.7%
Net depreciation and amortization/Other	(4,110)	(4,027)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	5,126	5,172	-0.9%	+5.1%

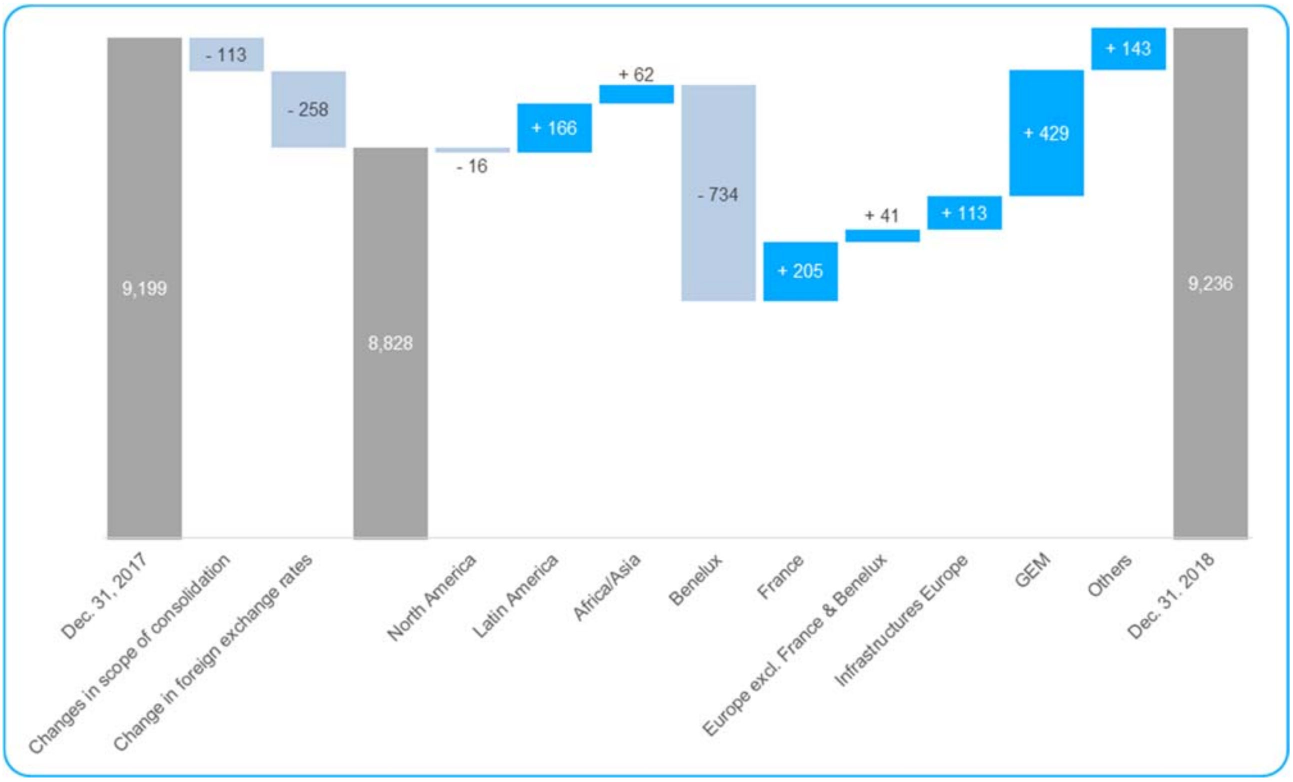
REVENUE TRENDS

In millions of euros



EBITDA TRENDS

In millions of euros



2.1 North America

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	3,383	2,964	+14.1%	+5.5%
EBITDA	224	224	+0.1%	-7.5%
Net depreciation and amortization/Other	(73)	(50)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	151	174	-13.1%	-20.1%

Revenues for the North America segment totaled €3,383 million, up 14.1%. The negative foreign exchange effect was more than offset by positive scope effects mainly arising from the acquisition of the service activities of Talen in September 2017, Unity in March 2018 and Donnelly in August 2018. On an organic basis, the 5.5% revenue increase was mainly driven by higher prices and volumes achieved by the residual LNG activity.

EBITDA totaled €224 million, stable compared with 2017 but down 7.5% organically adjusted for the contribution of new acquisitions. Growth in thermal and renewable generation activities was mainly attributable to favorable weather conditions in the Northeast region of the United States and in Canada, and to the commissioning of Holman solar assets in the second half of 2017. These effects were more than offset by significant non-recurring items in 2018 and by an increase in the costs of wind and solar projects, the largest of which are expected to make a contribution in 2019.

Current operating income after share in net income of entities accounted for using the equity method amounted to €151 million, down 20% on an organic basis, due to the one-off positive effect on net depreciation and amortization charges recorded in 2017.

2.2 Latin America

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	4,639	4,383	+5.8%	+17.1%
EBITDA	1,775	1,709	+3.8%	+11.1%
Net depreciation and amortization/Other	(419)	(433)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	1,355	1,277	+6.2%	+12.9%

Revenues for the Latin America segment totaled €4,639 million, up 5.8% on a reported basis and 17.1% organically. Reported revenues were negatively impacted by the strong depreciation of the Brazilian real (-16%) and, to a lesser extent, the US dollar (-4%), but these negative effects were more than offset by the scope effect of the new hydro concessions in Brazil (Jaguara and Miranda) acquired at the end of 2017 and by the organic revenue increase. In Brazil, organic growth was mainly driven by higher hydro sales in the spot market and the commissioning of new wind farms. In Mexico and Argentina, revenues benefited from price increases in gas distribution activities. In Chile, business was positively impacted by the start of new PPAs with distribution companies, while in Peru it was affected by the end of some high margin PPAs in 2017.

Electricity sales increased by 3.3 TWh to 62.6 TWh and gas sales increased by 5.4 TWh to 34.3 TWh.

EBITDA totaled €1,775 million, up 11.1% on an organic basis, mainly due to the above change in revenues.

Current operating income after share in net income of entities accounted for using the equity method amounted to €1,355 million, up 12.9% on an organic basis in line with the change in EBITDA.

2.3 Africa/Asia

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	4,014	3,939	+1.9%	+5.0%
EBITDA	1,122	1,272	-11.7%	+6.0%
Net depreciation and amortization/Other	(229)	(256)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	893	1,016	-12.1%	+6.0%

Revenues for the Africa/Asia region totaled €4,014 million, up 1.9% on a reported basis and up 5.0% organically. On a reported basis, revenues were impacted by the negative exchange rate effect relating to the US dollar, the Australian dollar and the Turkish lira. The net scope effect was slightly positive, as the negative impact of the sale of the Loy Yang B coal-fired power plant in Australia in January 2018 was more than offset by the positive contribution from several acquisitions in Client Solutions in South Africa, Morocco, Ivory Coast, Uganda, Zambia and Australia. The organic increase mainly reflects higher sales in retail activities in Australia and higher volumes of thermal contracted power generation in Thailand. These effects were partially offset by the impacts of the closure of the Hazelwood coal-fired power plant in Australia in March 2017.

Electricity sales decreased by 9.7 TWh to 35.2 TWh, with reduced volumes mostly due to the Hazelwood closure and the sale of Loy Yang B.

EBITDA totaled €1,122 million, down 11.7% on a reported basis but up 6.0% organically. Reported EBITDA was negatively impacted by the foreign exchange effects mentioned above and by the sale of Loy Yang B, partly offset by the positive contribution from Tabreed (cooling networks) in the United Arab Emirates. Organic growth was driven mainly by a higher contribution from the solar business in India and PTT NGD's gas distribution business in Thailand.

Current operating income after share in net income of entities accounted for using the equity method amounted to €893 million, up 6% on an organic basis primarily for the same reasons as those given above for EBITDA, although the lower depreciation charges following the classification of the thermal generation business in Thailand as "Discontinued operations" only partially offset the impact of impairment charges related to equity-accounted entities.

2.4 Benelux

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	6,690	6,771	-1.2%	-1.9%
EBITDA	(186)	550	-133.7%	-133.5%
Net depreciation and amortization/Other	(579)	(561)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	(765)	(11)	NA	NA

Revenues for the Benelux segment amounted to €6,690 million, down 1.2% on a reported basis compared with 2017. This decrease is due to nuclear power generation activities, which are affected both by a decline in volumes due to more shutdowns in 2018 than in 2017 (in particular at Doel 3 from September 22, 2017 until August 5, 2018 and Tihange 3 since March 31, 2018) and by a decrease in captured prices. These negative impacts were partially offset by the positive volume impacts recorded in energy retail activities and by the contribution from 2018 of revenues from the Cozie service activities.

In Belgium and Luxembourg, power generation amounts to 27.5 TWh, representing a decrease of 10.5 TWh. In the Netherlands, electricity sales amounted to 10.7 TWh, representing an increase of 0.9 TWh.

Natural gas sales in Benelux totaled 52 TWh, representing an increase of 2.5 TWh compared with 2017, due to a favorable climate effect in the first quarter of 2018 and net customer gains.

EBITDA was down by €736 million to a negative €186 million due to the nuclear power business which was severely affected by unscheduled outages leading to a very low availability rate of 52% in 2018, and by a decrease in captured prices.

Current operating income/(loss) after share in net income of entities accounted for using the equity method amounted to a negative €765 million, down €754 million compared with 2017 in line with the change in EBITDA.

2.5 France

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	15,183	14,157	+7.2%	+4.4%
EBITDA	1,669	1,461	+14.2%	+14.2%
Net depreciation and amortization/Other	(635)	(592)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	1,034	869	+19.0%	+18.3%

Volumes sold

In TWh	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)
Gas sales	88.3	94.7	-6.8%
Electricity sales	39.0	34.3	+14.0%

France climatic adjustment

In TWh	Dec. 31, 2018	Dec. 31, 2017	Total change in TWh
Climate adjustment volumes (negative figure = warm climate, positive figure = cold climate)	(3.0)	(0.3)	(2.7)

Revenues for the France segment totaled €15,183 million, up 7.2% on a reported basis and 4.4% on an organic basis. Reported growth includes the impact of the acquisition of several service companies in the BtoB segment (MCI at end-December 2017, Icomera in June 2017, CNN MCO in September 2017 and Eras in March 2018). Organic growth was driven primarily by a sharp increase in hydro power generation thanks to better runoff in 2018, growth in retail electricity sales and buoyant business in BtoB et BtoT services.

Natural gas sales fell by 6.4 TWh following the loss of retail customers due to competitive pressure (3.7 TWh) and an unfavorable temperature effect (2.7 TWh). Electricity sales were up 4.8 TWh thanks to the continued development of retail offers (up 2.9 TWh) and growth in sales of hydro power (up 1.9 TWh).

EBITDA amounted to €1,669 million, up 14.2% on an organic basis, driven primarily by a large number of wind and solar farm disposals in 2018 (mainly the Compagnie du Vent facilities and offshore wind projects at Yeu-Noirmoutiers and Dieppe-Le Tréport), growth in hydro power generation, and improved margins in service activities.

Current operating income after share in net income of entities accounted for using the equity method amounted to €1,034 million, up 18.3% on an organic basis in line with the change in EBITDA.

2.6 Europe excluding France & Benelux

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	9,527	8,831	+7.9%	+5.1%
EBITDA	679	650	+4.6%	+6.5%
Net depreciation and amortization/Other	(207)	(216)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	473	434	+9.0%	+11.6%

Revenues for the Europe excluding France & Benelux segment amounted to €9,527 million, up 7.9% on a reported basis and 5.1% on an organic basis, driven mainly by Client Solutions. Reported growth includes the impact of the acquisition of housing regeneration company Keepmoat Regeneration in the United Kingdom in April 2017. The 5.1% organic growth was driven by the start-up of the retail energy business in the United Kingdom in June 2017, the development of Keepmoat over a nine-month period, a positive price effect in the gas and electricity retail business in Romania, and growth in service activities in Spain.

Electricity sales amounted to 29 TWh, representing a decrease of 1.1 TWh compared to 2017, mainly in the BtoB segment in Germany. Gas sales were down 0.4 TWh to 70.6 TWh.

EBITDA totaled €679 million, representing an increase of 6.5% on an organic basis, mainly for the same reasons as given above for revenues, coupled with good hydrological conditions in Spain. These items were partly offset by a lower performance in hydro power generation in the United Kingdom due to regulatory and market conditions.

Current operating income after share in net income of entities accounted for using the equity method amounted to €473 million, up 11.6% on an organic basis, slightly higher than EBITDA growth due to the improvement in the contribution from equity-accounted entities in Germany.

2.7 Infrastructures Europe

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	5,694	5,446	+4.6%	+4.6%
Total revenues (incl. intra-group transactions)	**6,859**	**6,712**	**+2.2%**	
EBITDA	3,499	3,386	+3.3%	+3.3%
Net depreciation and amortization/Other	(1,482)	(1,444)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	2,016	1,941	+3.9%	+3.8%

Revenues for the Infrastructures Europe segment amounted to €5,694 million, up 4.6% on a reported basis compared with 2017. The increase was mainly due to price increases in the transportation networks in France, LNG terminal business, which delivered a strong commercial performance, and the development of own account storage sales in the United Kingdom. Growth was partly offset by negative temperature effect of 8.1 TWh, representing €51.8 million.

EBITDA amounted to €3,499 million, up 3.3% driven mainly by the introduction of gas storage regulation on January 1, 2018 in France, partly offset by the introduction of new contractual provisions for L-gas conversion in Northern France at GRTgaz.

Current operating income after share in net income of entities accounted for using the equity method amounted to €2,016 million for the period, an increase of 3.9% in line with EBITDA growth.

2.8 GEM

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	**6,968**	**7,638**	**-8.8%**	**-8.8%**
EBITDA	**240**	**(188)**	**NA**	**NA**
Net depreciation and amortization/Other	(41)	(40)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**199**	**(229)**	**NA**	**NA**

Revenues for the GEM segment amounted to €6,968 million, down 8.8% compared with 2017. The decrease was mainly due to the change of accounting treatment for long-term gas supply contracts and transport and storage capacity contracts[(1)].

EBITDA amounted to €240 million, up sharply compared with the prior-year period, driven by an excellent performance from the energy management activities in favorable market conditions in 2018 (whereas the first quarter of 2017 had suffered from supply difficulties in the south of France), coupled with the positive impact on EBITDA of the change of management model for certain long term contracts.

Current operating income after share in net income of entities accounted for using the equity method amounted to €199 million in 2018, representing growth on both a reported and an organic basis, in line with EBITDA trends.

2.9 Other

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	% change (reported basis)	% change (organic basis)
Revenues	**4,498**	**5,445**	**-17.4%**	**-10.2%**
EBITDA	**213**	**136**	**+56.6%**	**NA**
Net depreciation and amortization/Other	(444)	(436)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**(232)**	**(300)**	**+22.8%**	**+37.1%**

(1) Since October 1, 2017, these contracts have been managed individually based on market conditions rather than as part of a portfolio. As a result, fair value accounting is mostly applied. The segment's results therefore include the realized and unrealized gains and losses relating to these contracts, which are now measured at fair value through profit or loss and included in the net margin presented in revenues.

Volumes sold

In TWh	Dec. 31, 2018	Dec 31, 2017	% change (reported basis)
Gas sales in France	36.9	42.4	-12.9%
Electricity sales	34.9	46.1	-24.9%

France climatic adjustment

In TWh	Dec. 31, 2018	Dec. 31, 2017	Total change in TWh
Climate adjustment volumes (negative figure = warm climate, positive figure = cold climate)	(0.7)	(0.1)	(0.6)

The Other segment mainly comprises the activities of the Generation Europe, Tractebel and GTT business units, the *Entreprises & Collectivités* activities, and the Group’s holding and corporate activities, which notably include the entities centralizing the Group’s financing requirements and the equity-accounted contribution of SUEZ.

Revenues amounted to €4,498 million, down 17.4% on a reported basis and 10.2% on an organic basis. The reported decrease mainly reflects the 2017 disposal of the thermal power generation business in the United Kingdom and Poland. The organic decrease mainly reflects lower downstream gas sales in France and less favorable market conditions for power generation in Europe.

Gas sales fell by 5.4 TWh as a result of strong competitive pressure, with a slightly negative climate effect. ENGIE's share of the BtoB market was 18% compared with 21% at end-2017.

Electricity sales totaled 34.9 TWh, representing a decrease of 11.2 TWh compared with 2017. The decrease was mainly due to the disposal of thermal generation assets in the United Kingdom and Poland, and the end of the Rosen power station contract in Italy.

EBITDA totaled €213 million, up on both a reported and organic basis compared with 2017, mainly due to one-off positive items in the thermal power generation business in Europe (mainly the favorable outcome of certain disputes), the development of ancillary activities, and the contribution from the Lean 2018 program, which more than offset the less favorable market conditions in 2018.

Current operating loss after share in net income/(loss) of entities accounted for using the equity method amounted to a negative €232 million for the period, representing an increase on both a reported and an organic basis in line with EBITDA.

3 OTHER INCOME STATEMENT ITEMS

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]	% change (reported
Current operating income after share in net income of entities accounted for using the equity method	**5,126**	**5,172**	**-0.9%**
Mark to market on commodity contracts other than trading instruments	(223)	29	
Impairment losses	(1,798)	(1,298)	
Restructuring costs	(162)	(669)	
Changes in scope of consolidation	(150)	752	
Other non-recurring items	(147)	(1,252)	
Income/(loss) from operating activities	**2,645**	**2,735**	**-3.3%**
Net financial income/(loss)	(1,381)	(1,388)	
Income tax benefit/(expense)	(704)	395	
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**560**	**1,741**	
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**1,069**	**366**	
NET INCOME/(LOSS)	**1,629**	**2,108**	**-22.7%**
Net income/(loss) Group share	**1,033**	**1,320**	
Of which Net income/(loss) relating to continued operations, Group share	*(12)*	*1,047*	
Of which Net income/(loss) relating to discontinued operations, Group share	*1,045*	*273*	
Non-controlling interests	**595**	**788**	
Of which Non-controlling interests relating to continued operations	*572*	*695*	
Of which Non-controlling interests relating to discontinued operations	*24*	*93*	

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

Income from operating activities amounted to €2,645 million in 2018, representing a decrease compared with 2017, mainly due to (i) losses on asset disposals, (ii) higher impairment losses in 2018, (iii) the negative impact of fair value adjustments to commodity hedges, and (iv) the decrease in current operating income after share in net income of companies accounted for using the equity method, partly offset by (v) the non-recurring charge recognized in 2017 related to the change in the accounting treatment of long-term gas supply contracts and transport and storage contracts implemented by the GEM business unit, and (vi) lower restructuring costs.

Income from operating activities was also affected by:

- changes in the fair value of commodity derivatives relating to operating items, which had a negative impact of €223 million (reflecting transactions not eligible for hedge accounting), compared with a positive impact of €29 million in 2017. The impact for the period results chiefly from negative overall price effects on these positions, combined with the net negative impact of unwinding positions with a positive market value at December 31, 2017;

- net impairment losses of €1,798 million, compared with €1,298 million the previous year.
  At December 31, 2018, the Group recognized net impairment losses of €14 million against goodwill, €1,576 million against property, plant and equipment and intangible assets, and €209 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the Benelux, Other (primarily the Generation Europe business unit), Africa/Asia, Infrastructures and Latin America reportable segments. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2018 amounts to €1,540 million. These impairment losses are described in Note 10.2 "Impairment losses" to the consolidated financial statements. In 2017, the Group recognized net impairment losses of €481 million against goodwill, €787 million against property, plant and equipment and intangible assets, and €30 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the Infrastructures (storage), and Other (primarily the Generation Europe business unit) reportable segments;

- restructuring costs of €162 million (compared with €669 million the previous year) including notably costs related to decisions to shut down operations and close some entities and sites, as well as costs related to various staff reduction plans;

- negative scope effects of €150 million, mainly comprising a €87 million loss on the sale of the Loy Yang B thermal power plant in Australia, primarily in respect of items of other comprehensive income recycled to the income statement;

- other non-recurring items totaling a negative €147 million, mainly including asset scrapping and costs related to site closures.

The **net financial loss** was stable and amounted to €1,381 million in 2018, compared with €1,388 million the previous year (*see Note 11*).

The **income tax** charge for 2018 amounted to €704 million (versus a €395 million benefit in 2017). It includes an income tax benefit of €125 million arising on non-recurring operating and financial income/(loss) (versus €1,462 million in 2017), mainly comprising non-recurring taxable charges in France and deferred tax assets on impairment losses in Germany and Latin America. In 2017, non-recurring items included the reduction in the tax rate in France pursuant to the 2018 Finance Act and the refund of the 3% tax on dividends previously paid by French companies. Adjusted for these non-recurring items, the effective recurring tax rate was 23.7%, lower than the 2017 rate of 29.6% due mainly to the recognition of deferred tax assets in several countries where the Group's prospects have improved.

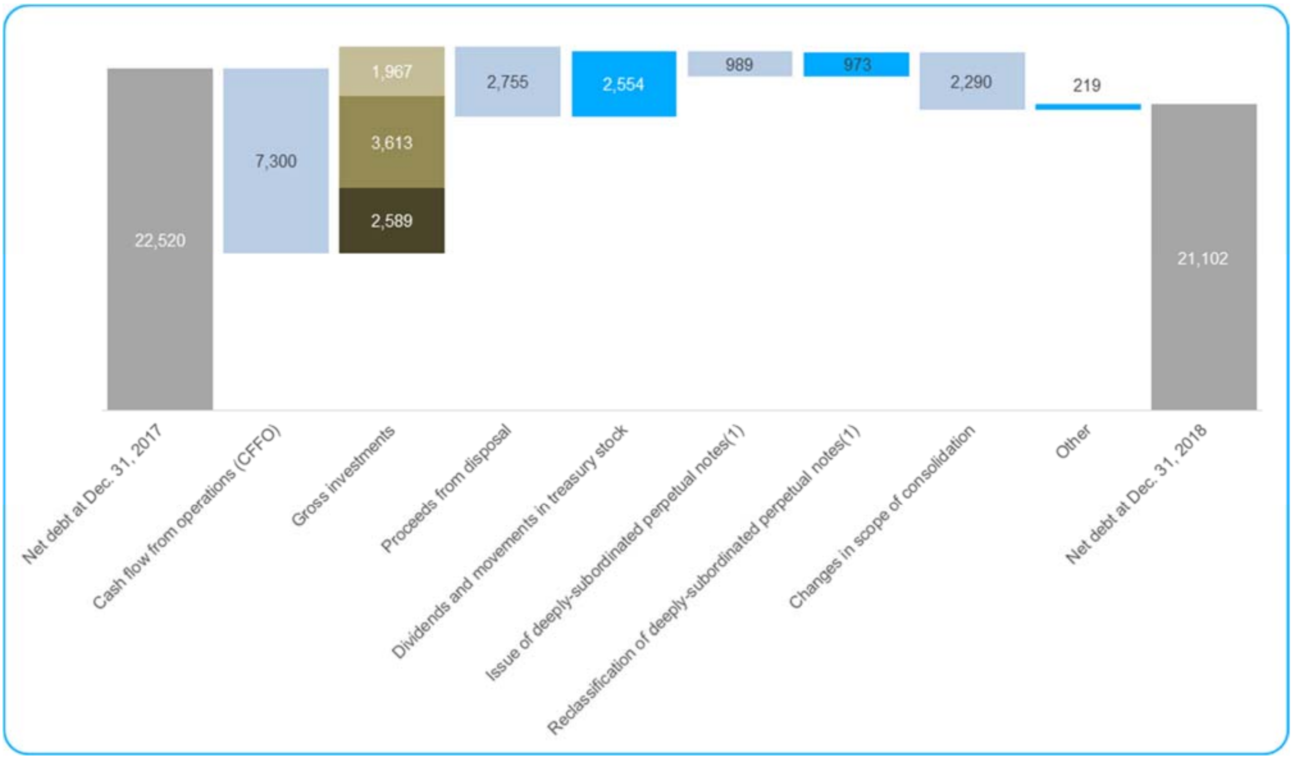
Net income relating to continued operations attributable to non-controlling interests amounted to €572 million, compared with €695 million in 2017. The decrease was mainly due to the change in impairment losses, coupled with the sale of the Loy Yang B coal-fired power plant.

4 CHANGES IN NET DEBT

Net financial debt stood at €21.1 billion, down €1.4 billion compared with December 31, 2017. This variation is mainly due to (i) cash flow from operations (€7.3 billion), (ii) the impacts of the portfolio rotation program (€4.4 billion, including the closing of the sale of the exploration-production and upstream LNG businesses, the Loy Yang B coal-fired power plant in Australia and the distribution business in Hungary, as well as the classification of Glow, a power plant operator in the Asia-Pacific region, as "Assets classified as held for sale"). These items were partially offset by (i) gross capital expenditure over the period (€7.6 billion[16]), and (ii) dividends paid to ENGIE SA shareholders (€1.7 billion) and to non-controlling interests (€0.8 billion).

Changes in net debt break down as follows:

In millions of euros



(1) *See Note 19.2.1 "Issuance of deeply-subordinated perpetual notes".*

Maintenance investments
Development investments
Financial investments

The net debt (excluding internal debt of discontinued operations) to EBITDA ratio came out at 2.28 at December 31, 2018.

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Net debt (excluding internal debt of discontinued operations)	21,102	20,788
EBITDA	9,236	9,199
NET DEBT/EBITDA RATIO	**2.28**	**2.26**

(16) *Net of DBSO proceeds.*

The economic net debt (excluding internal debt of discontinued operations) to EBITDA ratio stood at 3.85 at December 31, 2018.

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Economic net debt (excluding internal debt of discontinued operations)	35,590	35,127
EBITDA	9,236	9,199
ECONOMIC NET DEBT/EBITDA RATIO (1)	**3.85**	**3.82**

(1) The 2018 ratio comes to 3.7 once lease payments relating to operating lease commitments included in economic net debt have been restated for EBITDA (around €0.5 billion), thus reflecting expected impacts as from 2019 of the application of IFRS 16 – Leases.

4.1 Cash flow from operations (CFFO)

Cash flow from operations (CFFO) amounted to €7.3 billion, down €1.2 billion compared with 2017. The decrease stems chiefly from the return to a normal level in working capital (€1.5 billion negative impact) and from a decrease in financial cash flows, partly offset by an increase in operating cash flow and lower tax expense.

4.2 Net investments

Gross investments during the period amounted to €8,169 million and included:

- financial investments for €1,967 million, relating primarily to (i) the acquisition of renewable energy companies (wind and solar) and services companies (micro-power grid, heating and cooling network) in North America (€446 million), wind power and service companies in Africa (€193 million) and the Langa group in France (€174 million), (ii) financing of the construction of the Safi thermal power plant in Morocco (€149 million), and (iii) a €188 million increase in Synatom investments;

- development investments totaling €3,613 million, including (i) €1,463 million invested in the Latin America segment to build thermal power plants and develop wind and photovoltaic farms in Brazil and Chile, (ii) €671 million invested in the Infrastructures Europe segment (blending projects and development of the natural gas distribution and transportation network in France), (iii) €494 million invested in the North America segment (mainly to develop wind power projects), and (iv) €568 million invested in the France segment (mainly in renewable projects);

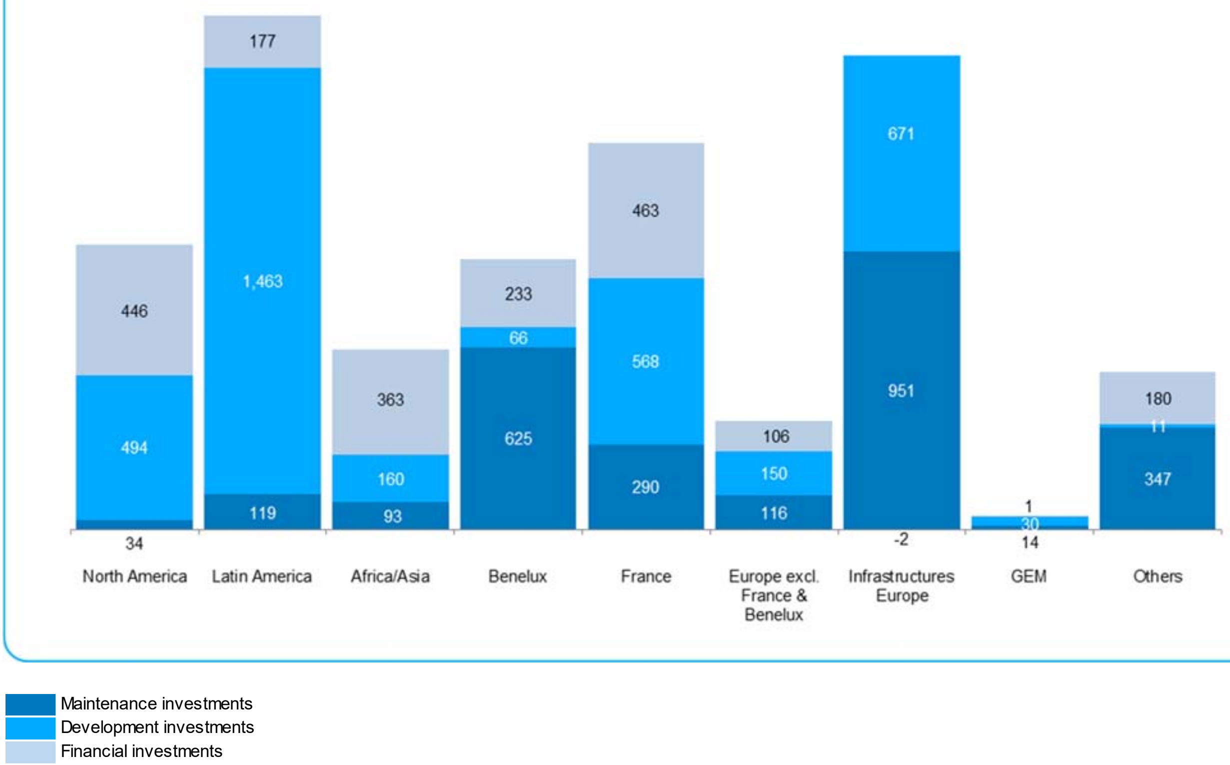
- maintenance investments for an amount of €2,589 million.

Disposals represented a cash inflow of €2,755 million and mainly included the Group's divestment of its LNG activities, its 70% holding in its subsidiary ENGIE E&P International (EPI), the Loy Yang B coal-fired power plant in Australia and the gas distribution business in Hungary.

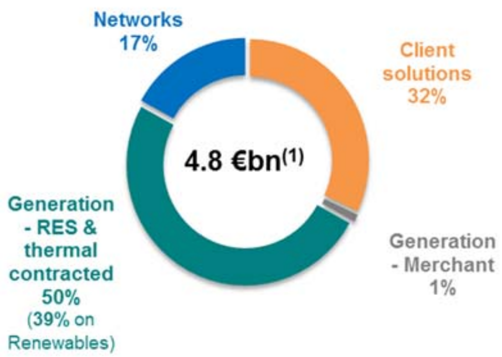
Taking into account changes in the scope of consolidation for the period relating to acquisitions and disposals of subsidiaries (€2,290 million negative impact), the impact on net debt of investments net of proceeds from disposals amounted to €3,124 million.

Capital expenditures break down as follows by segment:

In millions of euros



Growth capital expenditures break down as follows by activity:



Main projects		
Low CO_2		
Brésil - wind (Campo Largo, Umburranas) & solar	~	**0.7**
North America - Wind (including Infinity platform)	~	**0.5**
Latin America - Mexican wind & solar projects	~	**0.2**
France - Langa group acquisition	~	**0.2**
Australia - Willogoleche (wind)	~	**0.1**
Networks		
GRDF	~	**0.4**
GRTgaz	~	**0.2**
Client Solutions		
North America - client solutions acquisitions (including Donnelly, Unity, Socore, Plymouth & Longwood)	~	**0.4**
Electro Power Systems	~	**0.1**
Europe excluding France & Benelux - Priora acquisition	~	**0.1**
Latin America - CAM, Transantigo acquisitions	~	**0.1**
France BtoB - tuck-in acquisitions	~	**0.1**

(1) *Net of partial disposals under DBSO operations, excluding Corporate, and Synatom reallocated to maintenance expenditure.*

4.3 Dividends and movements in treasury stock

Dividends and movements in treasury stock during the period amounted to €2,554 million and included:

- €1,739 million in dividends paid by ENGIE SA to its shareholders, which corresponds to the balance of the 2017 dividend (€0.35 per share for shares with rights to an ordinary dividend or €0.42 per share for shares with rights to a dividend mark-up) paid in May 2018 and to an interim dividend (€0.37 per share) paid in October 2018;
- dividends paid by various subsidiaries to their non-controlling shareholders in an amount of €796 million, the payment of interest on hybrid debt for €123 million and movements in treasury stock.

4.4 Net debt at December 31, 2018

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2018 a total of 75% of net debt was denominated in euros and 18% in US dollars.

Including the impact of financial instruments, 81% of net debt is at fixed rates.

The average maturity of the Group's net debt is 10.9 years.

At December 31, 2018, the Group had total undrawn confirmed credit lines of €13.2 billion.

5 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION

In millions of euros	Dec. 31, 2018	Dec. 31, 2017	Net change
Non-current assets	**91,716**	**92,412**	**(696)**
Of which goodwill	*17,809*	*17,285*	*525*
Of which property, plant and equipment and intangible assets, net	*55,635*	*57,566*	*(1,931)*
Of which investments in entities accounted for using the equity method	*7,846*	*7,606*	*240*
Current assets	**61,986**	**57,729**	**4,257**
Of which assets classified as held for sale	*3,798*	*6,687*	*(2,889)*
Total equity	**40,941**	**42,122**	**(1,181)**
Provisions	21,813	21,715	98
Borrowings	32,178	33,467	(1,289)
Other liabilities	58,769	52,836	5,933
Of which liabilities directly associated with assets classified as held for sale	*2,130*	*3,371*	*(1,241)*

The carrying amount of **property, plant and equipment and intangible assets** was €55.6 billion, down €1.9 billion compared with December 31, 2017. The decrease was primarily the result of the classification of Glow in Thailand, some of Langa's solar farms in France, and renewable energy assets in Mexico as “Assets classified as held for sale” (€2.6 billion negative impact) (*see Note 5.2*), depreciation and amortization charges (€3.8 billion negative impact), impairment losses (€1.6 billion negative impact) and translation adjustments (€0.1 billion negative impact), partly offset by capital expenditure during the period (€6.3 billion positive impact).

Goodwill increased by €0.5 billion to €17.8 billion, mainly due to acquisitions made by the North America business unit (€0.2 billion positive impact) and the France Renewable business unit (€0.2 billion positive impact), offset by the goodwill on the holding in Thai company Glow and Langa's operating assets following their classification as "Assets classified as held for sale" (€0.2 billion negative impact).

Total equity amounted to €40.9 billion, a decrease of €0.5 billion compared with December 31, 2017. The decrease stemmed mainly from the payment of the cash dividend (€2.6 billion negative impact, including €1.7 billion of dividends paid by ENGIE SA to its shareholders and €0.9 billion paid to non-controlling interests), partly offset by net income for the period (€1.6 billion positive impact).

Provisions amounted to €21.8 billion, stable compared with December 31, 2017.

At December 31, 2018, assets and liabilities reclassified to “**Assets classified as held for sale**” and “**Liabilities directly associated with assets classified as held for sale**” correspond to Glow in Thailand, some of Langa's solar farms in France and renewable energy assets in Mexico, and at December 31, 2017, to the exploration-production activities and the Loy Yang B power plant in Australia (*see Note 5.1*).

6 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 2018 totaled €27,833 million, driven mainly by positive price and volume effects on sales to other gas operators.

The net operating loss was €1,058 million, relatively stable compared with a loss of €1,358 million in 2017. Revenue growth (€7,248 million) was offset by an increase in gas purchase costs (€7,471 million). The electricity business was up slightly from €4,602 million in 2017 to €4, 683 million in 2018, representing an increase of 2% driven by new electricity customers (approximately 450,000 new customers), partly offset by an increase in supply costs.

Net financial income amounted to €3,718 million compared with €3,849 million in 2017.

Non-recurring items represented a loss of €2,107 million, mainly comprising impairment of equity investments.

The income tax benefit amounted to €549 million compared to a benefit of €1,001 million in 2017, mainly comprising a tax consolidation benefit of €343 million, a net tax provision reversal of €124 million and various other net tax credits of €82 million. The 2017 figure included a €422 million refund by the French State of the 3% tax on dividends, which was held unconstitutional by the French Constitutional Court.

Net income for the year came out at €1,102 million.

Shareholders' equity amounted to €36,616 million at end-2018 compared with €37,191 million at end-2017. The €575 million decrease was due in large part to the difference in net income between 2017 and 2018 (negative €319 million) and the appropriation of 2017 net income (negative €333 million).

At December 31, 2018, net debt stood at €36,080 million, and cash and cash equivalents totaled €8,032 million (of which €5,216 relating to subsidiaries' current accounts).

Information relating to payment deadlines

Pursuant to the application of Article D.441-4 of the French Commercial Code, companies whose annual financial statements are certified by a Statutory Auditor must publish information regarding supplier and customer payment deadlines. The purpose is to demonstrate that there is no significant failure to respect settlement deadlines.

Information relating to supplier and customer payment deadlines mentioned in Article D.441-4 of the French Commercial Code

	Article D. 441 I.- 1°: Invoices received, unpaid and overdue at the reporting date						Article D. 441 I.- 2°: Invoices issued, unpaid and overdue at the reporting date					
In millions of euros	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 days (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	-					18,871	-					548,749
Aggregate invoice amount (incl. VAT)	-	448.3	40.3	0.5	113.8	602.9	-	602.5	32.6	14.9	177.4	917.3
Percentage of total amount of purchases (incl. VAT) for the period	-	1.34%	0.12%	0.00%	0.34%	1.81%						
Percentage of total revenues (incl. VAT) for the period							-	2.11%	0.10%	0.05%	0.54%	2.79%
(B) Invoices excluded from (A) relating to disputed or unrecognized receivables and payables												
Number of excluded invoices	226						-					
Aggregate amount of excluded invoices	9.9						-					
(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					

02 CONSOLIDATED FINANCIAL STATEMENTS

INCOME STATEMENT 30
STATEMENT OF COMPREHENSIVE INCOME 31
STATEMENT OF FINANCIAL POSITION 32
STATEMENT OF CHANGES IN EQUITY 34
STATEMENT OF CASH FLOWS 36

INCOME STATEMENT

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017[1]
Revenues from contracts with customers	8	56,388	53,073
Revenues from other contracts		4,208	6,503
REVENUES		**60,596**	**59,576**
Purchases		(32,190)	(31,465)
Personnel costs	9.1	(10,624)	(10,051)
Depreciation, amortization and provisions	9.2	(3,586)	(3,787)
Other operating expenses		(10,981)	(10,978)
Other operating income		1,550	1,455
CURRENT OPERATING INCOME		**4,765**	**4,750**
Share in net income of entities accounted for using the equity method	4	361	422
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**10**	**5,126**	**5,172**
Mark-to-market on commodity contracts other than trading instruments	10.1	(223)	29
Impairment losses	10.2	(1,798)	(1,298)
Restructuring costs	10.3	(162)	(669)
Changes in scope of consolidation	10.4	(150)	752
Other non-recurring items	10.5	(147)	(1,252)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**10**	**2,645**	**2,735**
Financial expenses		(1,981)	(2,127)
Financial income		600	739
NET FINANCIAL INCOME/(LOSS)	**11**	**(1,381)**	**(1,388)**
Income tax benefit/(expense)	12	(704)	395
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS		**560**	**1,741**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS		**1,069**	**366**
NET INCOME/(LOSS)		**1,629**	**2,108**
Net income/(loss) Group share		**1,033**	**1,320**
Of which Net income/(loss) relating to continued operations, Group share		*(12)*	*1,047*
Of which Net income/(loss) relating to discontinued operations, Group share		*1,045*	*273*
Non-controlling interests		**595**	**788**
Of which Non-controlling interests relating to continued operations		*572*	*695*
Of which Non-controlling interests relating to discontinued operations		*24*	*93*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**13**	**0.37**	**0.49**
Of which Basic earnings/(loss) relating to continued operations per share		*(0.07)*	*0.38*
Of which Basic earnings/(loss) relating to discontinued operations per share		*0.44*	*0.11*
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**13**	**0.37**	**0.49**
Of which Diluted earnings/(loss) relating to continued operations per share		*(0.07)*	*0.38*
Of which Diluted earnings/(loss) relating to discontinued operations per share		***0.43***	***0.11***

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

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, 2018	Dec. 31, 2018 Owners of the parent	Dec. 31, 2018 Non-controlling interests	Dec. 31, 2017[1]	Dec. 31, 2017 Owners of the parent[1]	Dec. 31, 2017 Non-controlling interests[1]
NET INCOME/(LOSS)		**1,629**	**1,033**	**595**	**2,108**	**1,320**	**788**
Debt instruments[2]	17	29	29	-	(406)	(406)	-
Net investment hedges	18	7	7	-	327	327	-
Cash flow hedges (excl. commodity instruments)	18	(175)	(184)	9	441	422	19
Commodity cash flow hedges	18	(18)	7	(26)	(136)	(126)	(11)
Deferred tax on items above	12	48	43	5	(161)	(159)	(2)
Share of entities accounted for using the equity method in recyclable items, net of tax		201	201	-	74	74	-
Translation adjustments		22	(54)	77	(2,516)	(2,155)	(361)
Recyclable items relating to discontinued operations, net of tax		36	39	(3)	(121)	(68)	(53)
TOTAL RECYCLABLE ITEMS		**150**	**88**	**62**	**(2,498)**	**(2,091)**	**(407)**
Equity instruments	17	42	42	-	3	3	-
Actuarial gains and losses	21	(245)	(247)	1	96	93	2
Deferred tax on items above	12	58	58	-	(97)	(92)	(4)
Share of entities accounted for using the equity method in non-recyclable items from actuarial gains and losses, net of tax		(43)	(45)	2	32	32	-
Non-recyclable items relating to discontinued operations, net of tax		(3)	(1)	(2)	5	3	2
TOTAL NON-RECYCLABLE ITEMS		**(192)**	**(193)**	**2**	**39**	**39**	**-**
TOTAL COMPREHENSIVE INCOME/(LOSS)		**1,586**	**928**	**659**	**(351)**	**(732)**	**381**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 “Restatement of 2017 comparative data”).

(2) Comparative data at December 31, 2017 of debt instruments integrate variations of available-for-sale financial assets, within the meaning of IAS 39.

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, 2018	Dec. 31, 2017[(1)]	Jan. 1, 2017[(1)]
Non-current assets				
Goodwill	14	17,809	17,285	17,372
Intangible assets, net	15	6,718	6,504	6,640
Property, plant and equipment, net	16	48,917	51,061	57,775
Other financial assets	17	6,193	5,586	5,243
Derivative instruments	17	2,693	2,949	3,603
Investments in entities accounted for using the equity method	4	7,846	7,606	6,815
Other non-current assets	27	474	566	430
Deferred tax assets	12	1,066	854	1,297
TOTAL NON-CURRENT ASSETS		**91,716**	**92,412**	**99,175**
Current assets				
Other financial assets	17	2,290	2,010	1,746
Derivative instruments	17	10,679	7,378	9,047
Trade and other receivables, net	8	15,613	13,127	14,160
Assets from contracts with customers	8	7,411	6,930	6,529
Inventories	27	4,158	4,161	3,663
Other current assets	27	9,337	8,508	10,697
Cash and cash equivalents	17	8,700	8,929	9,810
Assets classified as held for sale	5	3,798	6,687	3,506
TOTAL CURRENT ASSETS		**61,986**	**57,729**	**59,157**
TOTAL ASSETS		**153,702**	**150,141**	**158,332**

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 “Restatement of 2017 comparative data”).

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.

LIABILITIES

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017[(1)]	Jan. 1, 2017[(1)]
Shareholders' equity		35,551	36,283	39,253
Non-controlling interests	3	5,391	5,840	5,784
TOTAL EQUITY	**19**	**40,941**	**42,122**	**45,037**
Non-current liabilities				
Provisions	20	19,194	18,434	19,466
Long-term borrowings	17	26,434	25,292	24,405
Derivative instruments	17	2,785	2,980	3,410
Other financial liabilities	17	46	32	200
Liabilities from contracts with customers	8	36	258	265
Other non-current liabilities	27	960	1,007	1,180
Deferred tax liabilities	12	5,415	5,215	6,782
TOTAL NON-CURRENT LIABILITIES		**54,869**	**53,218**	**55,709**
Current liabilities				
Provisions	20	2,620	3,281	2,693
Short-term borrowings	17	5,745	8,175	12,544
Derivative instruments	17	11,510	8,720	9,228
Trade and other payables	17	19,759	16,404	17,042
Liabilities from contracts with customers	8	3,598	3,317	2,545
Other current liabilities	27	12,529	11,531	13,233
Liabilities directly associated with assets classified as held for sale	5	2,130	3,371	300
TOTAL CURRENT LIABILITIES		**57,891**	**54,800**	**57,586**
TOTAL EQUITY AND LIABILITIES		**153,702**	**150,141**	**158,332**

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

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	Number of shares	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, 2016	**2,435,285,011**	**2,435**	**32,506**	**1,967**	**3,273**	**(1,137)**	**1,296**	**(761)**	**39,578**	**5,870**	**45,447**
IFRS 9 & 15 impact (*see Note 2*)	-	-	-	(20)	-	(305)	-	-	(325)	(86)	(411)
EQUITY AT JANUARY 1, 2017[(1)]	**2,435,285,011**	**2,435**	**32,506**	**1,947**	**3,273**	**(1,442)**	**1,296**	**(761)**	**39,253**	**5,784**	**45,037**
Net income/(loss)				1,320					1,320	788	2,108
Other comprehensive income/(loss)				39		257	(2,349)		(2,052)	(407)	(2,459)
TOTAL COMPREHENSIVE INCOME/(LOSS)				**1,359**	**-**	**257**	**(2,349)**	**-**	**(732)**	**381**	**(351)**
Employee share issues and share-based payment				37					37	-	37
Dividends paid in cash				(2,049)					(2,049)	(680)	(2,729)
Purchase/disposal of treasury stock				(19)				(122)	(140)	-	(140)
Coupons of deeply-subordinated perpetual notes					(144)				(144)	-	(144)
Transactions between owners				60					60	131	191
Transactions with impacts on non-controlling interests				(3)					(3)	(1)	(4)
Transactions between owners within entities accounted for using the equity method				(1)					(1)		(1)
Share capital increases subscribed by non-controlling interests									-	226	226
Other changes				2					2	(3)	(1)
EQUITY AT DECEMBER 31, 2017[(1)]	**2,435,285,011**	**2,435**	**32,506**	**1,333**	**3,129**	**(1,184)**	**(1,053)**	**(883)**	**36,282**	**5,840**	**42,122**

(1) Comparative data at January 1, 2017 and December 31,2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

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	Number of shares	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, 2017	**2,435,285,011**	**2,435**	**32,506**	**1,455**	**3,129**	**(915)**	**(1,088)**	**(883)**	**36,639**	**5,938**	**42,577**
IFRS 9 & 15 impact (*see Note 2*)	-	-	-	(122)	-	(270)	36	-	(357)	(99)	(455)
Reclassification of premiums and coupons relating deeply-subordinated perpetual notes[1]	-	-	-	(570)	570	-	-	-	-	-	-
EQUITY AT JANUARY 1, 2018[2]	**2,435,285,011**	**2,435**	**32,506**	**763**	**3,699**	**(1,184)**	**(1,053)**	**(883)**	**36,282**	**5,840**	**42,122**
Net income/(loss)				1,033					1,033	595	1,629
Other comprehensive income/(loss)				(193)		165	(78)		(106)	63	(42)
TOTAL COMPREHENSIVE INCOME/(LOSS)				**840**	**-**	**165**	**(78)**	**-**	**928**	**659**	**1,586**
Employee share issues and share-based payment		6	60	80					146	1	146
Cancellation of treasury stock		(6)	-	(75)				81	-	-	-
Dividends paid in cash				(1,739)					(1,739)	(882)	(2,621)
Purchase/disposal of treasury stock				(236)				342	105	-	105
Deeply-subordinated perpetual notes[1]				(11)	1,000				989	-	989
Reclassification under debt of deeply-subordinated perpetual notes[1]				(24)	(949)				(973)	-	(973)
Interest on deeply-subordinated perpetual notes				(123)	-				(123)	-	(123)
Transactions between owners				(34)					(34)	10	(24)
Transactions with impact on non-controlling interests[3]				-					-	(229)	(229)
Share capital increases and decreases subscribed by non-controlling interests									-	(6)	(6)
Other changes				(29)	-	-			(29)	(2)	(31)
EQUITY AT DECEMBER. 31, 2018	**2,435,285,011**	**2,435**	**32,565**	**(590)**	**3,750**	**(1,019)**	**(1,130)**	**(460)**	**35,551**	**5,391**	**40,941**

(1) For clarity's sake, it has been decided to present deeply-subordinated perpetual notes for their nominal value instead of their net value (premiums and coupons deducted). This reclassification has no impact on equity. Transactions for the period are presented in Note 19.2.1 "Deeply-subordinated perpetual notes".

(2) Comparative data at January 1, 2017 and December 31,2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

(3) Mainly relating to the deconsolidation of the ENGIE E&P International following its disposal (see Note 5.1.2) and the change in consolidation method of Hazelwood (see Note 3.1).

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, 2018	Dec. 31, 2017[1]
NET INCOME/(LOSS)		1,629	2,108
- Net income/(loss) relating to discontinued operations		1,069	366
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS		**560**	**1,741**
- Share in net income of entities accounted for using the equity method		(361)	(422)
+ Dividends received from entities accounted for using the equity method		572	466
- Net depreciation, amortization, impairment and provisions		5,077	6,217
- Impact of changes in scope of consolidation and other non-recurring items		198	(858)
- Mark-to-market on commodity contracts other than trading instruments		223	(29)
- Other items with no cash impact		105	43
- Income tax expense		704	(395)
- Net financial income/(loss)		1,387	1,387
Cash generated from operations before income tax and working capital requirements		**8,464**	**8,150**
+ Tax paid		(757)	(905)
Change in working capital requirements	**26.1**	**149**	**1,613**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**7,857**	**8,858**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**17**	**476**
CASH FLOW FROM OPERATING ACTIVITIES		7,873	9,335
Acquisitions of property, plant and equipment and intangible assets	5.5	(6,202)	(5,778)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	5.5	(983)	(692)
Acquisitions of investments in entities accounted for using the equity method and joint operations	5.5	(338)	(1,311)
Acquisitions of equity and debt instruments	5.5	(283)	(247)
Disposals of property, plant and equipment, and intangible assets		114	90
Loss of controlling interests in entities, net of cash and cash equivalents sold		2,865	3,211
Disposals of investments in entities accounted for using the equity method and joint operations		2	283
Disposals of equity and debt instruments		186	126
Interest received on financial assets		26	75
Dividends received on equity instruments		52	171
Change in loans and receivables originated by the Group and other	5.5	(251)	(856)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**(4,813)**	**(4,928)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**(1,282)**	**(242)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES		(6,095)	(5,171)
Dividends paid[2]		(2,659)	(2,871)
Recovery from the French State of the 3% tax on dividends		-	389
Repayment of borrowings and debt		(5,328)	(7,738)
Change in financial assets held for investment and financing purposes		(289)	(197)
Interest paid		(727)	(744)
Interest received on cash and cash equivalents		79	107
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		(152)	(156)
Increase in borrowings		4,724	6,356
Increase/decrease in capital		70	486
Hybrid issue of subordinated perpetual notes		989	-
Purchase and/or sale of treasury stock		104	(140)
Changes in ownership interests in controlled entities	5.5	(18)	1
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**(3,207)**	**(4,506)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**1,279**	**(228)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES		(1,928)	(4,734)
Effects of changes in exchange rates and other relating to continued operations		(78)	(286)
Effects of changes in exchange rates and other relating to discontinued operations		(1)	(11)
TOTAL CASH FLOW FOR THE PERIOD		(229)	(867)
Reclassification of cash and cash equivalents relating to discontinued operations		-	(16)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		8,929	9,813
CASH AND CASH EQUIVALENTS AT END OF PERIOD		8,700	8,929

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

(2) The line "Dividends paid" includes the coupons paid to owners of the deeply subordinated perpetual notes for an amount of €123 million at December 31, 2018 and €144 million at December 31, 2017.

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.

03 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1 ACCOUNTING FRAMEWORK AND BASIS FOR PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS 39

Note 2 RESTATEMENT OF 2017 COMPARATIVE DATA 44

Note 3 MAIN SUBSIDIARIES AT DECEMBER 31, 2018 55

Note 4 INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD 62

Note 5 MAIN CHANGES IN GROUP STRUCTURE 70

Note 6 FINANCIAL INDICATORS USED IN FINANCIAL COMMUNICATION 75

Note 7 SEGMENT INFORMATION 79

Note 8 REVENUES 84

Note 9 OPERATING EXPENSES 89

Note 10 FROM CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD TO INCOME/(LOSS) FROM OPERATING ACTIVITIES 90

Note 11 NET FINANCIAL INCOME/(LOSS) 94

Note 12 INCOME TAX EXPENSE 96

Note 13 EARNINGS PER SHARE 101

Note 14 GOODWILL 102

Note 15 INTANGIBLE ASSETS 111

Note 16 PROPERTY, PLANT AND EQUIPMENT 116

Note 17 FINANCIAL INSTRUMENTS 120

Note 18 RISKS ARISING FROM FINANCIAL INSTRUMENTS 138

Note 19 EQUITY 159

Note 20 PROVISIONS 163

Note 21 POST-EMPLOYMENT BENEFITS AND OTHER LONG-TERM BENEFITS 170

Note 22 FINANCE LEASES 179

Note 23 OPERATING LEASES 181

Note 24 SHARE-BASED PAYMENTS 183

Note 25 RELATED PARTY TRANSACTIONS 187

Note 26 EXECUTIVE COMPENSATION 189

Note 27 WORKING CAPITAL REQUIREMENTS, INVENTORIES, OTHER ASSETS AND OTHER LIABILITIES 190

Note 28 LEGAL AND ANTI-TRUST PROCEEDINGS 193

Note 29 SUBSEQUENT EVENTS 197
Note 30 FEES PAID TO THE STATUTORY AUDITORS AND TO MEMBERS OF THEIR NETWORKS 198
Note 31 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS 199

ENGIE SA, the parent company of the Group, is a French s*ociété anonyme* with a Board of Directors that is subject to the provisions of Book II of the French Commercial Code (*Code de 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 27, 2019, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2018.

NOTE 1 ACCOUNTING FRAMEWORK AND BASIS FOR PREPARING THE CONSOLIDATED FINANCIAL STATEMENTS

1.1 Accounting standards

Pursuant to European Regulation (EC) 809/2004 on prospectuses dated April 29, 2004, 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, 2017 and 2018). 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, 2018 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, 2018 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2017, except for those described in § 1.1.1 below.

1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable in 2018

- IFRS 9 – *Financial instruments*

In accordance with the transition principles of IFRS 9, the new standard is applied retrospectively for the classification and measurement of financial assets and liabilities as well as for impairment losses, and prospectively for hedge accounting with the exception of the provisions relating to the recognition of the time value of derivative instruments. For these, as from January 1, 2017, the Group has decided to recognize changes in the fair value of the time component in other comprehensive income, for hedging relationships in which only the 'spot' element had previously been designated as hedging instrument.

For further details on the impact of IFRS 9 on the consolidated financial statements, please refer to Notes 2, 17 and 18.

- IFRS 15 – *Revenue from Contracts with Customers*

The first-time application has been implemented under the full retrospective method requiring comparative information to be restated at the date of initial application. In addition, ENGIE has decided to apply the practical expedients provided for by the standard regarding completed contracts or contracts modified as at January 1, 2017.

(1) Available on the European Commission's website: http://ec.europa.eu/internal_market/accounting/ias/index_en.htm.

For further details on the impact of IFRS 15 on the consolidated financial statements, please refer to Notes 2 and 18.

- Amendments to IFRS 2 – *Share-based payment: Classification and measurement of share-based payment transactions*
- IFRIC 22 – *Foreign Currency Transactions and Advance Consideration*
- Annual Improvements to IFRS Standards 2014-2016 Cycle[1]

The impact of the application of IFRS 9 and IFRS 15 is presented in the Notes mentioned above.

The other amendments, interpretations and improvements have no significant impact on the Group's consolidated financial statements.

1.1.2 IFRS Standards, amendments or IFRIC Interpretations effective in 2019 and that the Group has elected not to early adopt

- IFRS 16 - *Leases*

In January 2016, the IASB has issued a new standard on leases. Under the new standard, all lease commitments will be recognized on the face of the statement of financial position, without distinguishing between operating leases and finance leases.

The main impact we expect on the consolidated statement of financial position is an increase in the "right-of-use assets" on the assets side and an increase of the lease liabilities on the liabilities side, regarding leases where the Group acts as lessee and which are currently qualified as operating leases. They concern mainly real estate and vehicles. In the consolidated income statement, reversal of the rental expenses of these operating leases will lead to an increase in EBITDA and in depreciation and financial expenses.

Having concluded the stage of identifying leases throughout the Group, their analyzes under the criteria of the new standard have been realized (identifying a lease, assessing the term of the lease, measuring and determining the discount rates, etc.). They are now identified on an ongoing basis so as to update the Group database The IT tool able to deal with processing a large number of leases, has been deployed throughout the Group.

Transition

Analyzing the impact of the transition under the modified retrospective approach is being finalized. The Group has elected to apply some of the transition options of the new standard as at January 1, 2019. Amongst others, it has elected to include in the Group database the leases for which the lease term ends within 12 months of the transition date, to adjust the "right-of-use assets" by the amount of the provisions for onerous leases recognized in the statement of financial position as at December 31, 2018 (instead of impairing them) and to apply the grand-fathering clause.

Commitments relating to operating leases are presented in Note 23.1 **"**Operating leases for which ENGIE acts as lessee" (please refer to Note 22 for finance leases). Consistently with the amount of these off-balance sheet commitments, these leases are expected to have an impact amounting from €2.1 billion to €2.3 billion on the Group's debt as from 2019.

- Amendments to IFRS 9 – *Financial Instruments: Prepayment features with negative compensation*
- Amendments to IAS 28 – *Investments in Associates and Joint Ventures: Long-term interests in Associates and Joint Ventures*[2]
- Amendments to IAS 19 – *Employee benefits: Plan Amendment, Curtailment or Settlement*[2]

---

(1) The improvements of this cycle relating to IFRS 1 and IAS 28 are applicable as from 2018.

- IFRIC 23 – *Uncertainty over income tax treatments*
- Annual Improvements to IFRS Standards 2015-2017 Cycle(1).

The impact of the application of these other amendments, interpretations and improvements is currently being assessed.

1.1.3 IFRS Standards, amendments or IFRIC Interpretations effective after 2019

- IFRS 17 – *Insurance contracts*(2)
- Amendments to IFRS 3 – *Business Combinations: Definition of a Business*(1)
- Amendments to IAS 1 – *Presentation of Financial Statements* and IAS 8 – *Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Material* (1).

The impact of the application of these standards and 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 that 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 effect 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.

1.2.2.2 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) These standards and amendments have not yet been adopted by the European Union.
(2) These standards and amendments have not yet been adopted by the European Union.

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 statement of income 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.

1.2.4 Use of estimates and judgments

1.2.4.1 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 prompted the Group to step up its risk oversight procedures and include an assessment of these risks in measuring financial instruments and performing impairment tests. The Group's estimates used in business plans and determination of discount rates used in impairment tests and for calculating provisions, take into account the environment and the important market volatility.

Accounting estimates are made in a context which remains sensitive to energy market developments, therefore making it difficult to apprehend medium-term economic prospects.

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 fair value of assets acquired and liabilities assumed in a business combination *(see Note 5)*;
- measurement of revenue not yet metered, so called un-metered revenue *(see Note 8)*;
- measurement of recognized tax loss carry-forwards *(see Note 12)*;
- measurement of the recoverable amount of goodwill *(see Note 14)*, other intangible assets (see *Note 15)* and property, plant and equipment *(see Note 16)*;
- financial instruments *(see Notes 17 and 18)*;
- measurement of provisions, particularly for back-end of nuclear fuel cycle, dismantling obligations, disputes, pensions and other employee benefits *(see Notes 20 and 21)*.

1.2.4.2 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 effective IFRS Standards and IFRIC Interpretations do not specifically deal with the related accounting issues.

In particular, the Group exercised its judgment in assessing:

- the type of control (*see Note 3*);
- the performance obligations of sales contracts (see *Note 8*);
- how revenue is recognized for distribution or transmission services invoiced to clients (see *Note 8*);
- the identification of "own use contracts" as defined by IFRS 9 within non-financial purchase and sales contracts (electricity, gas, etc.) (see *Note 18*);
- the classification of arrangements which contain a lease (*see Notes 22 and 23*).

Entities for which judgment on the nature of control has been exercised are listed in Note 3 "Main subsidiaries at December 31, 2018" and Note 4 "Investments in entities accounted for using the equity method".

Accounting standards

From now on, accounting standards are presented above the Notes to which they relate in order to improve the clarity of these consolidated financial statements.

NOTE 2 RESTATEMENT OF 2017 COMPARATIVE DATA

The previously published financial statements presented hereafter have been restated to take into account:

- impacts resulting from the application of the new standards IFRS 9 – *Financial Instruments* and IFRS 15 – *Revenue from Contracts with Customers*; and
- the presentation in the financial statements at December 31, 2017 (the income statement, statement of comprehensive income and statement of cash flows) as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018, as they represent a separate major line of business under IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations*.

It should be noted that the exploration-production activities (ENGIE E&P International) were already classified as discontinued operations in the consolidated financial statements at December 31, 2017.

2.1 Impacts of applying IFRS 9 and IFRS 15 to the comparative 2017 financial statements

2.1.1 Impacts on the statement of financial position at December 31, 2017

2.1.1.1 Summary of the main impacts

In millions of euros	Dec. 31, 2017 reclassified	IFRS 9 impacts	IFRS 15 impacts	Dec. 31, 2017 restated
Other financial assets	7,632	(35)	-	7,596
Investments in entities accounted for using the equity method	7,702	(79)	(16)	7,606
Trade and other receivables, net	13,247	(126)	4	13,126
Assets from contracts with customers	6,946	(16)	-	6,930
Other current and non-current assets	114,761	37	83	114,882
TOTAL ASSETS	**150,287**	**(217)**	**70**	**150,140**
Shareholders' equity	36,639	(224)	(132)	36,283
Non-controlling interests	5,938	(11)	(87)	5,840
TOTAL EQUITY	**42,577**	**(235)**	**(219)**	**42,122**
Provisions	21,720	3	(8)	21,715
Liabilities from contracts with customers	3,278	-	298	3,575
Other current and non-current liabilities	82,712	15	(1)	82,727
TOTAL EQUITY AND LIABILITIES	**150,287**	**(217)**	**70**	**150,140**

2.1.1.2 Reclassifications to adapt the presentation of the statement of financial position following the application of the two new standards

The main impacts concern, for IFRS 9, the reclassification of financial assets that were previously classified as "Available-for-sale securities" and measured at fair value through other comprehensive income, and, for IFRS 15, the separate presentation of contract assets and contract liabilities.

In millions of euros	Dec. 31, 2017 published	Reclassifications										Dec. 31, 2017 reclassified
Assets												
Available-for-sale securities	2,656	(2,656)										-
Loans and receivables at amortized cost	3,576		(3,576)									-
Other financial assets	-	2,656	3,576	85	(293)				1,608			7,632
Equity instruments at fair value through other comprehensive income	-	*745*										*745*
Equity instruments at fair value through income	-	*379*										*379*
Debt instruments at fair value through other comprehensive income	-	*882*							*901*			*1,783*
Debt instruments at fair value through income	-	*650*							*213*			*863*
Loans and receivables at	-		*3,576*	*85*	*(293)*				*494*			*3,861*
Investments in entities accounted for using the equity method	7,409				293							7,702
Other current and non-current assets	9,059					22						9,081
Trade and other receivables, net	20,311			(74)			(46)	(6,951)			7	13,247
Assets from contracts with customers	-			(4)				6,951				6,947
Financial assets at fair value through income	1,608								(1,608)			-
Cash and cash equivalents	8,931			(7)								8,924
Liabilities												
Provisions	21,768						(48)					21,720
Trade and other payables,net	16,432									(7)	(18)	16,408
Liabilities from contracts with customers	-						2			3,276		3,278
Other current and non-current liabilities	15,765					22				(3,269)	25	12,542

2.1.1.3 IFRS 9 – *Financial Instruments:* impacts on the statement of financial position at December 31, 2017

The main impacts of the first-time application of IFRS 9 on the statement of financial position are summarized below for each of the three phases of the new standard.

- **Classification and measurement of financial assets and liabilities**
  IFRS 9 requires financial assets to be classified and measured based on their type, their contractual cash flow characteristics and their business model. The new standard does not significantly change how financial liabilities are classified and measured.
  For the Group, the main impact concerns the reclassification of financial assets which were previously presented as "Available-for-sale securities" and measured at fair value through other comprehensive income. A summary of the reclassifications is shown in the table above (*see Note 2.1.1.2*).

- **Impairment**
  IFRS 9 rules regarding impairment require the recognition of expected credit losses on initial recognition of receivables, or as from the time when loans are granted or financial guarantees given.
  The first-time application of IFRS 9 resulted in an increase in impairment. The increase mainly concerns trade receivables and assets from contracts with customers (increase in impairment of €134 million at end-2017 out of a total gross amount of €20 billion), as well as long-term receivables (increase in impairment of €26 million at end-2017 out of a total gross amount of €4 billion).
  The impacts of changes in impairment following the first-time application of IFRS 9 are summarized in the table below.

in millions of euros	Dec. 31, 2017 reclassified	IFRS 9 impacts	Dec. 31, 2017 restated before IFRS 15 impacts
Other financial assets	7,632	(35)	7,596
Equity instruments at fair value through other comprehensive income	**745**	**(12)**	**733**
Gross	*578*	*(3)*	*575*
Fair value	*167*	*(9)*	*158*
Equity instruments at fair value through income	**379**	**14**	**393**
Gross	*466*	*(2)*	*464*
Fair value	*(87)*	*16*	*(71)*
Debt instruments at fair value through other comprehensive income	**1,783**	**3**	**1,786**
Gross	*1,741*	*-*	*1,741*
Fair value	*42*	*4*	*46*
Debt instruments at fair value through income	**863**	**(6)**	**857**
Gross	*908*	*(2)*	*906*
Fair value	*(46)*	*(3)*	*(49)*
Loans and receivables at amortized cost	**3,861**	**(35)**	**3,826**
Gross	*4,084*	*(8)*	*4,076*
Fair value	*19*	*-*	*19*
Impairment	*(242)*	*(26)*	*(269)*
Trade and other receivables, net	13,247	(126)	13,122
Gross	*14,221*	*-*	*14,221*
Impairment	*(973)*	*(126)*	*(1,099)*
Assets from contracts with customers	6,946	(16)	6,930
Gross	*6,950*	*(8)*	*6,943*
Impairment	*(4)*	*(8)*	*(12)*

- **Hedge accounting**
  The new standard aims to better align hedge accounting with risk management, without substantially changing hedge accounting principles.
  The Group, which applies hedge accounting primarily to hedge net debt risk, did not observe any material impact as a result of the transition in this respect.

For the three phases, the first-time application of IFRS 9 had a total negative €235 million impact on consolidated equity at December 31, 2017 (including a negative €79 million impact on the measurement of the share in net assets of entities accounted for using the equity method).

2.1.1.4 IFRS 15 – *Revenue from Contracts with Customers*: impacts on the statement of financial position at December 31, 2017

The main impacts of the first-time application of IFRS 15 on the Group's statement of financial position concern:

- the separate presentation of contract assets and contract liabilities, which results in certain trade receivables being reclassified as contract assets and certain other current liabilities as contract liabilities (see summary table of reclassifications in section 2.1.1.2 above);
- the measurement of the revenues to be recognized, for which more explicit rules are set out in the new standard, notably depending on how the performance obligations identified are satisfied, and has modified the timing of revenue recognition and the margin profile for certain contracts.

The second point, this mainly affects contracts for the operation and maintenance of power plants or the provision of production capacities, with a potential increase in contract liabilities reflecting the delay between the price received and the completion of the services.

As a consequence, applying IFRS 15 had a negative €219 million impact on equity at December 31, 2017 whereas the impact on the rhythm of revenue recognition in the income statement for these contracts was not material, given their term.

2.1.2 Impacts on income statement at December 31, 2017

2.1.2.1 Summary of the main impacts

In millions of euros	Dec. 31, 2017 published	IFRS 9 impacts	IFRS 15 impacts	Dec. 31, 2017 restated excluding IFRS 5 impacts relating to
Revenues from contracts with customers	64,280	-	(9,898)	54,381
Revenues from other contracts	749	-	5,805	6,555
REVENUES	**65,029**	**-**	**(4,093)**	**60,936**
Purchases	(36,740)	-	3,980	(32,760)
Other operating income and expenses	(9,636)	-	78	(9,558)
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,273**	**(23)**	**(39)**	**5,211**
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**2,819**	**(27)**	**(39)**	**2,752**
NET FINANCIAL INCOME/(LOSS)	**(1,296)**	**(100)**	**(11)**	**(1,407)**
Income tax expense	425	37	11	473
NET INCOME/(LOSS)	**2,238**	**(92)**	**(38)**	**2,108**

2.1.2.2 *IFRS 9 – Financial instruments*: impacts on income statement at December 31, 2017

The impact of the application of IFRS 9 on net income Group share amounted to a negative €92 million (negative €129 million before tax) at December 31, 2017.

The impact on net income was primarily due to a one-off transition effect resulting from the application of IFRS 9, paragraph 7.2.1, which requires assets that were derecognized in 2017, particularly trade receivables, to continue to be accounted for under IAS 39 rather than IFRS 9. As a result, the recognition of expected credit losses on the initial recognition of new receivables (mainly trade receivables) in 2017 had a one-off negative impact of €113 million on gross income for the period, presented in non-recurring income.

It should be noted that after transition, recurring income may be impacted primarily by significant changes in the credit rating of our counterparties, for example in the event of a financial crisis

2.1.2.3 *IFRS 15 – Revenue from Contracts with Customers*: impacts on income statement at December 31, 2017

The main impacts on the Group's consolidated revenues are related to presentation. The impact of the new standard on current operating income is not material.

The three main issues concerning the Group are presented below. The first two, which represent €9,526 million are related to presentation and have no impact on the Group's current operating income:

- in certain countries where the Group acts as energy provider without being in charge of energy distribution, the analysis under IFRS 15 may lead to recognizing only energy sales as revenues. In some situations, the accounting treatment under IFRS 15 leads to a decrease in revenues corresponding to distribution without any impact on the energy margin, since the related expenses are decreased accordingly. At December 31, 2017, the related revenue restatement amounted to a negative €3,803 million, with operating expenses decreasing by the same amount.
  The countries that are most concerned are Belgium (for the distribution of gas and electricity as well as for the transportation of electricity) and France (for the distribution of electricity). Even if there is no impact at Group level for gas in France, there is an impact on the revenue breakdown by reportable segment: under IFRS 15, the revenues on gas distribution are no longer recognized by the provider (in the France reportable segment) but by the distributor (in the Europe Infrastructures reportable segment). At December 31, 2017, these revenues amounted to €1,957 million;

- commodities sales transactions which are within the scope of IFRS 9 – *Financial Instruments*, are outside the scope of IFRS 15. The sales under the related contracts that result in a physical delivery are therefore presented on a separate line from IFRS 15 revenues. At December 31, 2017, these sales amounted to €5,723 million;

- the new standard has modified the timing of revenue recognition for certain types of activities (such as operation and maintenance of power plants or provision of production capacities). However, this did not have a material impact on income at December 31, 2017.

2.2 Classification of upstream liquefied natural gas (LNG) activities as "Discontinued operations"

On July 13, 2018, the Group finalized the disposal of its upstream liquefied natural gas (LNG) activities to Total (*see Note 5.1.4 "Disposal of ENGIE's liquefied natural gas (LNG) activities"*).

In accordance with IFRS 5, the upstream LNG activities are presented as "Discontinued operations" in the Group's income statement, statement of comprehensive income and statement of cash flows at December 31, 2017

Other assets held for sale at December 31, 2018 do not meet the definition of "Discontinued operations" and therefore have not been restated.

2.3 2017 comparative financial statements

2.3.1 Income statement at December 31, 2017

In millions of euros	Dec. 31, 2017 published	IFRS 9 impacts	IFRS 15 impacts	IFRS 5 - LNG	Dec. 31, 2017 restated
Revenues from contracts with customers	64,280	-	(9,898)	(1,308)	53,073
Revenues from other contracts	749	-	5,805	(52)	6,503
REVENUES	**65,029**	**-**	**(4,093)**	**(1,360)**	**59,576**
Purchases	(36,740)	-	3,980	1,296	(31,465)
Personnel costs	(10,082)	-	-	31	(10,051)
Depreciation, amortization and provisions	(3,736)	(14)	(3)	(35)	(3,787)
Other operating expenses	(11,077)	-	61	37	(10,978)
Other operating income	1,441	-	16	(2)	1,455
CURRENT OPERATING INCOME	**4,835**	**(13)**	**(39)**	**(33)**	**4,750**
Share in net income of entities accounted for using the equity method	437	(10)	-	(6)	422
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,273**	**(23)**	**(39)**	**(39)**	**5,172**
Mark-to-market on commodity contracts other than trading instruments	(307)	(32)	-	368	29
Impairment losses	(1,317)	18	-	1	(1,298)
Restructuring costs	(671)	-	-	2	(669)
Changes in scope of consolidation	752	-	-	-	752
Other non-recurring items	(911)	9	-	(350)	(1,252)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**2,819**	**(27)**	**(39)**	**(17)**	**2,735**
NET FINANCIAL INCOME/(LOSS)	**(1,296)**	**(100)**	**(11)**	**19**	**(1,388)**
Income tax expense	425	37	11	(79)	395
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**1,948**	**(91)**	**(38)**	**(77)**	**1,741**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**290**	**(1)**	**-**	**77**	**366**
NET INCOME/(LOSS)	**2,238**	**(92)**	**(38)**	**-**	**2,108**
Net income/(loss) Group share	**1,423**	**(80)**	**(23)**	**-**	**1,320**
of which Net income/(loss) relating to continued operations, Group share	*1,226*	*(80)*	*(23)*	*(77)*	*1,047*
of which Net income/(loss) relating to discontinued operations, Group share	*196*	*-*	*-*	*77*	*273*
Non-controlling interests	**815**	**(11)**	**(16)**	**-**	**788**
of which Non-controlling interests relating to continued operations	*722*	*(11)*	*(16)*	*-*	*695*
of which Non-controlling interests relating to discontinued operations	*93*	*-*	*-*	*-*	*93*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**0.53**	**(0.03)**	**(0.01)**	**-**	**0.49**
of which Basic earnings/(loss) relating to continued operations per share	*0.45*	*(0.03)*	*(0.01)*	*(0.03)*	*0.38*
of which Basic earnings/(loss) relating to discontinued operations per share	*0.08*	*-*	*-*	*0.03*	*0.11*
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**0.53**	**(0.03)**	**(0.01)**	**-**	**0.49**
of which Diluted earnings/(loss) relating to continued operations per share	*0.45*	*(0.03)*	*(0.01)*	*(0.03)*	*0.38*
of which Diluted earnings/(loss) relating to discontinued operations per share	*0.08*	*-*	*-*	*0.03*	*0.11*

2.3.2 Statement of comprehensive income at December 31, 2017

In millions of euros	Published figures of Déc. 31, 2017	Impact of IFRS 9	Impact of IFRS 15	IFRS 5 - LNG	Restated figures of Dec. 31, 2017
NET INCOME/(LOSS)	**2,238**	**(92)**	**(38)**	**-**	**2,108**
Equity instruments	(379)	(27)	-	-	(406)
Net investment hedges	327	-	-	-	327
Cash flow hedges (excl. commodity instruments)	419	22	-	-	441
Commodity cash flow hedges	(20)	14	-	(131)	(136)
Deferred tax on items above	(184)	(24)	-	47	(161)
Share of entities accounted for using the equity method in recyclable items, net of tax	13	51	-	10	74
Translation adjustments	(2,583)	21	27	19	(2,516)
Recyclable items relating to discontinued operations, net of tax	(177)	1	-	55	(121)
TOTAL RECYCLABLE ITEMS	**(2,583)**	**58**	**27**	**-**	**(2,498)**
Equity instruments	-	3	-	-	3
Actuarial gains and losses	96	-	-	-	96
Deferred tax on items above	(97)	(2)	-	2	(97)
Share of entities accounted for using the equity method in non-recyclable items from actuarial gains and losses, net of tax	32	-	-	-	32
Non-recyclable items relating to discontinued operations, net of tax	7	-	-	(2)	5
TOTAL NON-RECYCLABLE ITEMS	**38**	**1**	**-**	**-**	**39**
TOTAL COMPREHENSIVE INCOME/(LOSS)	**(307)**	**(32)**	**(11)**	**-**	**(351)**
Of which owners of the parent	(701)	(22)	(7)	-	(732)
Of which non-controlling interests	394	(9)	(4)	-	381

2.3.3 Statement of financial position at January 1, 2017

In millions of euros	Jan 1, 2017 published	IFRS 9 & IFRS 15 classification	Jan 1, 2017 reclassified	IFRS 9 impacts	IFRS 15 impacts	Jan 1, 2017 restated
Non-current assets						
Goodwill	17,372	-	17,372	-	-	17,372
Intangible assets, net	6,639	1	6,640	-	-	6,640
Property, plant and equipment, net	57,739	-	57,739	(3)	39	57,775
Available-for-sale securities	2,997	(2,997)	-	-	-	-
Loans and receivables at amortized cost	2,250	(2,250)	-	-	-	-
Other financial assets	-	5,249	5,249	(6)	-	5,243
Derivative instruments	3,603	-	3,603	-	-	3,603
Assets from contracts with customers	-	-	-	-	-	-
Investments in entities accounted for using the equity method	6,624	348	6,972	(141)	(16)	6,815
Other non-current assets	431	(1)	430	-	-	430
Deferred tax assets	1,250	-	1,250	7	40	1,297
TOTAL NON-CURRENT ASSETS	**98,905**	**351**	**99,255**	**(143)**	**62**	**99,175**
Current assets						
Loans and receivables at amortized cost	595	(595)	-	-	-	-
Other financial assets	-	1,768	1,768	(22)	-	1,746
Derivative instruments	9,047	-	9,047	-	-	9,047
Trade and other receivables, net	20,835	(6,666)	14,169	(19)	10	14,160
Assets from contracts with customers	-	6,536	6,536	(6)	(1)	6,529
Inventories	3,656	-	3,656	-	7	3,663
Other current assets	10,692	5	10,697	1	(1)	10,697
Financial assets at fair value through income	1,439	(1,439)	-	-	-	-
Cash and cash equivalents	9,825	(7)	9,819	(9)	-	9,810
Assets classified as held for sale	3,506	-	3,506	-	-	3,506
TOTAL CURRENT ASSETS	**59,595**	**(397)**	**59,198**	**(55)**	**15**	**59,157**
TOTAL ASSETS	**158,499**	**(47)**	**158,453**	**(198)**	**77**	**158,332**
Shareholders' equity	39,578		39,578	(203)	(122)	39,253
Non-controlling interests	5,870		5,870	(2)	(83)	5,784
TOTAL EQUITY	**45,447**		**45,447**	**(206)**	**(205)**	**45,037**
Non-current liabilities						
Provisions	19,461	-	19,461	5	-	19,466
Long-term borrowings	24,411	(6)	24,405	-	-	24,405
Derivative instruments	3,410	-	3,410	-	-	3,410
Other financial liabilities	200	-	200	-	-	200
Liabilities from contracts with customers	-	53	53	-	212	265
Other non-current liabilities	1,203	(23)	1,180	-	-	1,180
Deferred tax liabilities	6,775	-	6,775		7	6,782
TOTAL NON-CURRENT LIABILITIES	**55,461**	**23**	**55,484**	**5**	**220**	**55,709**
Current liabilities						
Provisions	2,747	(49)	2,698	-	(5)	2,693
Short-term borrowings	12,539	6	12,544	-	-	12,544
Derivative instruments	9,228	-	9,228	-	-	9,228
Trade and other payables, net	17,075	(24)	17,051	-	(9)	17,042
Liabilities from contracts with customers	-	2,454	2,454	(2)	94	2,545
Other current liabilities	15,702	(2,456)	13,246	4	(17)	13,233
Liabilities directly associated with assets classified as held for sale	300	-	300	-	-	300
TOTAL CURRENT LIABILITIES	**57,591**	**(70)**	**57,521**	**2**	**62**	**57,586**
TOTAL EQUITY AND LIABILITIES	**158,499**	**(47)**	**158,453**	**(198)**	**77**	**158,332**

2.3.4 Statement of financial position at December 31, 2017

In millions of euros	Dec. 31, 2017 published	IFRS 9 & IFRS 15 classification	Dec. 31, 2017 reclassified	IFRS 9 impacts	IFRS 15 impacts	Dec. 31, 2017 restated
Non-current assets						
Goodwill	17,285	-	17,285	-	-	17,285
Intangible assets, net	6,504	1	6,504	-	-	6,504
Property, plant and equipment, net	51,024	-	51,024	-	38	51,061
Available-for-sale securities	2,656	(2,656)	-	-	-	-
Loans and receivables at amortized cost	2,976	(2,976)	-	-	-	-
Other financial assets	-	5,598	5,598	(12)	-	5,586
Derivative instruments	2,948	(2)	2,946	3	-	2,949
Assets from contracts with customers	-	-	-	-	-	-
Investments in entities accounted for using the equity method	7,409	293	7,702	(79)	(16)	7,606
Other non-current assets	567	(1)	566	-	-	566
Deferred tax assets	803	(21)	782	27	45	854
TOTAL NON-CURRENT ASSETS	**92,171**	**236**	**92,407**	**(61)**	**66**	**92,412**
Current assets						
Loans and receivables at amortized cost	599	(599)	-	-	-	-
Other financial assets	-	2,033	2,033	(23)	-	2,010
Derivative instruments	7,378	(4)	7,374	4	-	7,378
Trade and other receivables, net	20,311	(7,064)	13,247	(126)	4	13,126
Assets from contracts with customers	-	6,946	6,946	(16)	-	6,930
Inventories	4,155	-	4,155	-	7	4,161
Other current assets	8,492	23	8,515	(1)	(6)	8,508
Financial assets at fair value through income	1,608	(1,608)	-	-	-	-
Cash and cash equivalents	8,931	(7)	8,924	5	-	8,929
Assets classified as held for sale	6,687	-	6,687	-	-	6,687
TOTAL CURRENT ASSETS	**58,161**	**(280)**	**57,881**	**(157)**	**4**	**57,728**
TOTAL ASSETS	**150,332**	**(45)**	**150,287**	**(218)**	**70**	**150,140**
Shareholders' equity	36,639		36,639	(224)	(132)	36,283
Non-controlling interests	5,938		5,938	(11)	(87)	5,840
TOTAL EQUITY	**42,577**		**42,577**	**(235)**	**(219)**	**42,122**
Non-current liabilities						
Provisions	18,428	1	18,429	5	-	18,434
Long-term borrowings	25,292	-	25,292	-	-	25,292
Derivative instruments	2,980	-	2,980	-	-	2,980
Other financial liabilities	32	-	32	-	-	32
Liabilities from contracts with customers	-	33	33	-	225	258
Other non-current liabilities	1,009	(3)	1,006	-	2	1,007
Deferred tax liabilities	5,220	(27)	5,193	14	8	5,215
TOTAL NON-CURRENT LIABILITIES	**52,960**	**4**	**52,964**	**19**	**235**	**53,218**
Current liabilities						
Provisions	3,340	(49)	3,291	(2)	(8)	3,281
Short-term borrowings	8,176	-	8,175	-	-	8,175
Derivative instruments	8,720	-	8,720	-	-	8,720
Trade and other payables, net	16,432	(24)	16,408	-	(4)	16,404
Liabilities from contracts with customers	-	3,245	3,245	-	72	3,317
Other current liabilities	14,756	(3,220)	11,536	1	(7)	11,530
Liabilities directly associated with assets classified as held for sale	3,371	-	3,371	-	-	3,371
TOTAL CURRENT LIABILITIES	**54,795**	**(49)**	**54,746**	**(1)**	**55**	**54,799**
TOTAL EQUITY AND LIABILITIES	**150,332**	**(45)**	**150,287**	**(217)**	**70**	**150,140**

2.3.5 Statement of cash flows at December 31, 2017

In millions of euros	Dec. 31, 2017 published	IFRS 9 impacts	IFRS 15 impacts	IFRS 5 - LNG	Dec. 31, 2017 restated
NET INCOME/(LOSS)	2,238	(92)	(38)	-	2,108
- Net income/(loss) relating to discontinued operations	290	(1)	-	77	366
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**1,948**	**(91)**	**(38)**	**(77)**	**1,741**
- Share in net income of entities accounted for using the equity method	(437)	10	-	6	(422)
+ Dividends received from entities accounted for using the equity method	466	-	-	-	466
- Net depreciation, amortization, impairment and provisions	6,203	(19)	(2)	35	6,217
- Impact of changes in scope of consolidation and other non-recurring items	(1,096)	(111)	-	350	(858)
- Mark-to-market on commodity contracts other than trading instruments	307	32	-	(368)	(29)
- Other items with no cash impact	44	-	-	-	43
- Income tax expense	(425)	(37)	(11)	79	(395)
- Net financial income/(loss)	1,296	99	11	(19)	1,387
Cash generated from operations before income tax and working capital	**8,305**	**(117)**	**(41)**	**5**	**8,150**
+ Tax paid	(894)	-	-	(11)	(905)
Change in working capital requirements	**1,251**	**121**	**63**	**177**	**1,613**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**8,662**	**4**	**22**	**171**	**8,858**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**647**	**-**	**-**	**(171)**	**476**
CASH FLOW FROM OPERATING ACTIVITIES	9,309	4	22	-	9,335
Acquisitions of property, plant and equipment and intangible assets	(5,779)	-	(3)	5	(5,778)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	(690)	(2)	-	1	(692)
Acquisitions of investments in entities accounted for using the equity method and joint operations	(1,446)	-	-	135	(1,311)
Acquisitions of equity and debt instruments	(258)	10	-	-	(247)
Disposals of property, plant and equipment and intangible assets	90	-	-	-	90
Loss of controlling interests in entities, net of cash and cash equivalents sold	3,203	8	-	-	3,211
Disposals of investments in entities accounted for using the equity method and joint operations	283	-	-	-	283
Disposals of equity and debt instruments	538	-	-	(412)	126
Interest received on financial assets	83	2	(11)	1	75
Dividends received on equity instruments	170	-	-	-	171
Change in loans and receivables originated by the Group and other	(838)	(10)	(8)	-	(856)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**(4,645)**	**9**	**(22)**	**(270)**	**(4,928)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**(512)**	**-**	**-**	**270**	**(242)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	(5,157)	9	(22)	-	(5,171)
Dividends paid	(2,871)	-	-	-	(2,871)
Recovery from the French State of the 3% tax on dividends	389	-	-	-	389
Repayment of borrowings and debt	(7,738)	-	-	-	(7,738)
Change in financial assets held for investment and financing purposes	(181)	(16)	-	-	(197)
Interest paid	(745)	-	-	1	(744)
Interest received on cash and cash equivalents	100	7	-	-	107
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings	(156)	-	-	-	(156)
Increase in borrowings	6,356	-	-	-	6,356
Increase/decrease in capital	224	-	-	262	486
Purchase and/or sale of treasury stock	(140)	-	-	-	(140)
Changes in ownership interests in controlled entities	1	-	-	-	1
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**(4,761)**	**(9)**	**-**	**263**	**(4,506)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**36**	**-**	**-**	**(263)**	**(228)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	(4,725)	(9)	-	-	(4,734)
Effects of changes in exchange rates and other relating to continued operations	(294)	7	-	-	(286)
Effects of changes in exchange rates and other relating to discontinued operations	(10)	-	-	(1)	(11)
TOTAL CASH FLOW FOR THE PERIOD	(877)	11	-	(1)	(867)
Reclassification of cash and cash equivalents relating to discontinued operations	(16)	-	-	-	(16)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	9,825	(13)	-	-	9,813
CASH AND CASH EQUIVALENTS AT END OF PERIOD	8,931	(2)	-	-	8,929

2.3.6 Impacts on key indicators

In millions of euros	Dec. 31, 2017 published	IFRS 9 impacts	IFRS 15 impacts	IFRS 5 - LNG	Dec. 31, 2017 restated
EBITDA	9,316	(25)	(39)	(54)	9,199
NET RECURRING INCOME	3,550	(120)	(38)	-	3,392
Net recurring income/(loss) relating to continued operations	3,135	(127)	(38)	10	2,979
Net recurring income/(loss) relating to discontinued operations	415	8	-	(10)	413
NET RECURRING INCOME/(LOSS), GROUP SHARE	2,662	(122)	(23)	-	2,518
Net recurring income/(loss) relating to continued operations, Group share	2,372	(127)	(23)	11	2,233
Net recurring income/(loss) relating to discontinued operations, Group share	291	5	-	(11)	285
NET RECURRING INCOME/(LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	887	2	(16)	-	874
Net recurring income/(loss) relating to continued operations attributable to non-controlling interests	762	-	(16)	-	746
Net recurring income/(loss) relating to discontinued operations attributable to non-controlling interests	125	3	-	-	128
CASH FLOW FROM OPERATIONS (CFFO)	8,311	6	11	181	8,509

NOTE 3 MAIN SUBSIDIARIES AT DECEMBER 31, 2018

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.

3.1 List of main subsidiaries at December 31, 2018

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 accounts is not material. They correspond to entities deemed not significant as regards the Group’s main key figures (revenues, total equity, etc), shell companies 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 (www.engie.com, Investors/Regulated information section). Non-consolidated companies are classified under non-current financial assets (*see Note 17.1.1.1)* under “Equity instruments at fair value”.

The list of the main subsidiaries 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 4 “Investments in entities accounted for using the equity method”.

“FC” indicates the full consolidation method.

Some entities such as ENGIE SA, ENGIE Energie 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.

North America

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
ENGIE North America	Electricity distribution and generation/Natural gas/LNG/Energy services	United States	100.0	100.0	FC	FC
ENGIE Holding Inc.	Holding - parent company	United States	100.0	100.0	FC	FC
Distrigas of Massachussetts	LNG terminals	United States	-	100.0	-	FC
ENGIE Gas & LNG LLC	Natural gas/LNG	United States	-	100.0	-	FC
ENGIE Infinity Renewables(1)	Electricity distribution and generation	United States	100.0	-	FC	-
SoCore Energy LLC(2)	Electricity distribution and generation	United States	100.0	-	FC	-
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0	FC	FC
Engie Insight Service	Energy services	United States	100.0	100.0	FC	FC

(1) Acquisition on February 20, 2018.
(2) Acquisition on April 16, 2018.

Latin America

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	52.8	52.8	FC	FC
ENGIE Energía Perú	Electricity distribution and generation	Peru	61.8	61.8	FC	FC
ENGIE Brasil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7	FC	FC

Africa/Asia

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Glow Group(1)	Electricity distribution and generation	Thailand	69.1	69.1	FC	FC
Hazelwood Power Partnership(2)	Electricity generation	Australia	72.0	72.0	Joint Operation	FC
Loy Yang B Group(3)	Electricity generation	Australia	-	70.0	FC	FC
Simply Energy	Energy sales	Australia	72.0	72.0	FC	FC
Baymina Enerji A.S.	Electricity generation	Turkey	95.0	95.0	FC	FC

(1) Assets classified as “Assets held for sale” on December 31, 2018 (see Note 5 “Main change in Group structure”).
(2) Change in consolidation method in 2018 further to the implementation of a new governance as part of the dismantling of the site.
(3) The Loy Yang B coal-fired power plant in Australia was sold on January 15, 2018 (see Note 5 “Main changes in Group structure”).

Benelux

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Electrabel SA (*)	Electricity generation/Energy sales	Belgium	100.0	100.0	FC	FC
Synatom	Managing provisions relating to power plants and nuclear fuel	Belgium	100.0	100.0	FC	FC
Cofely Fabricom SA	Systems, facilities and maintenance services	Belgium	100.0	100.0	FC	FC
ENGIE Energie Nederland N.V. (*)	Energy sales	Netherlands	100.0	100.0	FC	FC
ENGIE Services Nederland N.V.	Energy services	Netherlands	100.0	100.0	FC	FC

France

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
ENGIE SA (*)	Energy sales	France	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Energy services/Networks	France	100.0	100.0	FC	FC
Axima Concept	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Endel Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
INEO Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Compagnie Nationale du Rhône	Electricity distribution and generation	France	49.9	49.9	FC	FC
ENGIE Green	Electricity distribution and generation	France	100.0	100.0	FC	FC
CPCU	Urban heating networks	France	66.5	64.4	FC	FC

Europe excluding France & Benelux

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
ENGIE Energielösungen GmbH	Energy services	Germany	100.0	100.0	FC	FC
ENGIE Deutschland GmbH	Energy services	Germany	100.0	100.0	FC	FC
ENGIE Italia S.p.A (*)	Energy sales	Italy	100.0	100.0	FC	FC
Engie Servizi S.p.A	Energy services	Italy	100.0	100.0	FC	FC
ENGIE Romania	Natural gas distribution/Energy sales	Romania	51.0	51.0	FC	FC
ENGIE Supply Holding UK Limited	Energy sales	United Kingdom	100.0	100.0	FC	FC
ENGIE Retail Investment UK Limited	Holding	United Kingdom	100.0	100.0	FC	FC
First Hydro Holdings Company	Electricity generation	United Kingdom	75.0	75.0	FC	FC
Keepmoat Regeneration	Energy services	United Kingdom	100.0	100.0	FC	FC
ENGIE Services Holding UK Ltd	Energy services	United Kingdom	100.0	100.0	FC	FC
ENGIE Services Limited	Energy services	United Kingdom	100.0	100.0	FC	FC

Infrastructures Europe

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
GRDF	Natural gas distribution	France	100.0	100.0	FC	FC
GRTgaz Group (excluding Elengy)	Natural gas transportation	France	74.6	74.8	FC	FC
Elengy	Natural gas/LNG	France	74.6	74.8	FC	FC
Fosmax LNG	Natural gas/LNG	France	54.1	54.2	FC	FC
Storengy Deutschland GmbH	Underground natural gas storage	Germany	100.0	100.0	FC	FC
Storengy SA	Underground natural gas storage	France	100.0	100.0	FC	FC

GEM (2018) / GEM & LNG (2017)(1)

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
Electrabel SA (*)	Energy management trading	France/Belgium	100.0	100.0	FC	FC
ENGIE Global Markets	Energy management trading	France/Belgium/Singapore	100.0	100.0	FC	FC
ENGIE Energy Management (*)	Energy management trading	France/Belgium/Italy/United Kingdom	100.0	100.0	FC	FC
ENGIE Energy Management	Holding	Switzerland	100.0	100.0	FC	FC
ENGIE SA (*)	Energy management trading/Energy sales/LNG	France	100.0	100.0	FC	FC

(1) The disposal of upstream LNG activities was completed on July 13, 2018. As a result, the reportable segment "GEM & LNG" has been renamed "GEM" and from now on only includes the activities of the GEM Business Unit.

E&P[1]

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
ENGIE E&P International Group	Exploration-production	France and other countries	-	70.0	-	FC
ENGIE E&P International	*Holding - parent company*	*France*	-	*70.0*	-	*FC*
ENGIE E&P Nederland B.V.	*Exploration-production*	*Netherlands*	-	*70.0*	-	*FC*
ENGIE E&P Deutschland GmbH	*Exploration-production*	*Germany*	-	*70.0*	-	*FC*
ENGIE E&P Norge AS	*Exploration-production*	*Norway*	-	*70.0*	-	*FC*
ENGIE E&P UK Ltd.	*Exploration-production*	*United Kingdom*	-	*70.0*	-	*FC*

(1) The disposal of ENGIE E&P International was completed on February 15, 2018 (see Note 5 "Main changes in Group structure").

Others

Company name	Activity	Country	% interest Dec. 31, 2018	% interest Dec. 31, 2017	Consolidation method Dec. 31, 2018	Consolidation method Dec. 31, 2017
ENGIE SA (*)	Holding - parent company	France	100.0	100.0	FC	FC
Electrabel SA (*)	Holding/Electricity generation	Belgium	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Holding	France	100.0	100.0	FC	FC
International Power Limited	Holding	United Kingdom	100.0	100.0	FC	FC
ENGIE CC	Financial subsidiaries/Central functions	Belgium	100.0	100.0	FC	FC
ENGIE FINANCE SA	Financial subsidiaries	France	100.0	100.0	FC	FC
ENGIE Solar	Solar EPC	France	100.0	100.0	FC	FC
ENGIE Energie Nederland N.V. (*)	Electricity generation	Netherlands	100.0	100.0	FC	FC
ENGIE Cartagena	Electricity generation	Spain	100.0	100.0	FC	FC
ENGIE Deutschland AG (*)	Electricity generation	Germany	100.0	100.0	FC	FC
ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG	Electricity generation	Germany	57.0	57.0	FC	FC
ENGIE Thermique France	Electricity generation	France	100.0	100.0	FC	FC
Gaztransport & Technigaz (GTT)	Engineering	France	40.4	40.4	FC	FC
Tractebel Engineering	Engineering	Belgium	100.0	100.0	FC	FC

3.2 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;
- whether substantive or protective rights are granted to shareholders, particularly in relation to the entity's relevant activities;
- the consequences of a "deadlock" clause;
- 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 (Intrastructures Europe): 74.6%

In addition to the analysis of the shareholder agreement with Société d'Infrastructures Gazières, a subsidiary of *Caisse des Dépôts et Consignations* (CDC), which owns 24.8% of the share capital of GRTgaz, the Group also assessed 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) of May 9, 2011, GRTgaz has been subject to independence rules as concerns 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) in view of its current 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

In the entities in which the Group does not have a 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 vote holders 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 entities in which the Group does not have the majority of the voting rights are Compagnie Nationale du Rhône (49.98%) and Gaztransport & Technigaz (40.4%).

Compagnie Nationale du Rhône (“CNR” – France): 49.98%

The Group holds 49.98% of the share capital of CNR, with CDC holding 33.2%, and the balance (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.

Gaztransport & Technigaz (“GTT” – Others): 40.4%

Since GTT's initial public offering in February 2014, ENGIE has been the largest shareholder in the company with a 40.4% stake, the free float representing around 49% of the share capital. The Group holds the majority of the voting rights exercised at shareholders’ meetings in view of the widely dispersed shareholding structure and the absence of evidence of minority shareholders acting in concert. ENGIE also holds the majority of the seats on the Board of Directors. The Group considers that it exercises *de facto* control over GTT, based on an IFRS 10 criteria.

3.3 Subsidiaries with material non-controlling interests

The following table shows the non-controlling interests in Group entities that are deemed to be material, the respective contributions to equity and net income at December 31, 2018 and December 31, 2017, as well as the dividends paid to non-controlling interests of these significant subsidiaries:

Corporate name	Activity	Percentage interest of non-controlling interests		Net income/(loss) of non-controlling interests		Equity of non-controlling interests		Dividends paid to non-controlling interests	
In millions of euros		Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
GRTgaz Group (Infrastructures Europe, France)	Regulated gas transportation activities and management of LNG terminals	25.4	25.2	99	99	1,133	981	158	97
ENGIE Energía Chile Group (Latin America, Chile)(1)	Electricity distribution and generation - thermal power plants	47.2	47.2	49	45	913	842	25	27
Glow Group (Africa/Asia, Thailand)(2)	Electricity distribution and generation - hydroelectric, wind and thermal power plants	30.9	30.9	96	87	512	465	75	87
ENGIE Brasil Energia Group (Latin America, Brazil)(1)	Electricity distribution and generation	31.3	31.3	170	174	473	563	206	154
ENGIE Romania Group (Europe excluding France & Benelux, Romania)	Distribution of natural gas/Energy sales	49.0	49.0	43	36	512	491	18	12
ENGIE E&P International Group (E&P, France and other countries)(3)	Portfolio of exploration-production assets and oil and gas field operation assets	NA	30.0	24	93	NA	363	38	-
ENGIE Energía Perú (Latin America, Peru)(1)	Electricity distribution and generation - thermal and hydroelectric power plants	38.2	38.2	34	45	376	337	11	17
Gaztransport & Technigaz (Other, France)(1)	Naval engineering, cryogenic membrane containment systems for LNG transportation	59.6	59.6	63	47	339	335	59	59
Other subsidiaries with non-controlling interests				18	162	1,131	1,464	294	227
TOTAL				**595**	**788**	**5,391**	**5,840**	**882**	**680**

(1) The ENGIE Energía Chile, ENGIE Energia Brasil and Glow groups, as well as Gaztransport & Technigaz and ENGIE Energía Perú are listed on the stock markets in their respective countries.

(2) Assets classified as "Assets held for sale" at December 31, 2018 (see Note 5 "Main changes in Group structure").

(3) The disposal of ENGIE E&P International group was finalized on Februarys 15, 2018 (see Note 5 "Main changes in Group structure").

3.3.1 Condensed financial information on subsidiaries with material 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.

In millions of euros	GRTgaz Group		ENGIE Energía Chile Group		Glow Group[(1)]		ENGIE Brasil Energia Group	
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Income statement								
Revenues	2,298	2,266	1,028	895	1,354	1,287	2,017	1,935
Net income/(loss)	389	461	94	85	262	225	544	555
Net income/(loss) Group share	283	342	45	40	165	138	374	381
Other comprehensive income/(loss) – Owners of the parent	(13)	(4)	49	(122)	41	(51)	(119)	(178)
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**270**	**339**	**94**	**(82)**	**206**	**87**	**255**	**203**
Statement of financial position								
Current assets	918	777	364	343	3,278	584	1,045	998
Non-current assets	10,404	10,481	2,700	2,562	(257)	2,330	4,232	3,895
Current liabilities	(921)	(885)	(271)	(303)	(950)	(359)	(907)	(1,460)
Non-current liabilities	(6,198)	(5,910)	(910)	(871)	(835)	(1,363)	(2,983)	(1,759)
TOTAL EQUITY	**4,204**	**4,462**	**1,882**	**1,732**	**1,237**	**1,191**	**1,388**	**1,673**
TOTAL NON-CONTROLLING INTERESTS	**1,133**	**1,196**	**913**	**842**	**512**	**465**	**473**	**563**
Statement of cash flows								
Cash flow from operating activities	1,213	1,074	249	190	421	487	875	797
Cash flow from (used in) investing activities	(493)	(915)	(248)	(428)	(132)	(142)	(851)	(1,551)
Cash flow from (used in) financing activities	(740)	(149)	(15)	55	(534)	(316)	89	770
TOTAL CASH FLOW FOR THE PERIOD[(2)]	**(20)**	**10**	**(14)**	**(183)**	**(245)**	**29**	**113**	**16**

(1) Assets classified as "Assets held for sales" at December 31,2018 (see Note 5 "Main changes in Group structure").
(2) Excluding effects of changes in exchange rates and other.

In millions of euros	ENGIE Romania Group		ENGIE Energía Perú		Gaztransport & Technigaz	
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
Income statement						
Revenues	1,231	1,051	427	502	246	237
Net income/(loss)	87	74	88	117	106	78
Net income/(loss) Group share	44	38	55	72	43	32
Other comprehensive income/(loss) – Owners of the parent	(3)	(13)	27	(66)	-	-
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**41**	**25**	**81**	**6**	**43**	**32**
Statement of financial position						
Current assets	626	517	255	224	319	232
Non-current assets	787	769	1,728	1,678	491	530
Current liabilities	(312)	(240)	(174)	(259)	(166)	(122)
Non-current liabilities	(64)	(57)	(824)	(764)	(74)	(79)
TOTAL EQUITY	**1,037**	**989**	**985**	**879**	**570**	**562**
TOTAL NON-CONTROLLING INTERESTS	**512**	**491**	**376**	**337**	**339**	**335**
Statement of cash flows						
Cash flow from operating activities	109	120	195	323	168	116
Cash flow from (used in) investing activities	(58)	(38)	(19)	(73)	(9)	(6)
Cash flow from (used in) financing activities	(54)	(67)	(144)	(242)	(94)	(95)
TOTAL CASH FLOW FOR THE PERIOD[(1)]	**(3)**	**15**	**33**	**8**	**66**	**14**

(1) Excluding effects of changes in exchange rates and other.

NOTE 4 INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

Accounting standards

The Group accounts for its investments in associates (entities over which the Group has significant influence) 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.

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, 2018 and December 31, 2017 are as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Statement of financial position		
Investments in associates	4,590	5,118
Investments in joint ventures	3,256	2,488
INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**7,846**	**7,606**
Income statement		
Share in net income/(loss) of associates	88	263
Share in net income/(loss) of joint ventures	273	159
SHARE IN NET INCOME/(LOSS) OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**361**	**422**
Statement of comprehensive income		
Share of associates in "Other comprehensive income/(loss)"	132	113
Share of joint ventures in "Other comprehensive income/(loss)"	26	(7)
SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD IN "OTHER COMPREHENSIVE INCOME/(LOSS)"	**158**	**106**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 “Restatement of 2017 comparative data”).

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;
- whether substantive or protective rights are granted to shareholders, particularly in relation 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 decision-making analysis relates to the relevant residual activities of the entity (those that significantly affect the variable returns of the entity);
- the consequences of a “deadlock” clause;
- 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

The significant judgments made in determining the consolidation method to be applied to these project management entities concerned 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 has 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.

SUEZ Group (32.06%)

With effect from July 22, 2013, the date on which the SUEZ shareholders' agreement expired, ENGIE no longer controls SUEZ but exercises significant influence over the company. In particular, this is because: (i) the Group does not have a majority of members on SUEZ's Board of Directors, (ii) at Shareholders' Meetings, although SUEZ's shareholder base is fragmented and ENGIE holds a large interest, past voting shows that ENGIE alone did not have the majority at Ordinary and Extraordinary Shareholders' Meetings between 2010 and 2018 and (iii) the operational transition agreements (essentially relating to a framework agreement governing purchases and IT) were entered into on an arm's length basis.

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 the decisions about its relevant activities, including for example the preparation of the budget and amendments to major contracts, etc., require the unanimous consent of the parties sharing control.

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, 2018.

4.1 Investments in associates

4.1.1 Contribution of material associates and of associates that are not material to the Group taken individually

The table hereafter 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 companies accounted for using the equity method" 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.

Corporate name	Activity	Capacity	Percentage interest 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	
In millions of euros			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
SUEZ Group (Other)	Water and waste processing		32.06	31.96	1,968	2,083	55	100	21	99	130	119
Energia Sustentável Do Brasil (Latin America, Brazil)	Hydro power plant	3,750 MW	40.00	40.00	646	784	(57)	(23)	-	-	-	-
Project management entities in the Middle East (Africa/Asia, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman, Kuwait)(1)	Gas-fired power plants and seawater desalination facilities				1,004	868	97	157	96	(16)	97	96
GASAG (Europe excluding France & Benelux, Germany)	Gas and heat networks		31.57	31.57	261	247	18	14	1	4	4	2
Other investments in associates that are not material taken individually					710	1,136	(25)	14	14	26	104	60
INVESTMENTS IN ASSOCIATES					**4,590**	**5,118**	**88**	**263**	**132**	**113**	**334**	**278**

(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 includes around 40 associates operating thermal power plants with a total installed capacity of 28,020 MW (at 100%) and a further 1,507 MW (at 100%) in capacity under construction. 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 as property, plant and equipment or as financial receivables whenever substantially all of the risks and rewards associated with the assets are transferred to the buyer of the output. This treatment complies with IFRIC 4 and IAS 17. 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%.

The share in net income/(loss) of associates includes a net non-recurring loss for a total amount of €155 million in 2018 (compared to a net non-recurring loss of €43 million in 2017), mainly including changes in the fair value of derivative instruments and disposal gains and losses, net of tax *(see Note 6.2 "Net recurring income Group share")*.

4.1.2 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 items 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 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 millions of euros	Revenues	Net income/ (loss)	Other comprehensive income/ (loss)	Total comprehensive income/ (loss)	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Total equity	% interest of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2018											
SUEZ Group[(1)]	17,331	335	(103)	232	10,872	22,681	11,664	12,896	8,993	32.06	1,968
Energia Sustentável Do Brasil	564	(142)	-	(142)	199	4,388	544	2,428	1,615	40.00	646
Project management entities in the Middle East	4,254	467	406	873	2,572	21,401	3,775	16,263	3,934		1,004
GASAG	1,196	56	3	59	798	1,733	1,508	196	827	31.57	261
AT DECEMBER 31, 2017											
SUEZ Group[(1)]	15,783	296	(195)	101	10,314	22,517	10,920	12,889	9,022	31.96	2,083
Energia Sustentável Do Brasil	789	(58)	(1)	(58)	269	4,976	591	2,695	1,960	40.00	784
Project management entities in the Middle East	4,147	633	87	720	2,512	20,958	3,979	16,219	3,272		868
GASAG	1,106	46	12	58	780	1,676	1,500	173	782	31.58	247

(1) The data indicated in the table for SUEZ correspond to financial information published by SUEZ. Total SUEZ equity attributable to the Group amounts to €6,392 million based on the published financial statements of SUEZ and €6,139 million based on the financial statements of ENGIE. The difference in these amounts mainly reflects the non-inclusion of the share in deeply-subordinated perpetual notes issued by SUEZ in total equity attributable to ENGIE, partly offset by the fair value measurement of the assets and liabilities of SUEZ at the date the Group changed its consolidation method (July 22, 2013).

SUEZ is the only material listed associate. Based on the closing share price at December 31, 2018, the market value of this interest was €2,297 million.

4.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2018 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	-	237	(3)	33	69	4	-
Contassur[(1)]	-	-	-	167	2	-	-
Energia Sustentável Do Brasil	126	-	-	-	76	10	-
Other	29	4	8	17	182	2	1
AT DECEMBER 31, 2018	**154**	**241**	**4**	**217**	**329**	**16**	**1**

(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 €168 million at December 31, 2018 (€159 million at December 31, 2017).

4.2 Investments in joint ventures

4.2.1 Contribution of material joint ventures and of joint ventures that are not material to the Group taken individually

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 entities accounted for using the equity method" 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 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.

Corporate name	Activity	Capacity	Percentage interest of investments in joint ventures		Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures		Other comprehensi-ve income/(loss) of joint ventures		Dividends received from joint ventures	
In millions of euros			Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
National Central Cooling Company "Tabreed" (Africa/Asia, Abu Dhabi)	District cooling networks		40.00	40.00	710	656	40	13	-	-	39	-
EcoÉlectrica (North America, Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	507 MW	50.00	50.00	416	470	34	44	-	-	104	-
Portfolio of power generation assets in Portugal (Europe excluding France & Benelux, Portugal)	Electricity generation	2,895 MW	50.00	50.00	325	329	44	40	1	3	49	135
WSW Energie und Wasser AG (Europe excluding France & Benelux, Germany)	Electricity distribution and generation	229 MW	33.10	33.10	204	192	11	7	-	-	3	3
Tihama Power Generation Co (Africa/Asia, Saudi Arabia)	Electricity generation	1,599 MW	60.00	60.00	163	122	34	2	1	1	-	-
Ohio State Energy Partners (North America)	Services		50,00	50.00	129	117	5	3	5	(2)	4	1
Megal GmbH (Infrastuctures Europe, Germany)	Gas transmission network		49.00	49.00	91	98	6	4	-	-	13	12
Transmisora Eléctrica del Norte (Latin America, Chile)	Electricity transmission line		50.00	50.00	85	66	7	1	-	-	-	-
Other investments in joint ventures that are not material taken individually					1,134	438	92	44	18	(9)	31	36
INVESTMENTS IN JOINT VENTURES					**3,256**	**2,488**	**273**	**159**	**26**	**(7)**	**244**	**188**

The share in net income/(loss) of joint ventures includes non-recurring income of €6 million in 2018 (non-recurring income of €18 million in 2017), resulting chiefly from changes in the fair value of derivatives, impairment losses and disposal gains and losses, net of tax *(see Note 6.2 “Net recurring income Group share”)*.

4.2.2 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.

Information on the income statement and statement of comprehensive income

In millions of euros	Revenues	Deprecia-tion and amortization on intangible assets and property, plant and equipment	Net financial income/ (loss)[1]	Income tax expense	Net income/ (loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)
AT DECEMBER 31, 2018							
National Central Cooling Company "Tabreed"	335	(34)	(37)	-	100	-	100
EcoÉlectrica	280	(63)	2	(3)	68	-	68
Portfolio of power generation assets in Portugal	749	(65)	(31)	(37)	106	3	109
WSW Energie und Wasser AG	856	(11)	(3)	(19)	35	-	35
Tihama Power Generation Co	111	(5)	(24)	(8)	56	1	57
Ohio State Energy Partners	52	-	(33)	-	10	11	21
Megal GmbH	124	(63)	(4)	2	12	-	12
Transmisora Eléctrica del Norte	75	-	(33)	(5)	14	16	30
AT DECEMBER 31, 2017							
National Central Cooling Company "Tabreed"[2]	121	(12)	(15)	-	34	-	34
EcoÉlectrica	301	(72)	(2)	(4)	89	-	89
Portfolio of power generation assets in Portugal	760	(66)	(36)	(20)	100	12	112
WSW Energie und Wasser AG	879	(13)	(5)	(16)	21	1	23
Tihama Power Generation Co	120	(5)	(26)	(5)	3	2	4
Ohio State Energy Partners	27	-	(16)	-	6	(5)	1
Megal GmbH	115	(59)	(4)	2	9	-	9
Transmisora Eléctrica del Norte	7	-	4	(1)	3	(8)	(5)

(1) Interest income is not material.

(2) These data correspond to the amount at 100% from the date acquisition by ENGIE (August 16, 2017).

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	% interest of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2018										
National Central Cooling Company "Tabreed"	65	124	2,574	-	173	816	-	1,775	40.00	710
EcoÉlectrica	24	107	755	3	27	-	23	833	50.00	416
Portfolio of power generation assets in Portugal(1)	231	568	1,305	287	178	763	115	761	50.00	325
WSW Energie und Wasser AG(2)	12	148	778	55	84	101	103	596	33.10	204
Tihama Power Generation Co	129	140	488	61	40	370	15	271	60.00	163
Ohio State Energy Partners	16	8	1,039	(6)	7	804	-	257	50.00	129
Megal GmbH	-	13	752	10	55	446	70	185	49.00	91
Transmisora Eléctrica del Norte	66	30	773	75	3	621	-	170	50.00	85
AT DECEMBER 31, 2017										
National Central Cooling Company "Tabreed"	101	108	2,351	-	160	760	-	1,641	40.00	656
EcoÉlectrica	97	112	773	3	16	-	23	940	50.00	470
Portfolio of power generation assets in Portugal	245	741	1,275	315	168	886	130	762	50.00	329
WSW Energie und Wasser AG	13	117	769	40	98	105	97	560	33.10	192
WSW Energie und Wasser AG	77	20	626	50	52	404	14	204	60.00	122
Tihama Power Generation Co	25	0	931	717	1	6	-	234	50.00	117
Megal GmbH	5	6	765	4	50	446	77	200	49.00	98
Transmisora Eléctrica del Norte	21	103	849	2	5	836	-	131	50.00	66

(1) Equity Group share amounts to €649 million for the Portuguese sub-group. The share of this €649 million attributable to ENGIE is therefore €325 million.

(2) Equity Group share amounts to €586 million for the WSW Energie und Wasser AG sub-group. The share of this €586 million attributable to ENGIE is therefore €193million. This amount is increased by an additional share of €11 million in respect of a non-controlling interest held directly by ENGIE in a subsidiary of this sub-group (and is therefore not included in the €586 million in equity attributable to the owners of the parent).

4.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2018 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	-	123	-	-	-	23	-
Portfolio of power generation assets in Portugal	-	-	-	-	128	-	-
WSW Energie und Wasser AG	1	43	-	6	-	-	-
Megal GmbH	65	-	-	-	-	5	-
Futures Energies Investissements Holding	2	17	4	-	157	-	-
Other	36	21	6	10	116	3	8
AT DECEMBER 31, 2018	**104**	**205**	**10**	**17**	**400**	**32**	**8**

4.3 Other information on investments accounted for using the equity method

4.3.1 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 €171 million in 2018 (€218 million in 2017). Unrecognized losses relating to fiscal year 2018 amounted to €18 million.

These unrecognized losses mainly correspond to (i) the negative fair value of derivative instruments designated as interest rate and commodity hedges ("Other comprehensive income/(loss)") contracted by associates in Asia Pacific in connection with the financing of construction projects for power generation plants and (ii) cumulative losses arising on the Tirreno Power joint venture.

4.3.2 Commitments and guarantees given by the Group in respect of entities accounted for using the equity method

At December 31, 2018, the main commitments and guarantees given by the Group in respect of entities accounted for using the equity method concern the following two companies and groups of companies:

- Energia Sustentável do Brasil ("Jirau"), for an aggregate amount of BRL 4,341 million (€975 million).

  At December 31, 2018, the amount of loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 10,852 million (€2,439 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium;

- the project management entities in the Middle East and Africa, for an aggregate amount of €1,035 million.

  Commitments and guarantees given by the Group in respect of these project management entities chiefly correspond to:
  - an equity contribution commitment (capital/subordinated debt) for €147 million. These commitments only concern entities acting as holding companies for projects in the construction phase,
  - letters of credit to guarantee debt service reserve accounts for an aggregate amount of €237 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. 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 €261million,
  - performance bonds and other guarantees for an amount of €390 million.

NOTE 5 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 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 the 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.

Assets or group 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.

5.1 Disposals carried out in 2018

As part of its transformation plan, on February 25, 2016, the Group presented a €15 billion asset disposal program in order to reduce its exposure to high CO_2 emitting activities and merchant activities over the 2016-2018 period.

The table below shows the impact of the main disposals and sale agreements of 2018 on the Group’s net debt, excluding partial disposals with respect to DBSO[(1)] activities:

In millions of euros	Disposal price	Reduction in net debt
Disposal of the Loy Yang B coal power plant (Australia)	471	330
Disposal of the exploration-production activities	921	1,913
Disposal of gas distribution activities (Hungary)	147	198
Disposal of LNG activities	1,202	1,144
Other disposals that are not material taken individually	285	353
Classification of Glow activities under "Assets held for sale" - Thaïland	-	723
Classification of Langa activities under "Assets held for sale" - France	-	270
TOTAL	**3,026**	**4,931**

The €4,931 million reduction in net debt at December 31, 2018 is in addition to the €8,976 million decrease previously recognized at December 31, 2017 as part of the asset disposal program, representing a total of €13,907 million to date. Additional disposals in the process of completion at December 31, 2018 are described in Note 5.2.

5.1.1 Disposal of the Loy Yang B coal-fired power plant (Australia)

On January 15, 2018, the Group completed the sale of the Loy Yang B coal-fired power plant in Australia, for which it received a payment of €471 million corresponding to the sale price of the entire interest in Loy Yang B. An amount corresponding to 30% of this price was paid to Mitsui in the form of dividends.

The transaction reduced the Group's net debt by €624 million (the impact of the derecognition of Loy Yang B's net debt totaling €294 million following its classification under “Assets held for sale” at December 31, 2017, plus the payment of €330 million received in 2018 for the 70% interest sold). The loss on disposal totaled €87 million for 2018, mainly

(1) Develop, Build, Share and Operate.

corresponding to the reclassification from other comprehensive income to the income statement of translation adjustments and net investment hedges relating to the portfolio.

5.1.2 Disposal of the exploration-production business

On February 15, 2018, the Group completed the sale of its 70% interest in ENGIE E&P International (EPI) to Neptune Energy and received a payment of €921 million, corresponding to the sale price of all of its shares.

The combined effects of the transaction and of the cash generated by these activities since January 1, 2018 have reduced the Group's net debt by €1,913 million. The disposal gain before tax, recognized in "Net income/(loss) relating to discontinued operations" (*see Note 5.2.3*), amounted to €65 million in 2018.

Following the transaction, the Group still holds a residual 46% interest in ENGIE E&P Touat B.V. (Other sector), which holds a 65% stake in the Touat gas field under development in Algeria. This interest is now accounted for using the equity method.

5.1.3 Disposal of the gas distribution business (Hungary)

On January 11, 2018, following the success of the negotiations initiated in the second half of 2015 with the Hungarian State, the Group completed the sale of its entire interest in its Hungarian gas distribution subsidiary Égaz-Dégaz to Nemzeti Közmuvek Zártköruen Muködö Résvénytársaság (NKM) - a Hungarian state-owned company. The transaction reduced the Group's net debt by €198 million, with no material disposal gain.

5.1.4 Disposal of ENGIE's liquefied natural gas (LNG) activities

On July 13, 2018, the Group completed the sale of its upstream LNG activities to Total: liquefaction, shipping (including the Gazocéan subsidiary) and international LNG trading operations.

The combined effects of the transaction and of the cash generated by these LNG upstream activities since January 1, 2018 have reduced the Group's net debt by €1,144 million excluding any additional future payments to be received. The disposal gain before tax, recognized in "Net income/(loss) relating to discontinued operations" (*see Note 5.2.3*), amounted to €1,193 million at December 31, 2018.

5.2 Assets held for sale and discontinued operations

Total "Assets classified as held for sale" and total "Liabilities directly associated with assets classified as held for sale" amounted to €3,798 million and €2,130 million, respectively, at December 31, 2018.

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Property, plant and equipment, net	2,661	5,307
Other assets	1,137	1,380
TOTAL ASSETS CLASSIFIED AS HELD FOR SALE	**3,798**	**6,687**
of which Assets relating to discontinued operations	*-*	*5,471*
Borrowings and debt	1,019	418
Other liabilities	1,111	2,953
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH ASSETS CLASSIFIED AS HELD FOR SALE	**2,130**	**3,371**
of which Liabilities directly associated with assets relating to discontinued operations	*-*	*2,705*

All assets classified as held for sale at December 31, 2017 (exploration-production activities and the Loy Yang B power plant in Australia) were sold in 2018 (*see Note 5.1, Disposals carried out in 2018*).

At December 31, 2018 these assets and liabilities related to Glow's activities in Thailand, the solar parks run by Langa group in France and renewable energy assets in Mexico.

5.2.1 Disposal of ENGIE's interest in Glow

On June 20, 2018, ENGIE signed a share purchase agreement with Thailand-based Global Power Synergy Public Company Ltd. (GPSC) for the sale of its 69.1% interest in Glow, an independent power producer listed on the Stock Exchange of Thailand (Africa/Asia segment) and the Group classified it as an asset held for sale at the same date. The transaction translates into net proceeds of €2.5 billion for ENGIE and is expected to result in a total €3.2 billion reduction in ENGIE's consolidated net debt.

This reclassification under "Assets held for sale" reduced the Group's net debt by €723 million at December 31, 2018. Given the expected capital gain from the sale, no value adjustments were made at December 31, 2018. Glow's contribution to "Net income/(loss) Group share" was €165 million for 2018 and €138 million for 2017.

The transaction is expected to be completed during first-half 2019. The disposal gain is expected to be in the range of €1.5 billion.

5.2.2 Langa group asset disposal program

On December 21, 2018, the Group signed a sale agreement with Predica for the solar parks operated or under construction by Langa (France segment) to FEIH2 (a joint venture 80%-owned by Predica and 20%-owned by the ENGIE Group.

At December 31, 2018, the Group considered that the sale of these assets was highly probable in view of the progress made in the divestiture process and, as a result, classified the assets under "Assets held for sale". In view of the expected disposal gain, no value adjustments were recorded at December 31, 2018.

This reclassification under "Assets held for sale" reduced the Group's net debt by €270 million at December 31, 2018. The assets' contribution to net income Group share in 2018 was marginal.

The transaction is expected to be completed in fourth-quarter 2019.

5.2.3 Financial information on discontinued operations

Income from discontinued operations

In millions of euros	Dec 31, 2018	Dec 31, 2017
Revenues from contracts with customers	2,163	5,021
Revenues from other contracts	65	52
REVENUES	**2,229**	**5,073**
Purchases	(2,102)	(3,326)
Personnel costs	(35)	(237)
Depreciation, amortization and provisions	(18)	(86)
Other operating expenses	(44)	(322)
Other operating income	(5)	16
CURRENT OPERATING INCOME	**25**	**1,119**
Share in net income of entities accounted for using the equity method	2	11
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**27**	**1,130**
Mark-to-market on commodity contracts other than trading instruments	(221)	(381)
Impairment losses	(1)	(138)
Restructuring costs	-	(3)
Changes in scope of consolidation	1,258	(15)
Other non-recurring items	(2)	369
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**1,062**	**961**
Financial expenses	(20)	(88)
Financial income	7	27
NET FINANCIAL INCOME/(LOSS)	**(14)**	**(61)**
Income tax expense	21	(533)
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**1,069**	**366**
Net income/(loss) relating to discontinued operations, Group share	**1,045**	**273**
Non-controlling interests relating to discontinued operations	**24**	**93**

Income from discontinued operations relates to ENGIE's upstream LNG activities (*see Note 5.1.4*) and to exploration production activities, including the disposal gain (*see Note 5.1.2*).

Revenues generated by discontinued operations (LNG and EPI) with ENGIE Group companies totaled €880 million in 2018 (versus €1,959 million in 2017).

As required by IFRS 5, ENGIE has no longer recognized any depreciation and amortization expense on the property, plant and equipment and intangible assets of LNG activities (as of April 1, 2018) and of EPI activities (as of May 11, 2017). The savings generated by this change amounted to €36 million before tax (primarily relating to EPI) in 2018.

Net income relating to discontinued operations also includes €22 million of costs incurred specifically in connection with the LNG transaction.

Comprehensive income from discontinued operations

In millions of euros	Dec. 31, 2018	Dec. 31, 2018 Owners of the parent	Dec. 31, 2018 Non-controlling interests	Dec. 31, 2017	Dec. 31, 2017 Owners of the parent	Dec. 31, 2017 Non-controlling interests
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**1,069**	**1,045**	**24**	**366**	**273**	**93**
Commodity cash flow hedges	80	52	28	246	211	34
Deferred tax on items above	(43)	(33)	(10)	(88)	(76)	(12)
Share of entities accounted for using the equity method in recyclable items, net of tax	46	46	-	(10)	(10)	-
Translation adjustments	(43)	(23)	(19)	(268)	(193)	(75)
TOTAL RECYCLABLE ITEMS	**37**	**39**	**(3)**	**(121)**	**(68)**	**(53)**
Actuarial gains and losses	(2)	-	(2)	(2)	(2)	(1)
Deferred tax on items above	(1)	(1)	-	7	5	3
TOTAL NON-RECYCLABLE ITEMS	**(3)**	**(2)**	**(2)**	**5**	**3**	**2**
TOTAL COMPREHENSIVE INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**1,102**	**1,083**	**19**	**250**	**208**	**42**

Comprehensive income from discontinued operations relates to ENGIE's upstream LNG activities (*see Note 5.1.4*) and to exploration-production activities (*see Note 5.1.2*).

Cash flows from discontinued operations

In millions of euros	Dec 31, 2018	Dec 31, 2017
NET INCOME/(LOSS)	**1,069**	**366**
Cash generated from operations before income tax and working capital requirements	**42**	**1,224**
Tax paid	(53)	(460)
Change in working capital requirements	**28**	**(288)**
CASH FLOW FROM OPERATING ACTIVITIES	**17**	**476**
Acquisitions of property, plant and equipment and intangible assets	(51)	(601)
Loss of controlling interests in entities, net of cash and cash equivalent sold	(522)	-
Disposals of equity and debt instruments	-	412
Other	(710)	(53)
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	**(1,282)**	**(242)**
Cash flow from (used in) financing activities excluding intercompany transactions	1,284	(49)
Intercompany transactions with ENGIE on borrowings	(7)	(223)
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	**1,278**	**(272)**
Effects of changes in exchange rates and other	3	(11)
TOTAL CASH FLOW FOR THE PERIOD	**15**	**(49)**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	**15**	**65**
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**-**	**15**

Cash flows from discontinued operations relate to ENGIE's upstream LNG activities (*see Note 5.1.4*) and to exploration-production activities (*see Note 5.1.2*).

5.3 Acquisitions carried out in 2018

Various other acquisitions, equity transactions and disposals took place in 2018. They included the purchase of (i) companies in the renewable energy sector (wind and solar power) and in the services sector (microgrid, heating and cabling network) in the United States, (ii) the Langa group (an independent producer in solar, wind, biogas and biomass power in the renewable energy sector) as well as the purchase of a majority interest in Electro Power Systems (EPS, a company listed on Euronext which specializes in energy storage solutions and microgrids that enable intermittent renewable sources to be transformed into a stable power source) in France, and (iii) Priora FM SA (an airport services company) in Switzerland. In addition, on December 6, 2018, the Group finalized its acquisition of Compañía Americana de Multiservicios (CAM), the leading installation, operation and maintenance services provider in the electricity and telecommunications sectors in Latin America.

NOTE 6 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 aggregates of the IFRS consolidated financial statements.

6.1 EBITDA

The reconciliation between EBITDA and current operating income after share in net income of entities accounted for using the equity method is as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017 (1)
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,126**	**5,172**
Net depreciation and amortization/Other	3,882	3,966
Share-based payments (IFRS 2)	79	37
Non-recurring share in net income of entities accounted for using the equity method	149	24
EBITDA	**9,236**	**9,199**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

6.2 Net recurring income Group share

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 or non-recurring items.

This financial indicator therefore excludes:

- all items presented between the lines "Current operating income after share in net income of entities accounted for using the equity method" and "Income/(loss) from operating activities", i.e. "Mark-to-market on commodity contracts other than trading instruments", "Impairment losses", "Restructuring costs", "Changes in scope of consolidation" and "Other non-recurring items". These items are defined in Note 10 "Income/(loss) from operating activities"
- the following components of net financial income/(loss): the impact of debt restructuring, compensation payments on the early unwinding of derivative instruments net of the reversal of the fair value of these derivatives that were settled early, changes in the fair value of derivative instruments which do not qualify as hedges under IFRS 9 – *Financial Instruments: Recognition and Measurement,* as well as the ineffective portion of derivative instruments that qualify as hedges;
- the income tax impact of the items described above, determined using the statutory income tax rate applicable to the relevant tax entity;
- the recovery from the French State of the 3% tax on dividends in 2017 and the impact of tax rate changes in France and in the United States and other non-recurring measures in 2017 *(see Note 12.1.2)*;
- net non-recurring items included in "Share in net income of entities accounted for using the equity method". The excluded items correspond to the non-recurring items as defined above.

The reconciliation of net income/(loss) with net recurring income Group share is as follows:

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017[1]
NET INCOME/(LOSS) GROUP SHARE		**1,033**	**1,320**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS, GROUP SHARE		**1,045**	**273**
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS, GROUP SHARE		**(12)**	**1,047**
Non-controlling interests relating to continued operations		572	695
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS		**560**	**1,741**
Reconciliation items between CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD and INCOME/(LOSS) FROM OPERATING ACTIVITIES		**2,481**	**2,437**
Mark-to-market on commodity contracts other than trading instruments	*10*	*223*	*(29)*
Impairment losses	*10*	*1,798*	*1,298*
Restructuring costs	*10*	*162*	*669*
Changes in scope of consolidation	*10*	*150*	*(752)*
Other non-recurring items	*10*	*147*	*1,252*
Other adjusted items		**207**	**(1,198)**
Ineffective portion of derivatives qualified as fair value hedges	*11.3*	*3*	*2*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	*11.2*	*(7)*	*98*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*11.3*	*183*	*187*
Non recurring income/(loss) from debt instruments and equity instruments	*11.3*	*26*	*-*
Recovery from the French State of the 3% tax on dividends		*-*	*(408)*
Tax rate changes in France, in the United States and other non-recurring measures		*-*	*(479)*
Other adjusted tax impacts		*(147)*	*(622)*
Non-recurring income included in share in net income of entities accounted for using the equity method		*149*	*24*
NET RECURRING INCOME RELATING TO CONTINUED OPERATIONS		**3,248**	**2,980**
Net recurring income relating to continued operations attributable to non-controlling interests		790	746
NET RECURRING INCOME RELATING TO CONTINUED OPERATIONS, GROUP SHARE		**2,458**	**2,233**
Net recurring income relating to discontinued operations, Group share[2]		(33)	285
NET RECURRING INCOME GROUP SHARE		**2,425**	**2,518**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 “Restatement of 2017 comparative data”).

(2) The reconciliation of “net income/(loss) relating to discontinued operations, Group share” with “net recurring income relating to discontinued operations, Group share” at December 31, 2018 is mainly due to the gain on the disposal of the exploration-production activities, to the MtM on commodity contracts other than trading instruments recorded by upstream LNG activities and to miscellaneous disposal costs.

6.3 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, 2018	Dec. 31, 2017[1]
(+)	Property, plant and equipment and intangible assets, net		55,635	57,566
(+)	Goodwill		17,809	17,285
	(-)	*Goodwill Gaz de France - SUEZ and International Power* [2]	*(7,610)*	*(7,715)*
(+)	IFRIC 4 and IFRIC 12 receivables		1,550	1,548
(+)	Investments in entities accounted for using the equity method		7,846	7,606
	(-)	*Goodwill arising on the International Power combination* [2]	*(151)*	*(144)*
(+)	Trade and other receivables, net		15,613	13,127
	(-)	*Margin calls* [2, 3]	*(1,669)*	*(1,110)*
(+)	Inventories		4,158	4,161
(+)	Assets from contracts with customers		7,411	6,930
(+)	Other current and non-current assets		9,811	9,073
(+)	Deferred tax		(4,349)	(4,361)
	(+)	*Cancellation of deferred tax on other recyclable items* [2]	*(247)*	*(236)*
(-)	Provisions		(21,813)	(21,715)
	(+)	*Actuarial gains and losses in shareholders' equity (net of deferred tax)* [2]	*2,637*	*2,438*
(-)	Trade and other payables		(19,759)	(16,404)
	(+)	*Margin calls* [2, 3]	*1,681*	*473*
(-)	Liabilities from contracts with customers		(3,634)	(3,575)
(-)	Other current and non-current liabilities		(13,507)	(12,579)
INDUSTRIAL CAPITAL EMPLOYED			**51,412**	**52,370**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

(2) 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.

(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 reduce its exposure to counterparty risk on commodity transactions.

6.4 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, 2018	Dec. 31, 2017[1]
Cash generated from operations before income tax and working capital requirements	8,464	8,150
Tax paid	(757)	(905)
Change in working capital requirements	149	1,613
Interest received on non-current financial assets	26	75
Dividends received on non-current financial assets	52	171
Interest paid	(727)	(744)
Interest received on cash and cash equivalents	79	107
Change in financial assets at fair value through income	(289)	(197)
(+) Change in financial assets at fair value through income recorded in the statement of financial position and other	*303*	*238*
CASH FLOW FROM OPERATIONS (CFFO)	**7,300**	**8,509**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

6.5 Capital expenditures (CAPEX)

The reconciliation of capital expenditures (CAPEX) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]
Acquisitions of property, plant and equipment and intangible assets	6,202	5,778
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	983	692
(+) Cash and cash equivalents acquired	*83*	*30*
Acquisitions of investments in entities accounted for using the equity method and joint operations	338	1,311
Acquisitions of equity and debt instruments	283	247
Change in loans and receivables originated by the Group and other	251	856
(+) Other	*11*	*3*
Change in ownership interests in controlled entities	18	(1)
(+) Payments received in respect of the disposal of non-controlling interests	*-*	*222*
TOTAL CAPITAL EXPENDITURE (CAPEX)	**8,169**	**9,137**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

6.6 Net debt

Net debt is presented in Note 17.3 "Net debt".

6.7 Economic net debt

Economic net debt is as follows:

In millions of euros	Notes	Dec. 31, 2018	Dec. 31, 2017[(1)]
NET DEBT	17	**21,102**	**22,520**
Internal debt of discontinued operations	17	-	1,732
NET DEBT (excluding internal debt of discontinued operations)		**21,102**	**20,788**
Future minimum operating lease payments	23	2,087	3,463
(-) discontinued operations		*-*	*(1,132)*
Provisions for back-end of the nuclear fuel cycle	20	6,170	5,914
Provisions for dismantling of plant and equipment	20	6,081	5,728
Provisions for site rehabilitation	20	222	313
Post-employment benefit - Pension	21	1,970	1,763
(-) discontinued operations		*-*	*(14)*
(-) Infrastructures regulated companies		*60*	*40*
Post-employment benefit - Reimbursement rights	21	(167)	(158)
Post-employment benefit - Others benefits	21	4,293	4,278
(-) discontinued operations		*-*	(34)
(-) Infrastructures regulated companies		*(2,572)*	(2,420)
Deferred tax assets for pension and related obligations	12	(1,374)	(1,318)
(-) discontinued operations		*-*	11
(-) Infrastructures regulated companies		*601*	578
Plan assets relating to nuclear provisions, inventories of uranium and a receivable of Electrabel towards EDF Belgium	17 & 27	(2,883)	(2,672)
ECONOMIC NET DEBT		**35,590**	**35,127**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

NOTE 7 SEGMENT INFORMATION

7.1 Operating segments and reportable segments

ENGIE is organized into 23 Business Units (BUs) or operating segments primarily based on a region-centered approach within a single country or group of countries. Each Business Unit corresponds to an "operating segment" whose operational and financial performance is regularly reviewed by the Group's Executive Committee, which is the Group’s “chief operating decision maker” within the meaning of IFRS 8.

These operating segments are grouped into nine reportable segments to present the Group's segment information: North America, Latin America, Africa/Asia, Benelux, France, Europe excluding France & Benelux, Infrastructures Europe, GEM & LNG and Other.

Exploration & Production (E&P) and LNG have been sold (see Note 5 “*Main changes in Group structure*”). As a result, the reportable segment “GEM & LNG” has been renamed “GEM” and from now on only includes the activities of the GEM Business Unit.

7.1.1 Description of reportable segments

- **North America**: includes power generation, energy services and natural gas and electricity sales activities in the United States, Canada and Puerto Rico.
- **Latin America**: groups together the activities of (i) the Brazil BU and (ii) the Latin America BU (Argentina, Chile, Mexico and Peru). The subsidiaries concerned are involved in the centralized power generation and gas chain businesses, and energy services.
- **Africa/Asia**: groups together the activities of the following BUs: (i) Asia-Pacific (Australia, New Zealand, Thailand, Singapore, Indonesia and Laos), (ii) China, (iii) Africa (Morocco, South Africa) and (iv) the Middle East, South and Central Asia and Turkey (including India and Pakistan). In all of these regions, the Group is active in electricity generation and sales, gas distribution and sales, energy services and seawater desalination in the Arabian peninsula.
- **Benelux**: includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation using its nuclear power plants and renewable power generation facilities, (ii) natural gas and electricity sales and (iii) energy services.
- **France**: groups together the activities of the following BUs: (i) France BtoB: energy sales and services for buildings and industry, cities and regions and major infrastructures, (ii) France BtoC: sales of energy and related services to individual and professional customers, (iii) France Renewable Energy: development, construction, financing, operation and maintenance of all renewable power generation assets in France, and (iv) France Networks, which designs, finances, builds and operates decentralized energy production and distribution facilities (heating and cooling networks).
- **Europe excluding France & Benelux**: groups together the activities of the following BUs: (i) United Kingdom (management of renewable power generation assets and the portfolio of distribution assets, supply of energy services and solutions, etc.) and (ii) North, South and Eastern Europe (sales of natural gas and electricity and related energy services and solutions, operation of renewable power generation assets, management of distribution networks).
- **Infrastructures Europe**: groups together the GRDF, GRTgaz, Elengy and Storengy BUs, which operate natural gas transportation, storage and distribution networks and facilities, and LNG terminals, mainly in France and Germany. They also sell access rights to these infrastructures to third parties.
- **GEM**: the aim of the GEM BU is to manage and optimize the Group's portfolios of physical and contractual assets (excluding gas infrastructures), particularly on the European market, on behalf of the BUs that hold power generation assets. It is also responsible for sales of energy to major pan-European and national industrial clients, and leverages its expertise in the energy-related financial markets to provide solutions to third parties.
- **Other**: includes the activities of the following BUs: (i) Generation Europe, comprising the Group's thermal power generation activities in Europe, (ii) Tractebel (engineering companies specializing in energy, hydraulics and infrastructures), (iii) GTT (specialized in the design of cryogenic membrane confinement systems for sea

transportation and storage of LNG, both on land and at sea), as well as the Group's holding and corporate activities which include the entities centralizing the Group's financing requirements, energy sales to BtoB in France (*Entreprises & Collectivités*) and the contribution of the associate SUEZ.

The main commercial relationships between the reportable segments are as follows:

- relationships between the "Infrastructures Europe" reportable segment and the users of these infrastructures, i.e. the "GEM", "France" and "Other" (E&C) reportable segments: services relating to the use of the Group's gas infrastructures in France are billed based on regulated fees applicable to all network users;
- relationships between the "GEM" reportable segment and the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: the "GEM" reportable segment manages the Group's natural gas supply contracts and sells gas at market prices to commercial companies within the "Other" (E&C), "France", "Benelux" and "Europe excluding France & Benelux" reportable segments. As regards electricity, GEM manages and optimizes the power stations and sales portfolios on behalf of entities that hold power generation assets and deducts a percentage of the energy margin in return for providing these services. The revenues and margins related to power generation activities (minus the percentage deducted by GEM) are reported by the segments that hold power generation assets ("France", "Benelux", "Europe excluding France & Benelux" and "Generation Europe" within the "Other" reportable segment);
- relationships between the "Generation Europe" segment, which is part of the "Other" reportable segment, and the commercial entities in the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: a portion of the power generated by thermal assets within the "Generation Europe" BU is sold to commercial entities from these segments at market prices.

Due to the variety of its businesses and their geographical location, the Group serves a very diverse range of situations and customer types (industry, local authorities and individual customers). Accordingly, no external customer represents individually 10% or more of the Group's consolidated revenues.

7.2 Key indicators by reportable segment

Key indicators by reportable segments (except for 2017 industrial capital employed), presented hereafter, no longer take into account the contribution of activities classified as "Discontinued activities" in accordance with IFRS 5 (*see Note 5 "Main changes in Group structure"*). In addition, comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (*see Note 2 "Restatement of 2017 comparative data"*).

REVENUES

	Dec. 31, 2018			Dec. 31, 2017		
In millions of euros	External revenues	Intra-Group Revenues	Total	External revenues	Intra-Group Revenues	Total
North America	3,383	62	3,445	2,964	51	3,015
Latin America	4,639	-	4,639	4,383	-	4,383
Africa/Asia	4,014	1	4,016	3,939	-	3,940
Benelux	6,690	450	7,140	6,771	976	7,748
France	15,183	2	15,185	14,157	(86)	14,072
Europe excluding France & Benelux	9,527	128	9,655	8,831	155	8,986
Infrastructures Europe	5,694	1,166	6,859	5,446	1,267	6,712
GEM	6,968	6,077	13,045	7,638	7,128	14,766
Others	4,498	1,943	6,440	5,445	1,836	7,281
Elimination of internal transactions	-	(9,829)	(9,829)	-	(11,328)	(11,328)
TOTAL REVENUES	**60,596**	**-**	**60,596**	**59,576**	**-**	**59,576**

EBITDA

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	224	224
Latin America	1,775	1,709
Africa/Asia	1,122	1,272
Benelux	(186)	550
France	1,669	1,461
Europe excluding France & Benelux	679	650
Infrastructures Europe	3,499	3,386
GEM	240	(188)
Others	213	136
TOTAL EBITDA	**9,236**	**9,199**

DEPRECIATION AND AMORTIZATION

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	(72)	(53)
Latin America	(416)	(432)
Africa/Asia	(134)	(244)
Benelux	(576)	(558)
France	(628)	(606)
Europe excluding France & Benelux	(201)	(201)
Infrastructures Europe	(1,479)	(1,444)
GEM	(39)	(38)
Others	(337)	(391)
TOTAL DEPRECIATION AND AMORTIZATION	**(3,882)**	**(3,966)**

SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	75	78
Latin America	(25)	(17)
Africa/Asia	166	191
Benelux	7	5
France	1	8
Europe excluding France & Benelux	45	36
Infrastructures Europe	12	9
GEM	(5)	(4)
Others	84	116
Of which share in net income of SUEZ	*55*	*100*
TOTAL SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**361**	**422**

Associates and joint ventures account for €88 million and €273 million respectively of share in net income of entities accounted for using the equity method at December 31, 2018 (compared to €263 million and €159 million at December 31, 2017).

CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	151	174
Latin America	1,355	1,277
Africa/Asia	893	1,016
Benelux	(765)	(11)
France	1,034	869
Europe excluding France & Benelux	473	434
Infrastructures Europe	2,016	1,941
GEM	199	(229)
Others	(232)	(300)
TOTAL CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,126**	**5,172**

INDUSTRIAL CAPITAL EMPLOYED

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	2,494	1,718
Latin America	9,897	9,281
Africa/Asia	3,553	5,186
Benelux	(3,759)	(3,019)
France	6,300	5,890
Europe excluding France & Benelux	5,092	5,022
Infrastructures Europe	19,802	19,914
GEM (2018) / GEM & LNG (2017)	1,102	929
Others	6,930	7,447
Of which SUEZ equity value	*2,018*	*2,110*
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**51,412**	**52,370**

CAPITAL EXPENDITURE (CAPEX)

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
North America	974	316
Latin America	1,758	2,241
Africa/Asia	616	887
Benelux	925	694
France	1,322	1,067
Europe excluding France & Benelux	372	636
Infrastructures Europe	1,619	1,718
GEM	45	346
Others	538	1,232
TOTAL CAPITAL EXPENDITURE (CAPEX)	**8,169**	**9,136**

7.3 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, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017
France	24,983	25,251	30,542	30,310
Belgium	5,961	5,921	(3,254)	(2,233)
Other EU countries	15,448	14,583	7,188	7,250
Other European countries	820	1,100	386	425
North America	3,865	3,499	2,881	2,188
Asia, Middle East & Oceania	4,936	4,913	3,329	5,264
South America	4,197	4,040	9,523	9,091
Africa	385	271	816	74
TOTAL	**60,596**	**59,576**	**51,412**	**52,370**

NOTE 8 REVENUES

8.1 Revenues

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]
Revenues from contracts with customers	56,388	53,073
Revenues from other contracts	4,208	6,503
REVENUES	**60,596**	**59,576**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

Realized but not yet metered revenues (so called un-metered revenues) mainly relate to France and Belgium for an amount of €3,108 million at December 31, 2018 (€3,034 at December 31, 2017).

8.1.1 Revenues from contracts with customers

Accounting standards

Revenues from contracts with customers concern revenues from contracts that fall within the scope of IFRS 15. 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 frame is carried out to determine whether the distribution or transportation services invoiced to the customers have to be excluded from the revenue 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: who is primarily responsible for fulfillment of the distribution or transportation services? Has the energy provider 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), facility management (FM) and other services**
  Constructions and installations 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.

O&M contracts generally require the Group to perform services ensuring the availability of assets generating energy. 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.
FM generally involves managing and integrating a great number of different services, outsourced by the customers. The consideration due to FM suppliers can either be fixed or variable depending on the number of hours or on another indicator, irrespective of the nature of the services provided. Hence, the related revenues are recognized according to the percentage of completion on the basis of the costs incurred or of the number of hours performed.

The table below shows a breakdown of revenues by type of accounting principles:

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, O&M, FM and other services	Revenues from contracts with customers	Revenues from other contracts	Dec. 31, 2018
North America	592	1,858	-	900	3,350	33	**3,383**
Latin America	461	3,522	322	197	4,501	138	**4,639**
Africa/Asia	452	2,605	31	806	3,894	121	**4,014**
Benelux	1,341	2,143	14	3,038	6,537	153	**6,690**
France	3,164	4,040	105	7,675	14,983	200	**15,183**
Europe excluding France & Benelux	1,901	3,425	233	3,798	9,357	170	**9,527**
Infrastructures Europe	155	-	5,092	200	5,447	247	**5,694**
GEM	2,938	1,135	113	-	4,186	2,782	**6,968**
Others	1,113	1,925	167	927	4,133	365	**4,498**
TOTAL REVENUES	**12,116**	**20,654**	**6,077**	**17,540**	**56,388**	**4,208**	**60,596**

In millions of euros	Sales of gas	Sales of electricity and other energies	Sales of services linked to infrastructures	Constructions, installations, O&M, FM and other services	Revenues from contracts with customers	Revenues from other contracts	Dec. 31, 2017
North America	411	1,913	1	604	2,928	36	**2,964**
Latin America	399	3,477	279	144	4,300	83	**4,383**
Africa/Asia	455	2,405	53	695	3,608	332	**3,939**
Benelux	1,210	1,984	33	2,935	6,162	609	**6,771**
France	3,296	3,302	91	7,177	13,866	292	**14,157**
Europe excluding France & Benelux	1,756	3,044	303	3,377	8,480	351	**8,831**
Infrastructures Europe	227	-	4,668	269	5,165	281	**5,446**
GEM	2,375	1,450	176	3	4,003	3,635	**7,638**
Others	1,422	2,085	85	971	4,562	883	**5,445**
TOTAL REVENUES	**11,551**	**19,659**	**5,688**	**16,176**	**53,073**	**6,503**	**59,576**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

8.1.2 Revenues from other contracts

Accounting standards

If it is not possible to conclude from the contractual analysis that the contract falls within the scope of IFRS 15, the revenues are then accounted for as non-IFRS 15 revenues.

Non-IFRS 15 revenues are presented on a separate line of the income statement. They include the following items:

- commodity sales transactions within the scope of IFRS 9 – *Financial Instruments* and give rise to a physical delivery;
- proprietary trading transactions and energy trading carried out on behalf of customers, shown on a net basis after netting sales and purchases;

- lease or concession income, as well as any financing component of operational services.

In 2018, commodities sales transactions within the scope of IFRS 9 and giving rise to physical deliveries amounted to €3,408 million (€5,712 million in 2017). Revenues generated on other transactions which are not in the scope of IFRS 15 were not material.

8.2 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 contract assets 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 approach for trade receivables and contract assets, for which the change in credit risk is monitored on a portfolio basis. An individual approach is used for large customers and other large counterparties, for which the change in credit risk is monitored on an individual basis.

See Note 18 "Risks arising from financial instruments" for the Group's assessment of counterparty risk.

8.2.1 Trade and other receivables ,assets and from contracts with customers

	Dec. 31, 2018			Dec. 31, 2017[1]		
En millions d'euros	Non-current	Current	Total	Non-current	Current	Total
Trade and other receivables, net	-	15,613	15,613	-	13,127	13,127
of which IFRS 15	-	*7,552*	*7,552*	-	*7,009*	*7,009*
of which non-IFRS15	-	*8,060*	*8,060*	-	*6,118*	*6,118*
Assets from contracts with customers	-	7,411	7,411	-	6,930	6,930

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

The table below shows expected credit losses on trade and other receivables and contract assets:

	Dec. 31, 2018			Dec. 31, 2017[1]		
In millions of euros	Gross	Allowances and expected credit losses	Net	Gross	Allowances and expected credit losses	Net
Trade and other receivables, net	16,689	(1,076)	15,613	14,208	(1,081)	13,127
Assets from contracts with customers	7,419	(8)	7,411	6,943	(12)	6,930
TOTAL	**24,108**	**(1,085)**	**23,023**	**21,150**	**(1,094)**	**20,057**

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

Expected impairment and credit losses on trade and other receivables and contract assets amounted to €1,085 million in 2018 (€1,094 million in 2017).

Information on the age of receivables past due but not impaired and on counterparty risk are provided in Note 18.2 "Counterparty risk".

Current assets from contracts with customers include accrued income and unbilled revenues (for €6,377 million at December 31, 2018) and delivered, un-metered and unbilled gas and electricity ("energy in the meter") (for €1,034 million at December 31, 2018, mainly in France, Benelux and Latin America, representing 1.7% of annual revenues). The reportable segments that reported the greatest amounts of contract assets at December 31, 2018 are France (€2,730 million), Europe excluding France & Benelux (€1,436 million), Benelux (€859 million) and GEM (€556 million).

For customers whose energy consumption is metered during the accounting period, particularly customers supplied with low-voltage electricity or low-pressure gas, 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 are 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") is 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.

8.2.2 Liabilities from contracts with customers

	Dec. 31, 2018			Dec. 31, 2017[(1)]		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Liabilities from contracts with customers	36	3,598	3,634	258	3,317	3,575

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

Current liabilities from contracts with customers include advances and downpayments received for €1,713 million at December 31, 2018 and deferred revenues for €1,885 million.

The segments reporting the greatest amounts of contract liabilities are France (€2,048 million) – particularly BtoB (€1,172 million) – Europe excluding France & Benelux (€626 million) and Benelux (€387 million). These are the segments for which revenues are recognized over time, thereby generating a difference in timing between the payments received and the completion of the services.

The classification of Glow in Thailand under "assets held for sale" reduced contract liabilities by €291 million.

8.3 Revenues relating to performance obligations not yet satisfied

Revenues relating to performance obligations only partially satisfied at December 31, 2018 amounted to €10,886 million.

They mainly concern the United Kingdom (€6,102 million) and France BtoB (€2,902 million) BUs. These BUs handle a large number of construction, installation, maintenance and facility management contracts under which revenues are recognized over time. The Benelux, Tractebel Engineering and NECST BUs will also be recognizing revenues over the next three years for performance obligations satisfied over time.

NOTE 9 OPERATING EXPENSES

9.1 Personnel costs

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Short-term benefits	(9,998)	(9,510)
Share-based payments (*see Note 24*)	(86)	(44)
Costs related to defined benefit plans (*see Note 21.3.4*)	(407)	(355)
Costs related to defined contribution plans (*see Note 21.4*)	(133)	(142)
PERSONNEL COSTS	**(10,624)**	**(10,051)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

9.2 Depreciation, amortization and provisions

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Depreciation and amortization (see Notes 15 and 16)	(3,882)	(3,966)
Net change in write-downs of inventories, trade receivables and other assets	-	(67)
Net change in provisions (see Note 20)	296	245
DEPRECIATION, AMORTIZATION AND PROVISIONS	**(3,586)**	**(3,787)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

At December 31, 2018, depreciation and amortization mainly break down as €837 million for intangible assets and €3 048 million for property, plant and equipment.

NOTE 10 FROM CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD TO INCOME/(LOSS) FROM OPERATING ACTIVITIES

Accounting standards

Current operating income is an indicator used by the Group to present "a level of operational performance that can be used as part of an approach to forecast recurring performance" (this complies with ANC Recommendation 2013-03 on the format of financial statements of entities applying IFRS). Current operating income is a sub-total which helps in better understanding the Group's performance because it excludes items which are inherently difficult to predict due to their unusual, abnormal or non-recurring nature. For the Group, such items relate to mark-to-market on commodity contracts other than trading instruments, impairment losses, restructuring costs, scope effect transactions and other non-recurring items and are defined as follows:

- "Mark-to-market on commodity contracts other than trading instruments" corresponds to the changes in the fair value (mark-to-market) of financial instruments related to commodities, such as gas and electricity, which do not qualify as either trading or hedging instruments. These contracts are used in economic hedges of operating transactions in the energy sector. The changes in the fair value of these instruments have to be recognized through profit or loss under IFRS 9. Since they can be material and difficult to predict, they are presented on a separate line of the consolidated income statement;
- "Impairment losses" include impairment losses on goodwill, other intangible assets, property, plant and equipment and investments in entities consolidated using the equity method of accounting;
- "Restructuring costs" concern 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. These transactions on renewable activities are recognized in the current operating income as they are part of the recurring rotation of the Group's capital employed;
- "Other non-recurring items" notably include gains and losses on disposals of non-current assets.

The transition from Current operating income after share in net income of entities accounted for using the equity method to Income/(loss) from operating activities is detailed hereunder:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,126**	**5,172**
Mark-to-market on commodity contracts other than trading instruments	(223)	29
Impairment losses	(1,798)	(1,298)
Restructuring costs	(162)	(669)
Changes in scope of consolidation	(150)	752
Other non-recurring items	(147)	(1,252)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**2,645**	**2,735**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

10.1 Mark-to-market on commodity contracts other than trading instruments

In 2018, this item represents a net expense of €223 million, compared with net income of €29 million in 2017. It mainly reflects the changes in the fair value of (i) electricity and natural gas sale and purchase contracts falling within the scope of IFRS 9 and (ii) financial instruments used as economic hedges but not eligible for hedge accounting.

This expense is due to (i) a negative price effect related to changes in the forward prices of the underlying commodities, notably in gas, coupled with (ii) the negative impact of the settlement of positions over the period with a positive fair value at December 31, 2017.

10.2 Impairment losses

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]
Impairment losses:		
Goodwill (*see Note 14.1*)	(14)	(481)
Property, plant and equipment and other intangible assets (*see Notes 15 and 16*)	(1,609)	(952)
Investments in entities accounted for using the equity method and related provisions	(209)	(31)
TOTAL IMPAIRMENT LOSSES	**(1,831)**	**(1,463)**
Reversal of impairment losses:		
Property, plant and equipment and other intangible assets	33	165
Financial assets	-	1
TOTAL REVERSALS OF IMPAIRMENT LOSSES	**33**	**166**
TOTAL	**(1,798)**	**(1,298)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

Net impairment losses amounted to €1,798 million in 2018 and related primarily to property, plant and equipment. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2018 amounted to €1,540 million.

Impairment tests are performed in accordance with the conditions described in Note 14.3.

10.2.1 Impairment losses recognized in 2018

Net impairment losses amounted to €1,798 million in 2018 and mainly concerned:

- **Generation Europe CGU assets**
  In 2018, the Group recognized €646 million in net impairment losses against thermal power generation assets in Europe, owing to the downward revision of cash flow projections for certain portfolio assets in an unfavorable

economic environment. The main assumptions and key estimates used to determine the value of assets are discount rates, estimated demand for electricity and changes in the price of CO_2, fuel and electricity beyond the liquidity period, in addition to the regulatory environment and the operating life of the assets concerned.
Coal-fired power plants in Europe have been subject to unfavorable conditions, including the expected impact of the stricter regulatory environment, which has resulted in lower captured margins over the long term, impacting the profitability of these assets.

- **Belgian nuclear power assets**
  Further developments in 2018 led the Group to now distinguish nuclear power plants where there is no longer any possibility of extending their operating life from those whose operating life may still be extended beyond 2025. In view of this backdrop accentuated by the prolonged outages at certain power plants and the changes to the management methods of the plants as the end of their operating lives draws near, the Group has aligned its forecasts with the nuclear plants' maintenance schedule, as updated for the next three years. Consequently, the Group recognized impairment losses of €615 million in 2018 against plants whose operating life may no longer be extended.

- **Other impairment losses**
  Other impairment losses recognized by the Group mainly concern:

  - an investment in the Africa/Asia segment in respect of which an impairment loss of €209 million was recognized based on the revised forecasts;
  - gas infrastructure facilities in Europe, in respect of which an €87 million impairment loss was recognized after the life expectancy of certain facilities was revised and their dismantling date consequently brought forward;
  - thermal power generation assets in Latin America, in respect of which a €71 million impairment loss was recognized after their operating lives were revised.

10.2.2 Impairment losses recognized in 2017

Net impairment losses amounted to €1,298 million in 2017, and mainly concerned:

- the Storengy CGU for €494 million, including €338 million against goodwill following the regulation of storage activities in France;
- thermal power generation assets in Europe for €317 million, mainly due to the expected impact of a stricter regulatory environment for coal-fired power plants.

After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2017 amounted to €1,129 million.

10.3 Restructuring costs

Restructuring costs totaled €162 million in 2018, mainly including:

- costs related to various staff reduction plans (€54 million);
- costs related to decisions to relinquish several premises, restructure agencies and close facilities (€63 million);
- various other restructuring costs (€45 million).

In 2017, restructuring costs totaled €669 million, including €509 million related to staff reduction plans as part of the Group's transformation plan as well as measures to adapt to economic conditions, €108 million related to the shutdown of production and closure of some facilities and €53 million in other miscellaneous restructuring costs.

10.4 Changes in scope of consolidation

The impact of changes in the scope of consolidation in 2018 was a negative €150 million and mainly comprised (i) the €87 million negative impact of the sale of the Loy Yang B thermal power plant in Australia, primarily in respect of items of other comprehensive income recycled to the income statement, and (ii) the €27 million negative impact of the sale of LNG operations in the United States.

The impact of changes in the scope of consolidation in 2017 was a positive €752 million, and mainly comprised gains on the disposal of (i) the thermal merchant power plant portfolio in the United States for €540 million, (ii) the Group's interest in NuGen for €93 million, (iii) a thermal power plant portfolio in the United Kingdom for €61 million, and (iv) the Polaniec power plant in Poland for €57 million.

10.5 Other non-recurring items

Other non-recurring items totaling a negative €147 million in 2018, mainly included asset scrapping, costs related to site closures and other miscellaneous costs.

In 2017, other non-recurring items mainly included the €1,243 million expense corresponding to the change in the accounting treatment of long-term gas supply contracts and transport and storage contracts implemented by the GEM BU.

NOTE 11 NET FINANCIAL INCOME/(LOSS)

	Dec. 31, 2018			Dec. 31, 2017[(1)]		
In millions of euros	Expense	Income	Total	Expense	Income	Total
Cost of net debt	(713)	85	(628)	(812)	134	(678)
Gains and losses on debt restructuring transactions and from the early unwinding of derivative financial instruments	(108)	115	7	(181)	83	(98)
Other financial income and expenses	(1,161)	400	(761)	(1,134)	522	(611)
NET FINANCIAL INCOME/(LOSS)	**(1,981)**	**600**	**(1,381)**	**(2,127)**	**739**	**(1,388)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

11.1 Cost of net debt

The main items of the cost of net debt break down as follows:

In millions of euros	Expense	Income	Total Dec. 31, 2018	Dec. 31, 2017[(1)]
Interest expense on gross debt and hedges	(844)	-	(844)	(915)
Foreign exchange gains/losses on borrowings and hedges	-	4	4	21
Ineffective portion of derivatives qualified as fair value hedges	(3)	-	(3)	(2)
Gains and losses on cash and cash equivalents and liquid debt instruments held for cash investment purposes	-	81	81	113
Capitalized borrowing costs	134	-	134	104
COST OF NET DEBT	**(713)**	**85**	**(628)**	**(678)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

The decrease in the cost of net debt is mainly due to a slight reduction in the volume of average debt since the end of 2017, to the positive impacts of debt financing transactions realized by the Group and to active interest-rate management *(see Note 17.3.3 "Financial instruments – Main events of the period").*

At December 31, 2018, the average cost of debt after hedging came out at 2.68% compared with 2.63% at December 31, 2017.

11.2 Gains and losses on debt restructuring transactions and from the early unwinding of derivative financial instruments

The main effects of debt restructuring break down as follows:

In millions of euros	Expense	Income	Dec. 31, 2018	Dec. 31, 2017[(1]
Impact of early unwinding of derivative financial instruments on the income statement	**(108)**	**102**	**(6)**	**-**
Of which cash payments made on the unwinding of swaps	*(108)*	*-*	*(108)*	*(83)*
Of which reversal of the negative fair value of these derivatives that were settled early	*-*	*102*	*102*	*83*
Impact of debt restructuring transactions on the income statement	**-**	**13**	**13**	**(98)**
Of which early refinancing transactions expenses	*-*	*13*	*13*	*(98)*
GAINS AND LOSSES ON DEBT RESTRUCTURING TRANSACTIONS AND THE EARLY UNWINDING OF DERIVATIVE FINANCIAL INSTRUMENTS	**(108)**	**115**	**7**	**(98)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

The Group carried out a number of early refinancing transactions *(see Note 17.3.3. "Financial instruments - Main events of the period")*.

11.3 Other financial income and expenses

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Other financial expenses		
Income/(loss) from debt instruments and equity instruments	(84)	(12)
Change in fair value of derivatives not qualified as hedges	(183)	(187)
Gains and losses on the designation and inefficiency of economic hedges on other financial items	(2)	(1)
Unwinding of discounting adjustments to other long-term provisions	(538)	(493)
Net interest expense on post-employment benefits and other long-term benefits	(112)	(118)
Interest on trade and other payables	(39)	(48)
Other financial expenses	(203)	(275)
TOTAL	**(1,161)**	**(1,134)**
Other financial income		
Income/(loss) from debt instruments and equity instruments	73	77
Interest income on trade and other receivables	52	29
Interest income on loans and receivables at amortized cost	111	151
Other financial income	164	265
TOTAL	**400**	**522**
OTHER FINANCIAL INCOME AND EXPENSES, NET	**(761)**	**(611)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 “Restatement of 2017 comparative data”).

At December 31, 2017, “Other financial income” notably included interest relating to the recovery from the French State of the 3% tax on dividends as well as interest relating to the dispute opposing Electrabel and E.ON in respect of the Belgian and German nuclear contribution payments for an amount of €87 million.

NOTE 12 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.

12.1 Actual income tax expense recognized in the income statement

12.1.1 Breakdown of actual income tax expense recognized in the income statement

The tax expense recognized in the income statement for 2018 amounts to €704 million (€395 million income tax income in 2017). It breaks down as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[1]
Current income taxes	(712)	(367)
Deferred taxes	9	761
TOTAL INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(704)**	**395**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").*

12.1.2 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, 2018	Dec. 31, 2017[(1)]
Net income/(loss)	**1,629**	**2,108**
Share in net income of entities accounted for using the equity method	361	422
Net income from discontinued operations	1,069	366
Income tax expense	(704)	395
Income/(loss) before income tax expense and share in net income of associates (A)	**903**	**925**
Of which French companies	*1,434*	*(744)*
Of which companies outside France	*(531)*	*1,669*
Statutory income tax rate of the parent company (B)	34.4%	34.4%
THEORETICAL INCOME TAX EXPENSE (C) = (A) X (B)	**(311)**	**(318)**
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	42	112
Permanent differences[(2)]	(72)	(287)
Income taxed at a reduced rate or tax-exempt[(3)]	123	460
Additional tax expense[(4)]	(74)	(241)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences[(5)]	(968)	(564)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences[(6)]	370	241
Impact of changes in tax rates[(7)]	54	518
Tax credits and other tax reductions[(8)]	185	506
Other[(9)]	(53)	(32)
INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**(704)**	**395**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

(2) Includes mainly the disallowable impairment losses on goodwill, the disallowable operating expenses, the deduction of interest expenses arising from hybrid debts and effects relating to the cap on allowable interest on borrowings in France.

(3) Reflects notably 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, the disallowable impairment losses and capital losses on securities, and the impact of the untaxed income from remeasuring previously-held (or retained) equity interests in connection with acquisitions and changes in consolidation methods.

(4) Includes mainly tax on dividends resulting from the parent company tax regime, the exceptional income tax to compensate the reimbursement from the French State of the 3% tax on the dividends in 2017, the withholding tax on dividends and interest levied in several tax jurisdictions, allocations to provisions for income tax, and regional and flat-rate corporate taxes.

(5) 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 the assets.

(6) Includes the impact of the recognition of net deferred tax asset positions for some tax entities.

(7) Includes mainly the impact of tax rate changes on the deferred tax balances in France (see below) and in the United States in 2017.

(8) Includes notably the reversals of provisions for tax litigation, tax credits in France and other tax reductions and the impact of deductible notional interest in Belgium. In 2017, includes the refund of €376 million relating to the 3% tax on dividends paid previously in cash by the French companies.

(9) Includes mainly the correction of previous tax charges.

The 2018 French Finance Law approved on December 30, 2017 plans a tax rate decrease to 25.82% as of 2022 for all French tax entities (tax rate of 25.00%, plus the 3.3% social contribution). Deferred tax recorded by the French entities which is expected to reverse after 2022 was re-measured at this new rate in the December 31, 2017 accounts. This resulted in a positive impact of €550 million on non-recurring income and a negative impact of €91 million on deferred tax recognized in the statement of comprehensive income. However, the deferred tax balances, which expire in 2019, have been maintained at the 32.02% rate, without taking into consideration the fact that the 34.43% rate will be maintained for 2019, as already announced but not yet approved by Parliament at December 31, 2018.

12.1.3 Analysis of the deferred tax income/(expense) recognized in the income statement, by type of temporary difference

In millions of euros	Impact in the income statement Dec. 31, 2018	Dec. 31, 2017(1)
Deferred tax assets:		
Tax loss carry-forwards and tax credits	302	(118)
Pension and related obligations	2	(68)
Non-deductible provisions	(77)	(25)
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(141)	(240)
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	845	(288)
Other	38	(72)
TOTAL	**969**	**(811)**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(249)	671
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	(751)	741
Other	116	125
TOTAL	**(884)**	**1,537**
DEFERRED TAX INCOME/(EXPENSE)	**85**	**726**
Of which continued activities	*9*	*761*

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

The deferred tax income recorded in 2017 derives notably from the future tax rate decrease approved in France.

12.2 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, 2018	Dec. 31, 2017 (1)
Equity and debt instruments	(1)	37
Actuarial gains and losses	68	(95)
Net investment hedges	(14)	(86)
Cash flow hedges on other items	71	(116)
Cash flow hedges on net debt	(10)	2
TOTAL EXCLUDING SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**114**	**(257)**
Share of entities accounted for using the equity method	(20)	3
Discontinued operations	(81)	(81)
TOTAL	**13**	**(336)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

12.3 Deferred taxes presented in the statement of financial position

12.3.1 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, 2017[1]	**854**	**(5,215)**	**(4,361)**
Impact on net income for the year	969	(884)	85
Impact on other comprehensive income items	127	(128)	(1)
Impact of changes in scope of consolidation	(207)	199	(9)
Impact of translation adjustments	(3)	(24)	(27)
Transfers to assets and liabilities classified as held for sale	(222)	161	(60)
Other	28	(4)	24
Impact of netting by tax entity	(481)	481	-
AT DECEMBER 31, 2018	**1,066**	**(5,415)**	**(4,349)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 “Restatement of 2017 comparative data”).

12.3.2 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 validated by the Management, unless exception 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, 2018	Dec. 31, 2017[1]
Deferred tax assets:		
Tax loss carry-forwards and tax credits	1,765	1,652
Pension obligations	1,374	1,318
Non-deductible provisions	371	312
Difference between the carrying amount of PP&E and intangible assets and their tax bases	787	974
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	3,398	2,736
Other	545	555
TOTAL	**8,239**	**7,547**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(8,773)	(8,657)
Measurement of financial instruments at fair value (IAS 32/IFRS 9)	(3,343)	(2,629)
Other	(472)	(623)
TOTAL	**(12,588)**	**(11,908)**
NET DEFERRED TAX ASSETS/(LIABILITIES)	**(4,349)**	**(4,361)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 “Restatement of 2017 comparative data”).

12.4 Unrecognized deferred taxes

At December 31, 2018, 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 €3,216 million (€3,144 million at December 31, 2017). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium and Luxembourg) or up to nine years in the Netherlands. These tax loss carry-forwards did not give rise to the recognition of deferred tax 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 €1,364 million at end-December 2018 versus €1,246 million at end-December 2017.

NOTE 13 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 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.).

	Dec. 31, 2018	Dec. 31, 2017(1)
Numerator (in millions of euros)		
Net income/(loss) Group share	**1,033**	**1,320**
Of which Net income(loss) relating to continued activities, Group share	*(12)*	*1,047*
Interest from deeply-subordinated perpetual notes	(145)	(144)
Net income used to calculate earnings per share	**889**	**1,176**
Of which Net income(loss) relating to continued activities, Group share, used to calculate earnings per share	*(156)*	*903*
Impact of dilutive instruments	-	-
Diluted net income/(loss) Group share	**889**	**1,176**
Denominator (in millions of shares)		
Average number of outstanding shares	**2,396**	**2,396**
Impact of dilutive instruments:		
Bonus share plans reserved for employees	11	9
Diluted average number of outstanding shares	**2,407**	**2,405**
Earnings per share (in euros)		
Basic earnings/(loss) per share	**0.37**	**0.49**
Of which Basic earnings/(loss) Group share relating to continued activities per share	*(0.07)*	*0.38*
Diluted earnings/(loss) per share	**0.37**	**0.49**
Of which Diluted earnings/(loss) Group share relating to continued activities per share	*(0.06)*	*0.38*

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").

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 19.2.1).*

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.

NOTE 14 GOODWILL

Accounting standards

Recognition of goodwill

Goodwill is measured as the excess of the aggregate of:
(i) the consideration transferred;
(ii) the amount of any non-controlling interests in the acquiree; and
(iii) in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree;
over the net acquisition-date 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.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the measurement period.

Goodwill relating to interests in associates is recorded under "Investments in entities accounted for using the equity method".

Risk of impairment

Goodwill is not amortized but tested for impairment each year in accordance with IAS 36, or more frequently where an indication of impairment is identified. 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.

The method used to carry out these impairment tests are described in paragraph 14.3.

Impairment losses in relation to goodwill cannot be reversed and are shown as "Impairment losses" in the income statement.

Indicators of impairment (goodwill, intangible assets and property plant and equipment)

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 hereafter and that will have an adverse effect on 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 for which the asset belong;

– Internal reports that indicate that the economic performance of an asset is, or will be, worse than expected.

14.1 Movements in the carrying amount of goodwill

In millions of euros	**Net amount**
At December 31, 2016	**17,372**
Impairment losses	(481)
Changes in scope of consolidation and Other	775
Transfer to Assets classified as held for sale	(32)
Translation adjustments	(350)
At December 31, 2017(1)	**17,285**
Impairment losses	(14)
Changes in scope of consolidation and Other	745
Transfer to Assets classified as held for sale	(216)
Translation adjustments	9
AT DECEMBER 31, 2018	**17,809**

(1) Comparative data at December 31, 2017 and at January 1, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

The impact of changes in the scope of consolidation at December 31, 2018 relates primarily to:

- the recognition of goodwill arising on the acquisition of Langa Group (€241 million), Infinity Renewables (€94 million) and Electro Power System (€57 million);
- the derecognition of goodwill in an amount of €109 million relating to the disposal of wind and solar fields in France (negative impact of €71 million), and gas distribution activities in Hungary (negative impact of €29 million).

Following the classification of the Company's interest in Glow, the electricity production project in Thailand, as assets held for sale (*see Note 5.2 "Assets held for sale and discontinued operations*"), the carrying amount of the corresponding goodwill was transferred to "Assets classified as held for sale" in the statement of financial position.

The decrease in this caption in 2017 related chiefly to the recognition of impairment losses against goodwill totaling €481 million, including €338 million against the Storengy CGU and €141 million allocated to the group of assets held for sale which comprises the Loy Yang B power plant, the derecognition of goodwill relating to assets sold for €127 million, translation adjustments for €350 million, offset by the recognition of goodwill arising on the acquisitions for €674 million and the increase in the fair value of the financial liability representing the put option granted by the Group on non-controlling interests in La Compagnie du Vent, with a matching entry of €131 million in goodwill.

14.2 Goodwill CGUs

The table below shows "material" goodwill CGUs at December 31, 2018:

In millions of euros	**Operating segment**	**Dec. 31, 2018**
MATERIAL CGUs		
Benelux	Benelux	4,258
GRDF	Infrastructures Europe	4,009
France Renewable Energy	France	1,085
United Kingdom	Europe excl. France & Benelux	1,045
France BtoC	France	1,044
OTHER SIGNIFICANT CGUs		
North America	North America	875
France BtoB	France	731
Northern, Southern and Central Europe	Europe excl. France & Benelux	644
Generation Europe	Other	629
OTHER CGUs		3,490
TOTAL		**17,809**

14.3 Impairment testing of goodwill CGUs

All goodwill CGUs are tested for impairment based on data as of end-June, completed by a review of events arisen in the second half of the year. In most cases, the recoverable amount of CGUs is determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on 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 2022-2040. The forecasts that feature in the reference scenario were approved by the Executive Committee in December 2018. 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 market;
- 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 those presented in the "Canfin, Grandjean et Mestrallet" report published in July 2016. 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.

The discount rates used correspond to the weighted average cost of capital, which is adjusted in order to reflect the business, market, country and currency risk relating to each goodwill CGU reviewed. The discount rates used are consistent with available external information sources. The post-tax rates used in 2018 to measure the value in use of the goodwill CGUs for discounting future cash flows ranged between 3.7% and 11.3%, compared with a range of between 4.7% and 12.5% in 2017. The discount rates used for the main goodwill CGUs are shown in Notes 14.3.1 "Material CGUs" and 14.3.2 "Other significant CGUs", below.

14.3.1 Material CGUs

This section presents the method for determining value in use, the key assumptions underlying the valuation, and the sensitivity analyses for the impairment tests on CGUs where the amount of goodwill represents more than 5% of the Group's total goodwill at December 31, 2018.

14.3.1.1 Benelux CGU

The goodwill allocated to the Benelux CGU amounted to €4,258 million at December 31, 2018. The Benelux CGU includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation activities using its nuclear power plants and wind farms, (ii) natural gas and electricity sales activities, and (iii) energy services activities, as well as drawing rights on the Chooz B and Tricastin power plants in France.

Key assumptions used for the impairment test

The cash flow projections for the Benelux CGU are based on a large number of key assumptions, such as the long-term prices for fuel and CO_2, expected trends in gas and electricity demand and in electricity prices, the market outlook, and changes in the regulatory environment (especially concerning nuclear capacities in Belgium and the extension of drawing rights agreements for French nuclear plants). The key assumptions also include the discount rate used to calculate the value in use of this goodwill CGU.

The 2018 value in use of the activities included in this CGU was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. Cash flow projections for the period beyond the medium-term business plan were determined as described below:

Activities	Assumptions applied beyond the term of the business plan[1]
Nuclear power generation in Belgium	For Doel 1, Doel 2 and Tihange 1, cash flow projection over the residual useful life of 50 years. For the second generation reactors Doel 3 and Tihange 2, cash flow projection over the residual useful life of 40 years. For the second generation reactors Doel 4 and Tihange 3, extension of the operating life for a period of 20 years.
Drawing rights on Chooz B et Tricastin power plants	Cash flow projection over the remaining term of existing contract plus assumption that drawing rights will be extended for a further 10 years.
Energy retail and service activities	Cash flow projection over the duration of the business plan at mid term, plus application of a terminal value based on a normative cash flow using a long-term growth rate of 1.9%

(1) Assumptions unchanged from December 31, 2017.

The discount rates applied to these cash flows ranged from 5.8% to 8.5%, depending on the risk profiles of each business activity.

The most important assumptions concerning the Belgian regulatory environment relate to the operating life of existing nuclear reactors and the level of royalties and nuclear contributions paid to the Belgian State.

The impairment test took into account the 10-year extension (through 2025) of the operating life of Tihange 1, Doel 1 and Doel 2, as well as the capital expenditure required for the extension of Doel 1 and Doel 2, annual royalties totaling €20 million in respect of said extension and the new conditions for determining the nuclear contribution that will apply to second-generation reactors (Doel 3 and 4, Tihange 2 and 3) through their 40th year of operation, as defined in the December 29, 2016 law.

As regards second-generation reactors, the principle of a gradual phase-out of nuclear power and the schedule for this phase-out, with the shutdown of the reactors Doel 3 in 2022, Tihange 2 in 2023 and Tihange 3 and Doel 4 in 2025, after 40 years of operation, were reaffirmed in the law of June 18, 2015 and by the energy pact approved by the government on March 30, 2018. The pact is supplemented by a federal energy strategy based on four objectives: the safeguarding of supplies, the impact on climate, the impact on energy prices, and the safety of power plants. A monitoring committee has been set up and will meet each year to evaluate the achievement of these objectives and, where applicable, make recommendations to policymakers so that corrective action may be taken.

However, in view of (i) the extension of the operating life of Tihange 1, Doel 1 and Doel 2 beyond 40 years, (ii) the importance of nuclear power generation in the Belgian energy mix, (iii) the lack of a sufficiently detailed and attractive industrial plan enticing energy utilities to invest in replacement thermal capacity, and (iv) CO_2 emissions reduction targets, the Group considers that nuclear power will still be needed to guarantee the energy equilibrium in Belgium after 2025. Accordingly, in calculating value in use, the Group assumes a 20-year extension of the operating life of half of its second generation reactors, while taking into account a mechanism of nuclear contributions to be paid to the Belgian government. Should the circumstances described above change in the future, the Group may adapt its industrial scenarios accordingly.

In France, the Group included an assumption that its drawing rights on the Tricastin and Chooz B nuclear plants expiring in 2021 and 2037, respectively, would be extended by 10 years. Although no such decision has been taken by the government and the nuclear safety authority, the Group considers that extending the reactors' operating life is the most credible and likely scenario at this point in time. This is also consistent with the expected French energy mix featured in the Group's reference scenario.

Results of the impairment test

At December 31, 2018, the recoverable amount of the goodwill CGU was higher than its carrying amount. Furthermore, the Group recognized impairment losses of €615 million against nuclear reactors (*see Note 10.2 "Impairment losses"*).

Sensitivity analyses

A decrease of €10/MWh in electricity prices for nuclear power generation would lead to an additional impairment loss of around €1,200 million. Conversely, an increase of €10/MWh in electricity prices would have a positive impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU.

An increase of 50 basis points in the discount rates used would have a negative 49% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 53% impact on the calculation.

Various transformational scenarios were considered concerning nuclear power generation in Belgium:

- the disappearance of the entire nuclear component from the portfolio in 2025 after 50 years of operation in the case of Tihange 1, Doel 1 and Doel 2, and 40 years of operation for the second-generation reactors would have a strongly adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €1,700 million;
- if the life of half of the second-generation reactors were to be extended by ten years and the entire nuclear component subsequently disappear, the recoverable amount would fall below the carrying amount and the impairment risk would represent €547 million.

14.3.1.2 GRDF CGU

The total amount of goodwill allocated to the GRDF CGU was €4,009 million at December 31, 2018. The GRDF CGU groups together the Group's regulated natural gas distribution activities in France.

The value in use of the GRDF CGU was calculated using the cash flow projections drawn up on the basis of the 2019 budget, the 2020-2021 medium-term business plan, and cash flow projections for the 2022-2024 period. The terminal value corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2024. The RAB is the value assigned by the French Energy Regulation Commission (CRE) to the assets operated by the distributor. It is the sum of the future pre-tax cash flows, discounted at a rate that equals the pre-tax rate of return guaranteed by the regulator.

The cash flow projections are drawn up based on the tariff for public natural gas distribution networks, known as the "ATRD 5 tariff", which entered into effect for a period of four years on July 1, 2016, and on the overall level of investments agreed by the CRE as part of its decision on the ATRD 5 tariff.

Given the regulated nature of the businesses grouped within the GRDF CGU, a reasonable change in any of the valuation inputs would not result in the recoverable amount falling below the carrying amount.

14.3.1.3 France Renewable Energy CGU

The goodwill allocated to the France Renewable Energy CGU amounted to €1,085 million at December 31, 2018. The France Renewable Energy CGU groups together the development, construction, financing, operation and maintenance of all of the renewable power generation assets in France (hydraulic, wind and photovoltaic).

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. For the hydraulics business, a terminal value was calculated by extrapolating the cash flows beyond that period based on the reference scenario adopted by the Group.

The main assumptions and key estimates relate primarily to discount rates, assumptions on the renewal of the hydropower concession agreements and changes in the sales prices of electricity beyond the liquidity period.

The discount rates applied are between 5.1% and 8.3%, depending on whether they relate to regulated assets or merchant activities.

Value in use of the Compagnie Nationale du Rhône and SHEM was calculated based on assumptions including the extension or renewal of a tender process for the concession agreements, as well as on the conditions of a potential extension.

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.

A decrease of €10/MWh in electricity prices for hydropower generation would have a negative 47% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of €10/MWh in electricity prices would have a positive 47% impact on the calculation.

An increase of 50 basis points in the discount rates used would have a negative 47% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 63% impact on the calculation.

If the Compagnie Nationale du Rhône hydropower concession agreements are not renewed beyond 2023, this would have a strong adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €0.9 billion.

14.3.1.4 United Kingdom CGU

The goodwill allocated to the United Kingdom CGU amounted to €1,045 million at December 31, 2018. The United Kingdom CGU includes activities in (i) renewable power generation (hydraulic, wind and solar), (ii) gas and electricity sales, and (iii) services to individual and professional customers in the United Kingdom.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. A terminal value was calculated for the services and energy sales businesses by extrapolating the cash flows beyond that 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.

The discount rates applied are between 5.7% and 9.0%.

An increase of 50 basis points in the discount rates used would have a negative 44% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 60% impact on the calculation.

A decrease of 10% in the margin captured by power generation assets would have a negative 69% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. An increase of 10% in the margin captured would have a positive 69% impact on this calculation.

14.3.1.5 France BtoC CGU

The goodwill allocated to the France BtoC CGU amounted to €1,044 million at December 31, 2018. The France BtoC CGU groups together sales of energy and related services to individual and professional customers in France.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. A terminal value was calculated by extrapolating the cash flows beyond that period using a long-term growth rate of 1.8%.

The main assumptions and key estimates relate primarily to discount rates, expected trends in gas and electricity demand in France, changes in the Group's market share and sales margin forecasts.

The discount rates applied are between 6.5% and 8.5%.

An increase of 50 basis points in the discount rates used would have a negative 22% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 29% impact on the calculation.

A decrease of 5% in the margin on gas and electricity sales activities would have a negative 14% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of 5% in the margin on gas and electricity sales activities would have a positive 14% impact on the calculation.

14.3.2 Other significant CGUs

The table below sets out the assumptions used to determine the recoverable amount of the other main CGUs.

CGU	Reportable segment	Measurement	Discount rate
North America	North America	DCF + DDM	4.0% - 11.3%
Generation Europe	Other	DCF + DDM	3.7% - 9.1%
Northern, Southern and Eastern Europe	Europe excl. France & Benelux	DCF + DDM	4.8% - 10.9%
France BtoB	France	DCF + DDM	7.1% - 7.7%

DDM refers to the discounted dividend model.

14.3.2.1 North America CGU

The goodwill allocated to the North America CGU amounted to €875 million at December 31, 2018. The North America CGU mainly comprises:

- Canada, which includes activities in (i) renewable, thermal power generation (wind and biomass), (ii) services to individual and professional customers;
- The United States, which includes activities in (i) gas and electricity sales, (ii) services to individual and professional customers and (iii) thermal power generation;
- Puerto Rico, which includes an investment in EcoElectrica, a key energy industry player in Puerto Rico's economy (*see Note 4.2 "Investments in joint ventures"*). Despite the difficult financial environment in Puerto Rico, ENGIE does not have any information at December 31, 2018 on the basis of which the Group would modify its valuation assumptions regarding its share in these assets.

The wind and solar energy production activities acquired in the United States in 2018 make up an independent goodwill CGU.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. A terminal value was calculated for the services and energy sales businesses using EBITDA multiples as a basis.

The main assumptions and key estimates relate primarily to discount rates and changes in captured margins beyond the liquidity period.

The discount rates applied are between 4.0% and 11.3%.

An increase of 50 basis points in the discount rates used would have a negative impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain slightly above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive impact on the calculation.

A decrease of 5% in the margin on gas and electricity sales activities would have a negative 45% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of 5% in the margin on gas and electricity sales activities would have a positive 45% impact on the calculation.

A decrease of 5% in service activities would have a negative 37% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of 5% in the margin on gas and electricity sales activities would have a positive 37% impact on the calculation.

14.3.2.2 Generation Europe CGU

The goodwill allocated to the Generation Europe CGU amounted to €629 million at December 31, 2018. The Generation Europe CGU groups together the thermal power generation activities in Europe.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2019 budget and the 2020-2021 medium-term business plan. Beyond this three-year period, cash flows were projected over the useful lives of the assets based on the reference scenario adopted by the Group,

The discount rates applied to these cash flow projections ranged between 3.7% and 9.1%.

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.

Results of the impairment test

At December 31, 2018, the recoverable amount of the Generation Europe goodwill CGU was higher than its carrying amount.

Sensitivity analyses

An increase of 50 basis points in the discount rates used would have a negative 13% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 13% impact on the calculation.

A decrease of 10% in the margin captured by thermal power plants would have a negative 17% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. An increase of 10% in the margin captured would have a positive 17% impact on this calculation.

14.3.2.3 Other significant goodwill CGUs

For the other significant goodwill CGUs, there is a considerable difference between their recoverable amount and their carrying amount at December 31, 2018.

14.4 Goodwill segment information

The carrying amount of goodwill can be analyzed as follows by operating segment:

In millions of euros	Dec. 31, 2018
North America	997
Latin America	740
Africa-Asia	649
Benelux	4,258
France	3,273
Europe excl. France & Benelux	1,689
Infrastructures Europe	5,000
Other	1,203
TOTAL	**17,809**

NOTE 15 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	10	40
Other intangible assets	1	50

Intangible assets with an indefinite useful life are not amortized but are tested for impairment annually.

Risk of impairment

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.

Impairment indicators

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.

Main impairment indicators used by the Group are described in Note 14 “Goodwill”.

Impairment

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the individual asset or 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.

Measurement of recoverable amount

In order to review the recoverable amount of property, plant and equipment and intangible assets, the assets are grouped, where appropriate, into CGUs and the carrying amount of each CGU is compared with its 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 to exceed 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 costs of disposal. Where negotiations are ongoing, this value is determined based on the best estimate of their outcome as of the reporting date.

In the event of a decline in value, the impairment loss is recorded in the consolidated income statement under “Impairment losses”.

15.1 Movements in intangible assets

In millions of euros	Intangible rights arising on concession contracts	Capacity entitlements	Others	Total
GROSS AMOUNT				
At December 31, 2016	**3,205**	**2,565**	**11,614**	**17,384**
Acquisitions	179	-	1,026	1,205
Disposals	(32)	-	(224)	(256)
Translation adjustments	(57)	-	(261)	(318)
Changes in scope of consolidation	1	-	27	28
Transfer to "Assets classified as held for sale"	-	-	(1,075)	(1,075)
Other	343	116	(439)	20
At December 31, 2017(1)	**3,640**	**2,681**	**10,668**	**16,988**
Acquisitions	120	17	912	1,048
Disposals	(9)	(19)	(149)	(177)
Translation adjustments	(52)	-	10	(42)
Changes in scope of consolidation	1	-	(290)	(289)
Transfer to "Assets classified as held for sale"	-	-	(98)	(98)
Other	55	40	(54)	41
AT DECEMBER 31, 2018	**3,753**	**2,719**	**11,000**	**17,472**
ACCUMULATED AMORTIZATION AND IMPAIRMENT				
At December 31, 2016	**(1,259)**	**(1,988)**	**(7,497)**	**(10,744)**
Amortization	(117)	(56)	(603)	(776)
Impairment	(7)	-	(219)	(227)
Disposals	20	-	219	239
Translation adjustments	5	-	149	154
Changes in scope of consolidation	-	-	(3)	(3)
Transfer to "Assets classified as held for sale"	-	-	880	880
Other	(26)	-	19	(7)
At December 31, 2017(1)	**(1,385)**	**(2,045)**	**(7,054)**	**(10,484)**
Amortization	(144)	(61)	(632)	(837)
Impairment	-	-	(16)	(16)
Disposals	7	19	129	155
Translation adjustments	4	-	2	6
Changes in scope of consolidation	-	-	434	434
Transfer to "Assets classified as held for sale"	-	-	46	46
Other	(32)	-	(26)	(57)
AT DECEMBER 31, 2018	**(1,550)**	**(2,087)**	**(7,117)**	**(10,754)**
CARRYING AMOUNT				
At December 31, 2017(1)	**2,255**	**636**	**3,613**	**6,504**
AT DECEMBER 31, 2018	**2,204**	**632**	**3,883**	**6,718**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

Following the classification of the Group's interest in Glow (power generation in Thailand) under "Assets held for sale" (*see Note 5.2 "Assets held for sale and discontinued operations"*), the carrying amount of the corresponding intangible assets was transferred to "Assets classified as held for sale" in the statement of financial position at December 31, 2018.

15.1.1 Intangible rights arising on concession contracts

Accounting standards

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 retains the right to take back the infrastructure at the end of the concession.

The intangible asset model according to IFRIC 12§17 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 the distribution infrastructures of gas 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.

15.1.2 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 to exceed 50 years. The Group currently holds entitlements in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy.

15.1.3 Others

At December 31, 2018, this caption mainly relates to software and licenses for €985 million, as well as to intangible assets (client portfolio) acquired as a result of business combinations and capitalized acquisition costs for customer contracts for €1,000 million.

15.2 Information regarding research and development costs

Accounting standards

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 recognized.

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 costs, excluding technical assistance costs, totaled €182 million in 2018, of which €25 million expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38.

NOTE 16 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.

Property, plant and equipment acquired under finance leases are carried in the consolidated statement of financial position at the lower of market value and the present value of the related minimum lease payments, in accordance with IAS 17. The corresponding liability is recognized under borrowings. These assets are depreciated using the same methods and useful lives as set out below.

Borrowing costs that are directly attributable to the construction of the qualifying asset are capitalized as part of the cost of that asset.

Cushion gas

"Cushion" gas injected into 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 27.2 "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:

	Useful life	
Main depreciation periods (years)	**Minimum**	**Maximum**
Plant and equipment		
• Storage - Production - Transport - Distribution	5	60(*)
• Installation - Maintenance	3	10
• Hydraulic plant and equipment	20	65
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. In accordance with the law of January 31, 2003 adopted by the Belgian Chamber of Representatives with respect to the gradual phase-out of nuclear energy for the industrial production of electricity, the useful lives of nuclear power stations were reviewed and adjusted prospectively to 40 years as from 2003, except for Tihange, Doel 1 and Doel 2 for which the operating lives have been extended by 10 years.

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.

Risk of impairment

See Note 15 “Intangible assets”.

Impairment indicators

See Note 14 “Goodwill”.

16.1 Movements in property, plant and equipment

In millions of euros	Land	Buildings	Plant and equipment	Vehicles	Dismantling costs	Assets in progress	Other	Total
GROSS AMOUNT								
At December 31, 2016	**756**	**5,687**	**95,555**	**451**	**3,030**	**6,462**	**1,174**	**113,115**
Acquisitions	7	24	918	39	-	4,015	58	5,062
Disposals	(10)	(84)	(851)	(40)	(34)	(110)	(208)	(1,337)
Translation adjustments	(22)	(119)	(2,466)	(11)	(41)	(414)	(16)	(3,090)
Changes in scope of consolidation	3	(23)	(1,614)	3	(4)	99	-	(1,535)
Transfer to "Assets classified as held for sale"	(26)	(67)	(11,698)	(7)	(742)	(1,160)	(14)	(13,714)
Other	9	98	3,702	9	11	(4,039)	11	(197)
At December 31, 2017(1)	**717**	**5,517**	**83,547**	**444**	**2,220**	**4,853**	**1,005**	**98,303**
Acquisitions	9	42	545	51	-	4,593	61	5,302
Disposals	(17)	(38)	(635)	(40)	(3)	(6)	(59)	(797)
Translation adjustments	(5)	31	114	2	6	(53)	8	103
Changes in scope of consolidation	(1)	(3)	(1,678)	(39)	(12)	(59)	(4)	(1,797)
Transfer to "Assets classified as held for sale"	(19)	(12)	(3,866)	(6)	(1)	(206)	(29)	(4,138)
Other	(14)	138	3,589	6	233	(3,652)	34	334
AT DECEMBER 31, 2018	**671**	**5,676**	**81,615**	**419**	**2,444**	**5,469**	**1,015**	**97,309**
ACCUMULATED DEPRECIATION AND IMPAIRMENT								
At December 31, 2016	**(145)**	**(2,925)**	**(48,534)**	**(337)**	**(1,324)**	**(1,195)**	**(878)**	**(55,337)**
Depreciation	(9)	(123)	(2,929)	(40)	(187)	-	(96)	(3,384)
Impairment	2	(31)	(670)	(1)	2	(19)	(2)	(719)
Disposals	1	68	692	36	46	96	202	1,140
Translation adjustments	6	16	1,226	10	24	59	10	1,352
Changes in scope of consolidation	1	18	825	(1)	2	26	1	871
Transfer to "Assets classified as held for sale"	15	35	7,785	5	518	208	11	8,577
Other	-	7	(388)	(2)	(9)	625	26	258
At December 31, 2017(1)	**(129)**	**(2,937)**	**(41,992)**	**(330)**	**(929)**	**(199)**	**(725)**	**(47,241)**
Depreciation	(8)	(119)	(2,600)	(42)	(189)	-	(90)	(3,048)
Impairment	(1)	(82)	(1,006)	(1)	(250)	(219)	(3)	(1,561)
Disposals	-	23	551	37	-	1	53	665
Translation adjustments	4	(5)	(108)	(2)	(4)	4	(6)	(119)
Changes in scope of consolidation	2	1	1,277	43	12	21	7	1,363
Transfer to "Assets classified as held for sale"	-	5	1,552	5	-	2	23	1,588
Other	2	(60)	56	(1)	(58)	24	(2)	(39)
AT DECEMBER 31, 2018	**(130)**	**(3,175)**	**(42,270)**	**(290)**	**(1,418)**	**(367)**	**(742)**	**(48,391)**
CARRYING AMOUNT								
At December 31, 2017(1)	**588**	**2,579**	**41,554**	**115**	**1,291**	**4,653**	**280**	**51,062**
AT DECEMBER 31, 2018	**541**	**2,501**	**39,345**	**129**	**1,026**	**5,102**	**273**	**48,917**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement financial information").*

In 2018, the net decrease in “Property, plant and equipment” takes into account:

- the classification under “Assets held for sale” (*see Note 5.2 “Assets held for sale and discontinued operations”*) for a negative €2,550 million of the Group’s interest in Glow (power generation in Thailand), the Langa group's operating wind farms in France and solar fields in Mexico. The carrying amount of these property, plant and equipment, has been transferred to “Assets classified as held for sale” in the statement of financial position at December 31, 2018;
- depreciation for a total negative amount of €3,048 million;
- impairment losses amounting to €1,561 million, mainly related to thermal power generation assets in Europe (€1,268 million) and Latin America (€71 million), and gas infrastructure sites in France (€87 million);
- changes in the scope of consolidation for a negative €434 million, mainly resulting from the DBSO[1] activities relating to wind and solar farms in France (negative impact of €411 million), gas distribution activities in Hungary (negative impact of €155 million), LNG activities (negative impact of €110 million euros), slightly offset by the acquisition of the Langa group in France (€206 million);
- partly offset by maintenance and development investments for a total amount of €5,302 million mainly relating to the construction of plants and development of wind and solar farms in Latin America and France, the extension of transportation and distribution networks in the Infrastructures Europe segment.

In 2017, the net increase in “Property, plant and equipment” mainly resulted from:

- the transfer of the carrying amount of property, plant and equipment to “Assets held for sale” of Loy Yang B assets in the process being sold at December 31, 2017 and of exploration-production activities under discontinued operations for a negative total amount of €5,137 million;
- maintenance and development investments for a total amount of €5,062 million mainly related to the construction of plants and development of wind and solar farms in Latin America and France, and the extension of transportation and distribution networks in the Infrastructures Europe segment;
- depreciation for a total negative amount of €3,384 million;
- negative net translation adjustments of €1,738 million, mainly resulting from the US dollar (negative impact of €963 million) and the Brazilian real (negative impact of €439 million);
- impairment losses amounting to €719 million, mainly related to thermal power generation assets (€510 million) and gas storage facilities in Germany (€156 million);
- changes in the scope of consolidation for a negative €664 million, mainly resulting from the DBSO activities relating to wind and solar fields in France (negative impact of €277 million), and the disposal of power generation plants in the United-Kingdom (negative impact of €186 million).

16.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €1,298 million at December 31, 2018 compared to €2,185 million at December 31, 2017.

The decrease mainly related to the classification of Glow assets in Thailand under “Assets held for sale”. The secured debt, on the other hand, was classified as “Liabilities held for sale” *(see Note 5.2).*

16.3 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, property, 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.

(1) Develop Build Share and Operate.

Investment commitments made by the Group to purchase property, plant and equipment totaled €1,415 million at December 31, 2018 compared to €1,988 million at December 31, 2017.

16.4 Other information

Borrowing costs for 2018 included in the cost of property, plant and equipment amounted to €134 million at December 31, 2018 compared to €104 million at December 31, 2017.

NOTE 17 FINANCIAL INSTRUMENTS

17.1 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 flows characteristics of the financial asset. The analysis of the contractual cash flows characteristics allows to determine whether these cash flows are "only payments of principal and interest on the outstanding amounts" (known as "SPPI" test or Solely Payment 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 flows 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 their 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 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, 2018			Dec. 31, 2017[1]		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Other financial assets	17.1	6,193	2,290	8,483	5,586	2,010	7,596
Equity instruments at fair value through other comprehensive income		*742*	*-*	*742*	*733*	*-*	*733*
Equity instruments at fair value through income		*365*	*-*	*365*	*393*	*-*	*393*
Debt instruments at fair value through other comprehensive income		*1,108*	*840*	*1,947*	*844*	*942*	*1,786*
Debt instruments at fair value through income		*600*	*233*	*832*	*647*	*210*	*857*
Loans and receivables at amortized cost		*3,378*	*1,218*	*4,596*	*2,968*	*858*	*3,826*
Trade and other receivables	8.2	-	15,613	15,613	-	13,127	13,127
Assets from contracts with customers	8.2	-	7,411	7,411	-	6,930	6,930
Cash and cash equivalent	17.1	-	8,700	8,700	-	8,929	8,929
Derivative instruments	17.4	2,693	10,679	13,372	2,949	7,378	10,326
TOTAL		**8,886**	**44,692**	**53,578**	**8,535**	**38,374**	**46,908**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

17.1.1 Other financial assets

17.1.1.1 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 in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument that is not held for trading. 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, the 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, 2017[1]	**733**	**393**	**1,127**
Increase	50	170	220
Decrease	(62)	(118)	(179)
Changes in fair value	35	(46)	(10)
Changes in scope of consolidation, foreign exchange translation and other	(15)	(34)	(50)
AT DECEMBER 31, 2018	**742**	**365**	**1,107**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

Equity instruments amounted to €1,107 million at December 31, 2018 of which €62 million in listed securities relating to equity instruments at fair value through other comprehensive income.

At December 31, 2018 the net book value of equity instruments at fair value through other comprehensive income amounted to €742 million. This amount mainly includes shares held by the group as minority interest in Nord Stream AG for an amount of €478 million.

In 2018, the Group received €55 million of dividends including €38 million from equity instruments at fair value through other comprehensive income (of which €1 million from shares sold in 2018) and €15 million from equity instruments at fair value through income (of which €3 million from shares sold in 2018).

17.1.1.2 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 recycling mechanism). This involves a measurement through profit or loss for interest (at amortized cost using the effective interest method), depreciations and foreign exchange gains and losses, and through OCI (with recycling mechanism) for other gains or losses.

This category mainly includes bonds and financial deposits (step-up deposits).

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:

- interest income using the effective interest method;
- 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, on simple request of the holder. They are measured at fair value through profit or loss because the contractual cash flows characteristics do not meet the SPPI test.

In millions of euros	Debt instruments 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 other comprehensive income	Liquid debt instruments held for cash investment purposes at fair value through income	Total
At December 31, 2017[1]	**884**	**621**	**902**	**236**	**2,643**
Increase	139	(73)	170	65	300
Decrease	(9)	(2)	(145)	-	(156)
Changes in fair value	33	(23)	-	3	14
Changes in scope of consolidation, foreign exchange translation and other	(22)	3	(5)	3	(22)
AT DECEMBER 31, 2018	**1,025**	**525**	**922**	**307**	**2,779**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

At December 31, 2018, the debt instruments at fair value amounted to €2,779 million including €1,947 million of debt instruments at fair value through other comprehensive income and €832 million of debt instruments at fair value through income (respectively €1,786 million and €857 million at December 31, 2017).

Debt instruments at fair value at December 31, 2018 include bonds and money market funds held by Synatom for €1,492 million and liquid instruments deducted from gross debt for €1,229 million (respectively €1,441 million and €1,138 million at December 31, 2017).

17.1.1.3 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.

Leasing security deposits are presented in this caption and recognized at their nominal value.

	Dec. 31, 2018			Dec. 31, 2017[1]		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Loans granted to affiliated companies	1,498	121	1,619	990	97	1,087
Other receivables at amortized cost	675	241	916	672	107	779
Amounts receivable under concession contracts	544	68	612	571	82	653
Amounts receivable under finance leases	661	89	750	735	72	807
Margin calls on derivatives hedging borrowings - assets	-	699	699	-	500	500
TOTAL	**3,378**	**1,218**	**4,596**	**2,968**	**858**	**3,826**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

The increase in "Loans and receivables at amortized cost" in 2018 includes the €247 million loan granted to Neptune Energy as part of the sale of the exploration-production business. This item also includes the financing of the Nord Stream 2 pipeline project for a nominal amount of €298 million (excluding capitalized interests and expected credit losses).

The table below shows impairment and expected credit losses on loans and receivables at amortized cost:

	Dec. 31, 2018				Dec. 31, 2017[1]			
In millions of euros	Gross	Amortized cost	Impairment and expected credit loss[2]	Net	Gross	Amortized cost	Impairment and expected credit loss[2]	Net
Loans granted to affiliated companies	1,808	86	(275)	1,619	1,293	19	(225)	1,087
Other receivables at amortized cost	924	1	(10)	916	789	-	(10)	779
Amounts receivable under concession contracts	614	-	(1)	612	655	-	(2)	653
Amounts receivable under finance leases	783	1	(34)	750	839	1	(33)	807
Margin calls on derivatives hedging borrowings - assets	699	-	-	699	500	-	-	500
TOTAL	**4,827**	**88**	**(319)**	**4,596**	**4,076**	**21**	**(270)**	**3,826**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").*

(2) *Including impairment on the Argentine State receivables, attributable to SUEZ (see Note 28.1.1 "Concessions in Buenos Aires and Santa Fe).*

Information on the age of past due receivables and on counterparty risk associated with loans and receivables at amortized cost are provided in Note 18.2 "Counterparty risk".

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, 2018	263	(21)	(41)
At December 31, 2017[1]	248	(13)	(8)

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").*

No material expected credit losses were recognized against loans and receivables at amortized cost at December 31, 2018 and December 31, 2017.

17.1.2 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 8.2.

17.1.3 Cash and cash equivalents

Accounting principles

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 €8,700 million at December 31, 2018 (€8,929 million at December 31, 2017).

This amount included funds related to the green bond issues, which remain unallocated to the funding of eligible projects (*see section 5 of the Registration Document*).

This amount also included at December 31, 2018 €121 million in cash and cash equivalents subject to restrictions (€141 million at December 31, 2017). Cash and cash equivalents subject to restrictions include notably €62 million of cash equivalents set aside to cover the repayment of borrowings and debt as part of project financing arrangements in certain subsidiaries.

Gains recognized in respect of “Cash and cash equivalents” amounted to €73 million at December 31, 2018 compared to €104 million at December 31, 2017.

17.1.4 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

As indicated in Note 20.2 “Nuclear dismantling liabilities”, the Belgian law of April 11, 2003, amended by the law of April 25, 2007, granted the Group’s wholly-owned subsidiary Synatom responsibility for managing and investing funds received from operators of nuclear power plants in Belgium and designed to cover the costs of dismantling nuclear power plants and managing radioactive fissile material.

Pursuant to the law, Synatom may lend up to 75% of these funds to operators of nuclear plants provided that they meet certain financial criteria – particularly in terms of credit quality. The funds that cannot be lent to operators are either lent to entities meeting the credit quality criteria set by the law or invested in financial assets such as bonds and money market funds.

Loans to entities outside the Group and other cash investments are shown in the table below:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[(1)]
Loans to third parties	**512**	**516**
Loan to Eso/Elia	454	454
Loan to Ores Assets	40	41
Loan to Sibelga	18	22
Others loans and receivables at amortized cost	**163**	**23**
Debt instruments - restricted cash	163	23
Equity and debt instruments at fair value	**1,539**	**1,483**
Equity instruments at fair value through other comprehensive income	47	41
Debt instruments at fair value through other comprehensive income	1,025	861
Debt instruments at fair value through income	467	580
TOTAL	**2,214**	**2,022**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 “Restatement of 2017 comparative data”).

Loans to entities outside the Group and the cash subject to restriction held by money market funds are shown in the statement of financial position as “Loans and receivables at amortized cost”. Bonds and money market funds held by Synatom are shown as “equity instruments at fair value through other comprehensive income”, “debt instruments at fair value through other comprehensive income” or “debt instruments at fair value through income” (*see Note 17.1 “Financial assets”*).

17.1.5 Transfer of financial assets

At December 31, 2018, the outstanding amount of transferred financial assets (as well as the risks to which the Group remains exposed following the transfer of those financial assets) as part of transactions leading to either (i) all or part of those assets being retained in the statement of financial position, or (ii) their full deconsolidation while retaining a continuing involvement in these financial assets, was not material in terms of the Group's indicators.

In 2018, the Group carried out disposals without recourse to financial assets as part of transactions leading to full derecognition, for an outstanding amount of €872 million at December 31, 2018.

17.1.6 Financial assets and equity instruments pledged as collateral for borrowings and debt

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Financial assets and equity instruments pledged as collateral	3,447	3,602

This item mainly includes the carrying amount of equity instruments pledged as collateral for borrowings and debt.

17.2 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, 2018, broken down into current and non-current items:

		Dec. 31, 2018			Dec. 31, 2017(1)		
In millions of euros	Notes	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	17.2	26,434	5,745	32,178	25,292	8,175	33,467
Trade and other payables	17.2	-	19,759	19,759	-	16,404	16,404
Liabilities from contracts with customers	8.2	36	3,598	3,634	258	3,317	3,575
Derivative instruments	17.4	2,785	11,510	14,295	2,980	8,720	11,700
Other financial liabilities	17.2	46	-	46	32	-	32
TOTAL		**29,301**	**40,612**	**69,913**	**28,562**	**36,617**	**65,179**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

17.2.1 Trade and other payables

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Trade payables	19,192	15,983
Payable on fixed assets	568	422
TOTAL	**19,759**	**16,404**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

The carrying amount of these financial liabilities represents a reasonable estimate of their fair value.

17.2.2 Liabilities from contracts with customers

Information on liabilities from contracts with customers are provided in Note 8.2.

17.2.3 Borrowings and debt

	Dec. 31, 2018			Dec. 31, 2017[1]		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Bond issues	21,444	1,202	22,645	20,062	2,175	22,237
Bank borrowings	4,272	349	4,620	4,231	928	5,159
Negotiable commercial paper	-	2,894	2,894	-	3,889	3,889
Drawdowns on credit facilities	33	33	66	26	21	47
Liabilities under finance leases	262	118	380	330	152	483
Other borrowings	74	51	125	65	56	121
TOTAL BORROWINGS	**26,084**	**4,647**	**30,731**	**24,714**	**7,221**	**31,935**
Bank overdrafts and current accounts	-	464	464	-	466	466
OUTSTANDING BORROWINGS AND DEBT	**26,084**	**5,111**	**31,195**	**24,714**	**7,688**	**32,401**
Impact of measurement at amortized cost	13	228	241	242	47	289
Impact of fair value hedges	337	2	339	336	29	365
Margin calls on derivatives hedging borrowings - carried in liabilities	-	404	404	-	412	412
BORROWINGS AND DEBT	**26,434**	**5,745**	**32,178**	**25,292**	**8,175**	**33,467**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

The fair value of gross borrowings and debt amounted to €33,651 million at December 31, 2018, compared with a carrying amount of €32,178 million.

Financial income and expenses relating to borrowings and debt are detailed in Note 11 "Net financial income/(loss)".

Borrowings and debt are analyzed in Note 17.3 "Net debt".

17.2.4 Other financial liabilities

At December 31, 2018, other financial liabilities amounted to €46 million (compared to €32 million at December 31, 2017), mainly corresponding to debt resulting from uncalled share capital of entities accounted for using the equity method.

17.3 Net debt

17.3.1 Net debt by type

	Dec. 31, 2018			Dec. 31, 2017[1]		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Outstanding borrowings	26,084	5,111	31,195	24,714	7,688	32,401
Impact of measurement at amortized cost	13	228	241	242	47	289
Impact of fair value hedge[2]	337	2	339	336	29	365
Margin calls on derivatives hedging borrowings - carried in liabilities	-	404	404	-	412	412
BORROWINGS AND DEBT	**26,434**	**5,745**	**32,178**	**25,292**	**8,175**	**33,467**
Derivatives hedging borrowings - carried in liabilities[3]	259	66	325	293	59	352
GROSS DEBT	**26,692**	**5,811**	**32,503**	**25,585**	**8,234**	**33,819**
Assets related to financing	(53)	(1)	(53)	(59)	(1)	(60)
Margin calls on derivatives hedging borrowings - carried in assets	-	(699)	(699)	-	(500)	(500)
ASSETS RELATED TO FINANCING AND MARGIN CALLS	**(53)**	**(700)**	**(752)**	**(59)**	**(501)**	**(559)**
Cash and cash equivalents	-	(8,700)	(8,700)	-	(8,929)	(8,929)
Derivatives hedging borrowings - carried in assets[3]	(678)	(42)	(720)	(610)	(63)	(673)
NET CASH	**(678)**	**(8,742)**	**(9,420)**	**(610)**	**(8,992)**	**(9,602)**
Liquid debt instruments held for cash investment purposes	(235)	(995)	(1,230)	(30)	(1,108)	(1,138)
LIQUID DEBT INSTRUMENTS HELD FOR CASH INVESTMENT PURPOSES	**(235)**	**(995)**	**(1,230)**	**(30)**	**(1,108)**	**(1,138)**
NET DEBT	25,727	(4,625)	21,102	24,887	(2,367)	22,520
Outstanding borrowings	26,084	5,111	31,195	24,714	7,688	32,401
Assets related to financing	(53)	(1)	(53)	(59)	(1)	(60)
Liquid debt instruments held for cash investment purposes	(235)	(995)	(1,230)	(30)	(1,108)	(1,138)
Cash and cash equivalents	-	(8,700)	(8,700)	-	(8,929)	(8,929)
NET DEBT EXCLUDING THE IMPACT OF AMORTIZED COST, DERIVATIVE INSTRUMENTS AND MARGIN CALLS	**25,796**	**(4,584)**	**21,212**	**24,626**	**(2,351)**	**22,275**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

(2) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship.

(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.

Net debt excluding internal debt of discontinued operations amounted to €20,788 million at December 31, 2017 (*see Notes 5.1.2 "Disposal of the exploration-production business" and 5.1.4 "Disposal of ENGIE's liquefied natural gas (LNG) activities"*).

17.3.2 Reconciliation between net debt and cash flow from (used in) financing activities

In millions of euros	Dec. 31, 2017[(1)]	Cash flow from financing activities	Cash flow from operating and investing activities and variation of cash and cash equivalents	Change in fair value	Translation adjustments	Change in scope of consolidation and others	Dec. 31, 2018
Outstanding borrowings	32,401	(589)	-	-	41	(658)	31,195
Impact of measurement at amortized cost	289	(20)	-	19	(12)	(35)	241
Impact of fair value hedge	365	-	-	(26)	-	-	339
Margin calls on derivatives hedging borrowings - carried in liabilities	412	(8)	-	-	-	-	404
BORROWINGS AND DEBT	**33,467**	**(617)**	**-**	**(7)**	**29**	**(694)**	**32,178**
Derivatives hedging borrowings - carried in liabilities	352	(76)	-	-	51	(2)	325
GROSS DEBT	**33,819**	**(693)**	**-**	**(7)**	**80**	**(696)**	**32,503**
Assets related to financing	(60)	-	-	-	6	-	(53)
Margin calls on derivatives hedging borrowings - carried in assets	(500)	(199)	-	-	-	-	(699)
ASSETS RELATED TO FINANCING AND MARGIN CALLS	**(559)**	**(199)**	**-**	**-**	**6**	**-**	**(752)**
Cash and cash equivalents	(8,929)	-	(449)	-	93	585	(8,700)
Derivatives hedging borrowings - carried in assets	(673)	89	-	29	(160)	(4)	(720)
NET CASH	**(9,602)**	**89**	**(449)**	**29**	**(67)**	**580**	**(9,420)**
Liquid debt instruments held for cash investment purposes	(1,138)	(90)	-	(4)	-	3	(1,230)
LIQUID DEBT INSTRUMENTS HELD FOR CASH INVESTMENT PURPOSES	**(1,138)**	**(90)**	**-**	**(4)**	**-**	**3**	**(1,230)**
NET DEBT	22,520	(894)	(449)	18	19	(113)	21,102

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").*

17.3.3 Main events of the period

17.3.3.1 Impact of changes in the scope of consolidation and in exchange rates on net debt

In 2018, changes in exchange rates resulted in a €19 million increase in net debt, including a €124 million decrease in relation to the Brazilian real, which was offset by a €151 million increase in debt denominated in US dollars.

Changes in the scope of consolidation (including the cash impact of acquisitions and disposals) led to a €2,605 million decrease in net debt, reflecting:

- disposals of assets over the period, which reduced net debt by €3,938 million, notably including the disposal of the exploration-production business, upstream liquefied natural gas (LNG) activities, the Loy Yang B power plant in Australia and the gas distribution business in Hungary (*see Note 5.1 "Disposals carried out in 2018"*);
- the classification of Glow under "Assets held for sale" (*see Note 5.2.1 "Disposal of ENGIE's interest in Glow"*) and assets held by the Langa group (*see Note 5.2.2 "Disposal of Langa group asset disposal program"*) which reduced net debt by €993 million;
- acquisitions carried out in 2018 (chiefly in the United States with the purchase of companies in the renewable energy and services sectors and in France with the purchase of the Langa group, Priora FM SA and a majority interest in Electro Power Systems), which increased net debt by €2,326 million (*see Note 5.3 "Acquisitions carried out in 2018"*).

17.3.3.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2018:

- on June 22, 2018, ENGIE SA issued €750 million worth of bonds maturing in June 2028 with a 1.421% coupon;
- on September 19, 2018, ENGIE SA issued €1 billion worth of bonds:
  - a €500 million tranche maturing in September 2025 with a 0.875% coupon,
  - a €500 million tranche maturing in September 2033 with a 1.875% coupon;
- the redemption of the following bonds, which matured in 2018:
  - ENGIE SA redeemed the €644 million worth of bonds that matured on February 18, 2018 with a 5.125% coupon,
  - ENGIE SA redeemed the €729 million worth of bonds that matured on June 1, 2018 with a 2.25% coupon,
  - ENGIE SA redeemed the €150 million worth of bonds that matured on October 17, 2018 with a 3.046% coupon;
- on July 5, July 11 and October 16, 2018, ENGIE SA carried out private issues in the amounts of €75 million, AUD 85 million (€53 million) and €50 million, maturing in 2038, 2033 and 2027 respectively;
- on June 6, 2018, ENGIE gave notice that it had exercised the annual prepayment option for the €600 million tranche of deeply-subordinated notes (representing a total amount of €621 million including the accrued coupon) that had previously been recognized in equity in an amount of €584 million. ENGIE SA redeemed the bonds on July 10, 2018;
- on December 5, 2018, ENGIE gave notice that it had exercised the annual prepayment option for the GBP 300 million tranche of deeply-subordinated notes (representing a total amount of €352 million including the accrued coupon) that had previously been recognized in equity in an amount of €340 million;
- on December 12, 2018, Electrabel SA repaid the €300 million bank loan with a variable 3-month Euribor coupon;
- ENGIE Brasil Energia carried out the following transactions:
  - on June 28, 2018, ENGIE Brasil Energia carried out four bond issues totaling BRL 1,802 million (€401 million). BRL 782 million of these issues will mature in 2023 and BRL 1,020 million in 2027;
  - on July 25, 2018, ENGIE Brasil Energia carried out two bond issues totaling BRL 746 million (€161 million). BRL 515 million of these issues will mature in 2025 and BRL 231 million in 2028;
  - on August 27, 2018, ENGIE Brasil Energia took out 11 bank loans to finance wind farm projects totaling BRL 730 million (€153 million) and maturing in 2035;
  - in April 2018 and November 2018, ENGIE Brasil Energia took out four bank loans totaling USD 400 million including €174 million maturing in 2020 and €174 million in 2021;
  - in August 2018 and December 2018, ENGIE Brasil Energia took out bank loans totaling BRL 635 million (€143 million) maturing in January 2036;
  - on June 29, 2018, ENGIE Brasil Energia partially redeemed bonds in an amount of BRL 1,685 million (€375 million).

17.4 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 will be 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 18 – 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 therefore 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.

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 measurements requirements described in paragraph 17.1. 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 within 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).

If an embedded derivative is separate from the host contract, it shall be 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 income. 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 income 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 income. 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 income.

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 income. 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 income, under “Mark-to-market” or “Mark-to-market on commodity contracts other than trading instruments” below current operating income for derivative instruments with non-financial assets as the underlying, and in 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.

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 contracts 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 some parameters 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).

Derivative instruments recognized in assets and liabilities are measured at fair value and broken down as follows:

	Dec. 31, 2018						Dec. 31, 2017[1]					
	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	678	42	720	259	66	325	610	63	673	293	59	352
Derivatives hedging commodities	1,409	10,608	12,018	1,311	11,405	12,716	1,532	7,231	8,763	1,475	8,544	10,018
Derivatives hedging other items[2]	606	28	634	1,215	38	1,254	806	83	889	1,212	118	1,329
TOTAL	**2,693**	**10,679**	**13,372**	**2,785**	**11,510**	**14,295**	**2,949**	**7,378**	**10,326**	**2,980**	**8,720**	**11,700**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").*

(2) *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 debt, as well as net investment hedge derivatives.*

17.4.1 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 set off in accordance with Section 42 of IAS 32, are presented in the table below:

		Dec. 31, 2018				Dec. 31, 2017			
In millions of euros		Gross amount	NET AMOUNT RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION[2]	Other offsetting agreements[3]	TOTAL NET AMOUNT	Gross amount	NET AMOUNT RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION[1,2]	Other offsetting agreements[3]	TOTAL NET AMOUNT
Assets	Derivatives hedging commodities	12,588	**12,018**	(8,409)	**3,608**	9,177	**8,763**	(5,061)	**3,703**
	Derivatives hedging borrowings and other items	1,354	**1,354**	(384)	**970**	1,563	**1,563**	(315)	**1,248**
Liabilities	Derivatives hedging commodities	(13,286)	**(12,716)**	10,448	**(2,268)**	(10,432)	**(10,018)**	7,221	**(2,798)**
	Derivatives hedging borrowings and other items	(1,579)	**(1,579)**	601	**(978)**	(1,682)	**(1,682)**	393	**(1,289)**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").*

(2) *Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in Section 42 of IAS 32.*

(3) *Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in Section 42 of IAS 32.*

17.5 Fair value of financial instruments by level in the fair value hierarchy

17.5.1 Financial assets

The table below shows the allocation of financial instruments carried in assets to the different levels in the fair value hierarchy:

In millions of euros	Dec. 31, 2018 Total	Level 1	Level 2	Level 3	Dec. 31, 2017[1] Total	Level 1	Level 2	Level 3
Other financial assets (excluding loans and receivables at amortized cost)	3,887	1,554	-	2,332	3,493	976	277	1,937
Equity instruments at fair value through other comprehensive income	*742*	*62*	*-*	*680*	*733*	*55*	*-*	*678*
Equity instruments at fair value through income	*365*	*-*	*-*	*365*	*393*	*37*	*-*	*356*
Debt instruments at fair value through other comprehensive income	*1,947*	*1,025*	*-*	*922*	*1,786*	*884*	*-*	*902*
Debt instruments at fair value through income	*832*	*467*	*-*	*365*	*580*	*-*	*277*	*-*
Derivative instruments	13,372	38	12,912	422	10,326	21	9,993	313
Derivatives hedging borrowings	*720*	*-*	*720*	*-*	*673*	*-*	*673*	*-*
Derivatives hedging commodities - relating to portfolio management activities[2]	*2,075*	*-*	*2,036*	*39*	*2,001*	*-*	*1,969*	*32*
Derivatives hedging commodities - relating to trading activities[2]	*9,943*	*38*	*9,522*	*383*	*6,763*	*21*	*6,461*	*281*
Derivatives hedging other items	*634*	*-*	*634*	*-*	*889*	*-*	*889*	*-*
TOTAL	**17,259**	**1,593**	**12,912**	**2,754**	**13,820**	**997**	**10,270**	**2,249**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

(2) Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and a power contract that are measured at fair value and relating to trading activities.

A definition of these three levels is presented in Note 17.4 "Derivative instruments".

Other financial assets (excluding loans and receivables at amortized cost)

At December 31, 2018, 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	Equity instruments at fair value through income	Debt instruments at fair value through other comprehensive income	Debt instruments at fair value through income	Other fiancial assets (excluding loans and receivable at amortized cost)
At December 31, 2017[1]	**678**	**356**	**902**	**277**	**2,213**
Acquisitions	44	170	170	85	469
Disposals	(61)	(81)	(145)	(2)	(290)
Changes in fair value	34	(46)	-	-	(11)
Changes in scope of consolidation, foreign currency translation and other changes	(15)	(34)	(5)	6	(49)
At December 31, 2018	**680**	**365**	**922**	**365**	**2,332**
Gains/(losses) recorded in income relating to instruments held at the end of the period					-

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

Derivative instruments

At December 31, 2018, changes in level 3 derivative instruments commodities can be analyzed as follows:

In millions of euros	Net Asset/(Liability)
At December 31, 2017	**(188)**
Changes in fair value recorded in income	29
Settlements	87
Transfer out of level 3 to levels 1 and 2	(6)
Net fair value recorded in income	**(79)**
Deferred Day-One gains/(losses)	(4)
At December 31, 2018	**(83)**

17.5.2 Financial liabilities

The table below shows the allocation of financial instruments carried in liabilities to the different levels in the fair value hierarchy:

	Dec. 31, 2018				Dec. 31, 2017[1]			
In millions of euros	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings used in designated fair value hedges	5,358	-	5,358	-	5,217	-	5,217	-
Borrowings not used in designated fair value hedges	28,293	19,028	9,265	-	30,352	19,478	10,874	-
Derivative instruments	14,295	26	13,764	505	11,700	26	11,173	501
Derivatives hedging borrowings	*325*	-	*325*	-	*352*	-	*352*	-
Derivatives hedging commodities - relating to portfolio management activities[2]	*2,124*	-	*2,075*	*49*	*2,210*	-	*2,140*	*70*
Derivatives hedging commodities - relating to trading activities[2]	*10,592*	*26*	*10,110*	*456*	*7,808*	*26*	*7,351*	*431*
Derivatives hedging other items	*1,254*	-	*1,254*	-	*1,329*	-	*1,329*	-
TOTAL	**47,946**	**19,054**	**28,387**	**505**	**47,269**	**19,504**	**27,264**	**501**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").*

(2) *Derivative financial instruments relating to commodities classified in level 3 mainly include long-term gas supply contracts and a power contract that are measured at fair value and relating to trading activities.*

A definition of these three levels is presented in Note 17.4 "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, which 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 18 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 Registration Document.

18.1 Market risks

18.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has identified primarily 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.

18.1.1.1 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 and transportation) over various time frames (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 as at December 31, 2018 are detailed in the table below. They 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.

Sensitivity analysis[1]

		Dec. 31, 2018		Dec. 31, 2017	
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	60	-	307	197
Natural gas	+€3/MWh	961	1	(17)	(48)
Electricity	+€5/MWh	65	(26)	145	(30)
Coal	+USD 10/ton	9	2	33	2
Greenhouse gas emission rights	+€2/ton	37	1	53	-
EUR/USD	+10%	67	(2)	102	(233)
EUR/GBP	+10%	87	-	69	2

(1) The sensitivities shown above apply solely to financial commodity derivatives used for hedging purposes as part of the portfolio management activities.

The change in sensitivity on natural gas compared to December 31, 2017 is mainly related to the sale of the upstream LNG activities, whose long exposure offset the short exposure of the gas supply activities.

18.1.1.2 Trading activities

The Group's trading activities are primarily conducted within:

- ENGIE Global Markets and ENGIE Energy Management. The purpose of these wholly-owned companies is to (i) assist Group entities in optimizing their asset portfolios; (ii) create and implement energy price risk management solutions for internal and external customers;
- ENGIE SA for the optimization of part of its long-term gas supply contracts, of a power exchange contract and of part of its gas sales contracts with retail entities in France and Benelux and with power generation facilities in France and Belgium.

Revenues from trading activities totaled €526 million at December 31, 2018 (€349 million at December 31, 2017).

The use of Value at Risk (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 trading entities.

Value at Risk

In millions of euros	Dec. 31, 2018	2018 average[(1)]	2018 maximum[(2)]	2018 minimum[(2)]	2017 average[(1)]
Trading activities	13	10	21	4	9

(1) Average daily VaR.
(2) Maximum and minimum daily VaR observed in 2018.

18.1.2 Hedges of commodity risks

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 that 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.

The Group applies cash flow hedge accounting as defined by IFRS 9 only for a minor part of the aforementioned hedge transactions. The disposal of the Group's upstream liquefied natural gas activities and of the exploration-production business (70% interest in EPI) in 2018 further reduced the materiality of hedge accounting for commodity risks.

The fair values of commodity derivatives at December 31, 2018 and December 31, 2017 are indicated in the table below:

	Dec. 31, 2018				Dec. 31, 2017[(1)]			
	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	1,409	666	(1,311)	(813)	1,532	468	(1,475)	(736)
Cash flow hedges	*46*	*56*	*(61)*	*(129)*	*186*	*62*	*(208)*	*(110)*
Other derivative instruments	*1,364*	*610*	*(1,249)*	*(684)*	*1,346*	*406*	*(1,267)*	*(625)*
Derivative instruments relating to trading activities	-	9,943	-	(10,592)	-	6,763	-	(7,808)
TOTAL	**1,409**	**10,608**	**(1,311)**	**(11,405)**	**1,532**	**7,231**	**(1,475)**	**(8,544)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

See also Note 17.4 “Derivative instruments”.

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.

18.1.2.1 Cash flow hedges

The fair values of cash flow hedges by type of commodity are as follows:

	Dec. 31, 2018				Dec. 31, 2017[1]			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	20	15	(1)	(3)	14	12	-	(10)
Electricity	1	3	(44)	(120)	3	7	(44)	(52)
Coal	7	3	-	-	8	4	-	-
Oil	-	-	-	-	145	1	-	(1)
Other[2]	18	35	(16)	(6)	16	38	(164)	(47)
TOTAL	**46**	**56**	**(61)**	**(129)**	**186**	**62**	**(208)**	**(110)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 “Restatement of 2017 comparative data”).
(2) Includes mainly foreign currency hedges on commodities.

Notional amounts (net)[1]

Notional amounts and maturities of cash flow hedges are as follows:

	Unit	Total at Dec. 31, 2018	2019	2020	2021	2022	2023	Beyond 5 years
Natural gas	*GWh*	5,619	3,258	2,361	-	-	-	-
Electricity	*GWh*	(8,028)	(4,601)	(2,241)	(1,186)	-	-	-
Coal	*Thousands of tons*	220	128	92	-	-	-	-
Oil-based products	*Thousands of barrels*	-	-	-	-	-	-	-
Forex	*Millions of euros*	65	25	21	18	-	-	-
Greenhouse gas emission rights	*Thousands of tons*	1,050	900	150	-	-	-	-

(1) Long/(short) position.

At December 31, 2018, a loss of €35 million was recognized in equity in respect of cash flow hedges, versus a loss of €24 million at December 31, 2017. A loss of €20 million was reclassified from equity to income in 2018, compared to a loss of €185 million in 2017.

Gains and losses arising from the ineffective portion of hedges are taken through profit or loss. This represented a gain of €8 million in 2018, compared to a loss of €6 million in 2017.

18.1.2.2 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.

18.1.3 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 in 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, in order, to assets in American dollars, Brazilian real and pounds sterling.

18.1.3.1 Financial instruments by currency

The following tables present a breakdown by currency of outstanding gross debt and net debt, before and after hedging:

Outstanding gross debt

	Dec. 31, 2018		Dec. 31, 2017	
	Before hedging	After hedging	Before hedging	After hedging
EUR	68%	76%	69%	79%
USD	12%	14%	12%	11%
GBP	8%	1%	7%	0%
Other currencies	12%	9%	12%	10%
TOTAL	**100%**	**100%**	**100%**	**100%**

Net debt

	Dec. 31, 2018		Dec. 31, 2017	
	Before hedging	After hedging	Before hedging	After hedging
EUR	63%	75%	65%	80%
USD	15%	18%	16%	14%
GBP	12%	1%	9%	(1)%
Other currencies	10%	6%	10%	7%
TOTAL	**100%**	**100%**	**100%**	**100%**

18.1.3.2 Currency risk sensitivity analysis

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).

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, 2018		
	Impact on income		Impact on equity
In millions of euros	+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)	(18)	18	NA
Financial instruments (debt and derivatives) qualified as net investment hedges (3)	NA	NA	137

(1) +(-)10%: depreciation (appreciation) of 10% on all foreign currencies against the euro.
(2) Excluding derivatives qualified as net investment hedges.
(3) This impact is countered by the offsetting change in the net investment hedged.

18.1.4 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 the 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. At December 31, 2018, the Group had a portfolio of interest rate options (caps) protecting it from a rise in short-term interest rates for the euro.

The Group has a portfolio of 2019 and 2020 forward interest rate pre-hedges with respective 18- and 10-year maturities to protect the refinancing interest rate on a portion of its debt.

18.1.4.1 Analysis of financial instruments by type of interest rate

The following tables present a breakdown by type of interest rate of outstanding gross debt and net debt before and after hedging.

Outstanding gross debt

	Dec. 31, 2018		Dec. 31, 2017	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	23%	43%	29%	39%
Fixed rate	77%	57%	71%	61%
TOTAL	100%	100%	100%	100%

Net debt

	Dec. 31, 2018		Dec. 31, 2017	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	(11)%	19%	(1)%	14%
Fixed rate	111%	81%	101%	86%
TOTAL	100%	100%	100%	100%

18.1.4.2 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, 2018			
	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	(40)	39	NA	NA
Change in fair value of derivatives not qualifying as hedges	51	(65)	NA	NA
Change in fair value of derivatives qualifying as cash flow hedges	NA	NA	321	(412)

18.1.5 Currency and interest rate hedges

18.1.5.1 Currency risk management

Foreign currency exchange risk (or "FX" risk) is reported and managed based on a Group-wide approach, reflected in a dedicated Group policy that is validated 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 debts, 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 pertinence 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.

18.1.5.2 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, LIBOR, etc., that do not include the borrower's credit spread.

A Group-wide approach on interest rate risk management is reflected in a dedicated Group policy that is validated by Group Management. This policy distinguishes between the two following main sources of interest rate risk:

- **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, in 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.

  The evolution of the interest rate risk is managed actively by monitoring the market rates and their effect 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 paragraph "Interest rate risk" above).

  Managing interest rate risk for specific project transactions aims 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 likeliness of completion, the availability of hedging instruments and their associated cost.

Hedging instruments and sources of hedge ineffectiveness

The Group uses principally the following risk management levers for mitigating interest rate risk:

- derivative instruments: these mostly correspond to over-the-counter contracts allowing 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, and
  - 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.

18.1.5.3 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 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, does not designate specific risk components as a hedged item and does not 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 and forwards.

The fair values of derivatives (excluding commodity instruments) at December 31, 2018 and December 31, 2017 are indicated in the table below:

	Dec. 31, 2018				Dec. 31, 2017(1)			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivatives hedging borrowings	678	42	(259)	(66)	610	63	(293)	(59)
Fair value hedges	*521*	*1*	*(29)*	*(1)*	*449*	*9*	*(38)*	*-*
Cash flow hedges	*24*	*-*	*(191)*	*-*	*15*	*1*	*(191)*	*-*
Derivative instruments not qualifying for hedge accounting	*133*	*42*	*(39)*	*(65)*	*147*	*53*	*(64)*	*(59)*
Derivatives hedging other items	606	28	(1,215)	(38)	806	83	(1,212)	(118)
Fair value hedges	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Cash flow hedges	*21*	*1*	*(284)*	*(4)*	*128*	*5*	*(375)*	*(37)*
Net investment hedges	*1*	*-*	*(5)*	*-*	*54*	*-*	*(8)*	*-*
Derivative instruments not qualifying for hedge accounting	*583*	*27*	*(927)*	*(34)*	*625*	*78*	*(830)*	*(80)*
TOTAL	**1,283**	**71**	**(1,474)**	**(105)**	**1,417**	**146**	**(1,505)**	**(177)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

See also Note 17.4 "Derivative instruments".

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 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, 2018 of the nominal amount of the hedging instruments, and, if applicable, the average price or rate of the hedging instrument:

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2019	2020	2021	2022	2023	Beyond 5 years
Buy	Fixed	CCS	AUD	**(527)**	(123)	(123)	(123)	(52)	(52)	(52)
			CHF	**(954)**	(399)	(399)	(155)	-	-	-
			EUR	**(615)**	(322)	(288)	(6)	-	-	-
			GBP	**(13,808)**	(2,041)	(2,041)	(1,789)	(1,789)	(1,230)	(4,919)
			HKD	**(1,338)**	(256)	(256)	(256)	(256)	(156)	(156)
			JPY	**(993)**	(358)	(358)	(278)	-	-	-
			NOK	**(151)**	(50)	(50)	(50)	-	-	-
			PEN	**(967)**	(263)	(263)	(252)	(189)	-	-
			USD	**(2,281)**	(1,053)	(1,097)	(44)	(44)	(44)	-
	Floating	CCS	USD	**(580)**	(262)	(318)	-	-	-	-
Sale	Fixed	CCS	CLP	**13**	7	6	-	-	-	-
			EUR	**17,988**	3,095	3,138	2,568	2,277	1,541	5,369
			GBP	**550**	286	259	5	-	-	-
			INR	**58**	-	58	-	-	-	-
			USD	**1,030**	289	286	260	195	-	-
	Floating	CCS	BRL	**600**	300	300	-	-	-	-
		CCS	EUR	**2,633**	1,180	1,180	273	-	-	-

In millions of euros

Buy/Sell	Interest rate type	Derivative instrument type	Currency	Total	2019	2020	2021	2022	2023	Beyond 5 years
Buy	Fixed	CAP	EUR	**2,000**	1,000	1,000	-	-	-	-
			HUF	**1**	-	-	-	-	-	-
		IRS	AUD	**2**	2	-	-	-	-	-
			CAD	**-**	-	-	-	-	-	-
			CZK	**16**	4	4	3	2	1	-
			EUR	**38,495**	5,671	7,324	8,197	6,157	3,660	7,486
			GBP	**13**	5	4	3	1	-	-
			USD	**2,526**	831	705	292	249	201	248
		FRA	EUR	**3,600**	1,950	1,650	-	-	-	-
	Floating	IRS	BRL	**675**	250	250	176	-	-	-
			EUR	**45,484**	13,056	11,751	7,589	5,972	2,482	4,635

The tables presented above exclude currency derivatives (except for cross currency swaps - CCS). These hedges are mainly short term, with maturity dates aligned with those of the hedged items.

Pursuant to the FX and interest rate risk management policy, FX sensitivity is presented in Note 18.1.3.2 “Currency risk sensitivity analysis” and the average cost of debt is 2.68% as presented in Note 11.1 “Cost of net debt”.

Effects of hedge accounting on the Group’s financial position and performance

The following tables show:

- the carrying amounts of the hedging instruments (financial assets separately from financial liabilities), with reference to the line item in the statement of financial position that includes the hedging instrument; and
- the nominal amounts of the hedging instruments.

Currency derivatives

	Dec. 31, 2018				Dec. 31, 2017	
	Fair value			Nominal	Fair value	Nominal
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Cash flow hedges	45	(380)	(335)	3,268	(167)	3,285
Net investment hedges	1	(5)	(3)	1,114	47	3,370
Derivative instruments not qualifying for hedge accounting	82	(105)	(23)	10,996	(76)	5,161
TOTAL	128	(489)	(361)	15,379	(197)	11,815

Interest rate derivatives

	Dec. 31, 2018				Dec. 31, 2017	
	Fair value			Nominal	Fair value	Nominal
In millions of euros	Assets	Liabilities	Total	Total	Total	Total
Fair value hedges	521	(30)	491	4,846	420	4,941
Cash flow hedges	1	(99)	(98)	1,434	(287)	1,550
Derivative instruments not qualifying for hedge accounting	703	(960)	(257)	25,216	(55)	21,792
TOTAL	1,226	(1,090)	136	31,496	78	28,283

The fair values shown in the table above are positive for an asset and negative for a liability.

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 hedge. The fair value of the hedging instruments at December 31, 2018 reflects the cumulative change in the fair value of the hedging instruments since inception of the hedges. For fair value hedges, the same principle applies to the hedged items.

Fair value hedges

The following tables concerning fair value hedges show:

- the carrying amounts of the hedged items and the accumulated amounts of fair value adjustments included in these carrying amounts, financial assets separately from financial liabilities, and with reference to the line item in the statement of financial position that includes the hedged items;
- the nominal amounts of the hedging instruments;
- the accumulated amount of fair value hedge adjustments remaining in the statement of financial position for any hedged items that have ceased to be adjusted for hedging gains and losses in accordance with paragraph 6.5.10 of IFRS 9; and
- the ineffective portion of the hedge recognized in the statement of profit or loss.

In millions of euros	Nominal amount	Fair value	Line item of the statement of financial position	Change in fair value used for calculating hedge ineffectiveness[1]	Ineffective portion recognized in profit or loss	Line item of the income statement
Hedging instruments	4,941	420	Derivatives hedging borrowings	420	(2)	Cost of net debt

In millions of euros	Outstanding amount	Impact of fair value hedge[1,2]	Line item of the statement of financial position	Change in value used for calculating hedge ineffectiveness
Hedged items	4,951	365	Long-term and short-term borrowings	142

(1) 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 fair value hedge relationship.

(2) Of which €153 million relating to hedging items that have ceased to be adjusted as a result of fair value hedge discontinuance.

Cash flow hedges

The following tables concerning cash flow hedges show:

- the change in fair value of the hedged item used as the basis for recognizing hedge ineffectiveness for the period;
- the balances in the cash flow hedge reserve for continuing hedges;
- the balances remaining in the cash flow hedge reserve for hedging relationships for which hedge accounting is no longer applied;
- the ineffective portion of the hedge recognized in the statement of profit or loss; and
- the gains and losses recognized in and reclassified from equity.

In millions of euros	Nominal amount	Fair value	Line item of the statement of financial position	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)	Line item of the income statement	Amount reclassified from the hedge reserve to profit or loss(1)	Line item of the income statement
Hedging instruments	4,835	(454)	Derivatives hedging borrowings/ other items	(291)	65	(1)	Other financial income and expenses/ Income/(loss) from operating activities	127	Other financial income and expenses/ Income/(loss) from operating activities

(1) Gains/(losses).

In millions of euros	Change in fair value used for calculating hedge ineffectiveness	Cash flow hedge reserve - hedge accounting still applied	Cash flow hedge reserve - hedge accounting no longer applied
Hedged items	290	(265)	(459)

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity:

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Fair value of derivatives by maturity date	(433)	4	(25)	(28)	(12)	(13)	(360)

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Fair value of derivatives by maturity date	(454)	(49)	(31)	(62)	(29)	(22)	(261)

Net investment hedges

The following tables concerning net investment hedges show:

- the change in fair value of the hedged item used as the basis for recognizing hedge ineffectiveness for the period;
- the balances in the foreign currency translation reserve for continuing hedges;
- the balances remaining in the foreign currency translation reserve for hedging relationships for which hedge accounting is no longer applied;
- the ineffective portion of the hedge recognized in the statement of profit or loss; and
- the gains and losses recognized in and reclassified from equity.

In millions of euros	**Nominal amount**	**Fair value**	**Line item of the statement of financial position**	**Change in fair value used for calculating hedge ineffectiveness**	**Change in the value of the hedging instrument recognized in equity(1)**	**Ineffectiveness recognized in profit or loss(1)**	**Line item of the income statement**	**Amount reclassified from the hedge reserve to profit or loss(1)**	**Line item of the income statement**
Hedging instruments	3,370	47	Derivatives hedging other items	3	25	-	Other financial income and expenses	(32)	Income/(loss) from operating activities

(1) Gains/(losses).

In millions of euros	**Change in fair value used for calculating hedge ineffectiveness**	**Cash flow hedge reserve - hedge accounting still applied**	**Cash flow hedge reserve - hedge accounting no longer applied**
Hedged items	(3)	(313)	NA

Amounts presented in the statement of changes in equity and of comprehensive income

The following table provides a reconciliation of each component of equity and an analysis of other comprehensive income:

	Cash flow hedge			**Net investment hedge**
In millions of euros	**Derivatives hedging borrowings - currency risk hedging(1)**	**Derivatives hedging other items - interest rate risk hedging(1)**	**Derivatives hedging other items - currency risk hedging(2)**	**Derivatives hedging other items - currency risk hedging(2)**
At December 31, 2017	**46**	**(562)**	**(18)**	**(320)**
Effective portion recognized in equity	(72)		7	(25)
Amount reclassified from the hedge reserve to profit or loss	(156)		29	32
Translation differences	-	-	-	-
Changes in scope of consolidation and other	1	5	(3)	-
AT DECEMBER 31, 2018	**46**	**(741)**	**(28)**	**(313)**

(1) Time period related to cash flow hedges.
(2) Transaction related to cash flow hedges.

18.2 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, goods delivery 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 a visibility and to provide tools for financial performance management; and

- provides guidelines on the use of mitigating mechanisms such as collaterals 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 standard IFRS 9, the Group has defined and applied a Group-wide methodology which includes the two different approaches:

- a portfolio approach, for which 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 different aspects:
    - public or private counterparties,
    - residential or BtoB counterparties,
    - geography,
    - type of activity,
    - size of the counterparty,
    - any other aspects the Group may consider relevant, and
  - impairment rates must be determined based on historical ageing balances and, when correlation is proven and documentation possible, the historical data must be adjusted by forward-looking elements;

- 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 of the counterparty's creditworthiness 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 supportable 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 counterparty at risk),
    - 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 the evolution of exposure for each year, especially the expected timing and amount of the contractual repayments, and 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 well-known 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 as of strategic importance for the counterparty, such as essential public services or goods, the LGD parameter is set at 30%.

The Group has decided that write-off applies in the following situations:

- for assets for which a legal recovery procedure is pending: no write-off to be applied as long as the procedure is ongoing;
- for assets for which no legal recovery procedure is pending: write-off should be booked once the trade receivable is 3 years overdue (5 years overdue for public counterparties).

18.2.1 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 business unit is responsible for managing counterparty risk, although the Group continues to manage the biggest counterparty exposures centrally.

The credit rating of large- and mid-sized counterparties with which the Group has exposures above a certain threshold is measured based on a specific rating process, while a simplified credit scoring process is used for commercial customers with which the Group has fairly low exposures. 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).

The Group's Energy Market Risk Committee (CRME) consolidates and monitors the Group's exposure to its main energy counterparties on a quarterly basis and ensures that the exposure limits set for these counterparties are respected.

18.2.1.1 Trade and other receivables, contract assets

The following tables concerning exposure to counterparty risk of "Trade and other receivables" and "Contract assets" show:

- the allocation of the outstanding amount according to the approach chosen (individual or collective) for monitoring expected credit losses;
- the breakdown of the outstanding amount relating to "Trade and other receivables" and "Contract assets" monitored according to the individual approach:
  - by risk level (levels 1, 2 and 3),
  - by counterparty type (investment grade versus other);

- the breakdown of the outstanding amount relating to "Trade and other receivables" and "Contract assets" monitored according to the collective approach between past due assets and assets neither impaired nor past due.

Total outstanding exposures presented in the tables hereafter do not include impacts relating to VAT or to any other item not subject to credit risk, which amounted to €2,547 million and €13 million respectively for "Trade and other receivables" and "Contract assets" at December 31, 2018 (compared to €2,114 million and €12 million at December 31, 2017).

Outstanding exposure breaks down as follows by type of monitoring approach:

		Dec. 31, 2018			Dec. 31, 2017		
In millions of euros		Individual approach	Collective approach	Total	Individual approach	Collective approach	Total
Trade and other receivables, net	Gross	10,339	3,804	**14,142**	8,548	3,546	**12,094**
	Expected credit losses	(323)	(754)	**(1,076)**	(352)	(729)	**(1,081)**
TOTAL		**10,016**	**3,050**	**13,066**	**8,196**	**2,817**	**11,013**
Assets from contracts with customers	Gross	3,052	4,381	**7,432**	2,757	4,073	**6,831**
	Expected credit losses	(7)	(1)	**(8)**	(7)	(5)	**(12)**
TOTAL		**3,045**	**4,379**	**7,424**	**2,750**	**4,068**	**6,818**

Individual approach

Outstanding "Trade and other receivables" and "Contract assets" exposures monitored according to the individual approach break down as follows by risk level:

		Dec. 31, 2018				Dec. 31, 2017			
In millions of euros		Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total
Trade and other receivables, net	Gross	9,694	422	222	**10,339**	7,821	455	272	**8,548**
	Expected credit losses	(107)	(71)	(145)	**(323)**	(103)	(76)	(173)	**(352)**
TOTAL		**9,587**	**352**	**77**	**10,016**	**7,718**	**379**	**99**	**8,196**
Assets from contracts with customers	Gross	2,730	261	61	**3,052**	2,047	507	203	**2,757**
	Expected credit losses	(6)	-	(1)	**(7)**	(5)	-	(1)	**(7)**
TOTAL		**2,725**	**261**	**59**	**3,045**	**2,042**	**507**	**202**	**2,750**

Outstanding "Trade and other receivables" and "Contract assets" exposures monitored according to the individual approach break down as follows by counterparty type:

		Dec. 31, 2018			Dec. 31, 2017		
In millions of euros		Investment Grade(1)	Other	Total	Investment Grade(1)	Other	Total
Trade and other receivables, net	Gross	9,161	1,178	**10,339**	7,258	1,290	**8,548**
	Expected credit losses	(205)	(118)	**(323)**	(164)	(189)	**(352)**
TOTAL		**8,956**	**1,060**	**10,016**	**7,094**	**1,101**	**8,196**
Assets from contracts with customers	Gross	2,358	694	**3,052**	1,780	977	**2,757**
	Expected credit losses	(4)	(3)	**(7)**	(6)	(1)	**(7)**
TOTAL		**2,354**	**691**	**3,045**	**1,774**	**976**	**2,750**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

Collective approach

Outstanding past due "Trade and other receivables" and "Contract assets" exposures monitored according to the collective approach break down as follows:

In millions of euros		0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2018
Trade and other receivables, net	Gross	730	146	368	1,243
	Expected credit losses	(18)	(19)	(243)	(281)
TOTAL		711	126	125	962
Assets from contracts with customers	Gross	34	3	4	42
	Expected credit losses	-	-	-	-
TOTAL		34	3	4	42

In millions of euros		0 to 6 months	6 to 12 months	beyond	Total past due assets at Dec. 31, 2017
Trade and other receivables, net	Gross	730	135	517	1,381
	Expected credit losses	(19)	(26)	(230)	(274)
TOTAL		711	109	287	1,107
Assets from contracts with customers	Gross	75	-	-	75
	Expected credit losses	-	-	-	-
TOTAL		75	-	-	75

18.2.1.2 Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

	Dec. 31, 2018		Dec. 31, 2017	
In millions of euros	Investment Grade(3)	Total	Investment Grade(3)	Total
Gross exposure(1)	9,325	12,027	7,309	8,764
Net exposure(2)	2,701	3,683	2,913	3,705
% of credit exposure to "Investment Grade" counterparties	73.4%		78.6%	

(1) *Corresponds to the maximum exposure, i.e. the value of the derivatives shown under assets (positive fair value).*

(2) *After taking into account the liability positions with the same counterparties (negative fair value), collateral, netting agreements and other credit enhancement techniques.*

(3) *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.*

18.2.2 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 drew 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.

18.2.2.1 Loans and receivables at amortized cost

The following tables concerning exposure to counterparty risk of "Loans and receivables at amortized cost" show the breakdown of the outstanding exposure:

- by risk level (levels 1, 2 and 3);
- by counterparty type (investment grade versus other).

Total outstanding exposures presented in tables hereafter do not include impacts relating to VAT or to any other item not subject to credit risk, which amount at December 31, 2018 to €809 million (compared to €533 million at December 31, 2017).

Outstanding exposure breaks down as follows by risk level:

	Dec. 31, 2018				Dec. 31, 2017			
In millions of euros	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total	Level 1: low credit risk	Level 2: increased credit risk	Level 3: impaired assets	Total
Gross	3,402	466	233	**4,100**	2,799	517	245	**3,561**
Expected credit losses	(91)	-	(227)	**(319)**	(36)	-	(232)	**(269)**
TOTAL	**3,311**	**466**	**5**	**3,781**	**2,763**	**517**	**13**	**3,293**

Outstanding exposure breaks down as follows by counterparty type:

	Dec. 31, 2018			Dec. 31, 2017		
In millions of euros	Investment Grade (1)	Other	Total	Investment Grade (1)	Other	Total
Gross	2,003	2,098	**4,100**	2,079	1,482	**3,561**
Expected credit losses	(86)	(233)	**(319)**	(21)	(247)	**(269)**
TOTAL	**1,917**	**1,865**	**3,781**	**2,058**	**1,235**	**3,293**

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's.

18.2.2.2 Counterparty risk arising from investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising from 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.

At December 31, 2018, total outstanding exposure to credit risk amounted to €9,634 million.

	Dec. 31, 2018				Dec. 31, 2017			
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	9,634	85.0%	6.0%	8.0%	10,009	84.0%	9.0%	7.0%

(1) Investment Grade corresponds to counterparties that are rated at least BBB- by Standard & Poor's or Baa3 by Moody's.
(2) Most 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, 2018, Crédit Agricole Corporate and Investment Bank (CACIB) is the main Group counterparty and represents 29% of cash surpluses. This relates mainly to a depositary risk.

18.3 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.

The Group has set up a quarterly committee tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, preparing forecasts of cash investments and divestments, and performing stress tests on the margin calls put in place when commodity, interest rate and currency derivatives are negotiated.

The Group centralizes virtually all 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. 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 onslaught of successive 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 and a daily monitoring of performance and counterparty risks for both investment types, allowing the Group to take immediate action where required in response to market developments. Consequently, 78% of cash pooled at December 31, 2018 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 and in the United States.

At December 31, 2018, bank loans accounted for 17% of gross debt (excluding overdrafts and the impact of derivatives and amortized cost), while the remaining debt was raised on capital markets (including €22,645 million in bonds, or 74% of gross debt).

Outstanding negotiable commercial paper issues represented 9% of gross debt, or €2,894 million at December 31, 2018. As negotiable 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, the refinancing of all outstanding negotiable commercial paper remains secured by confirmed bank lines of credit allowing the Group to continue to finance its activities if access to this financing source were to dry up.

Available cash, comprising cash and cash equivalents and liquid debt instruments dedicated to cash investments, totaled €9,935 million at December 31, 2018, of which 70% was invested in the Eurozone.

The Group also has access to confirmed credit lines. These facilities are appropriate for the scale of its operations and for the timing of contractual debt repayments. Confirmed credit facilities had been granted for a total of €13,297 million at December 31, 2018, of which €13,232 million was available. 95% of available credit facilities are centralized. None of these centralized facilities contain a default clause linked to covenants or minimum credit ratings.

At December 31, 2018, all the entities of the Group whose debt is consolidated comply with the covenants and declarations included in their financial documentation, except for some non-significant entities for which compliance actions are being implemented.

18.3.1 Undiscounted contractual payments relating to financial activities

At December 31, 2018, undiscounted contractual payments on net debt excluding the impact of derivatives, margin calls and amortized cost break down as follows by maturity:

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Bond issues	22,645	1,202	2,496	1,778	2,613	2,675	11,882
Bank borrowings	4,620	349	952	411	401	345	2,163
Negotiable commercial paper	2,894	2,894	-	-	-	-	-
Drawdowns on credit facilities	66	33	17	2	2	2	11
Liabilities under finance leases	380	118	92	82	10	9	70
Other borrowings	125	51	20	19	4	5	26
Bank overdrafts and current accounts	464	464	-	-	-	-	-
OUTSTANDING BORROWINGS AND DEBT	**31,195**	**5,111**	**3,577**	**2,291**	**3,030**	**3,035**	**14,152**
Assets related to financing	(53)	(1)	(5)	(2)	-	-	(46)
Liquid debt instruments dedicated to cash investments	(1,230)	(1,230)	-	-	-	-	-
Cash and cash equivalents	(8,706)	(8,706)	-	-	-	-	-
NET DEBT EXCLUDING THE IMPACT OF AMORTIZED COST, DERIVATIVE INSTRUMENTS AND MARGIN CALLS	**21,206**	**(4,825)**	**3,572**	**2,290**	**3,029**	**3,034**	**14,106**

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
OUTSTANDING BORROWINGS AND DEBT	**32,427**	**7,714**	**1,408**	**3,380**	**2,239**	**3,070**	**14,617**
Assets related to financing, liquid debt instruments dedicated to cash investments and cash and cash equivalents	(10,128)	(10,069)	-	(3)	(2)	-	(54)
NET DEBT EXCLUDING THE IMPACT OF AMORTIZED COST, DERIVATIVE INSTRUMENTS AND MARGIN CALLS	**22,300**	**(2,355)**	**1,408**	**3,377**	**2,237**	**3,070**	**14,563**

At December 31, 2018, undiscounted contractual interest payments on outstanding borrowings and debt break down as follows by maturity:

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Undiscounted contractual interest flows on outstanding borrowings and debt	9,335	894	825	734	619	534	5,730

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Undiscounted contractual interest flows on outstanding borrowings and debt	9,500	930	808	741	651	531	5,839

At December 31, 2018, undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) recognized in assets and liabilities break down as follows by maturity (net amounts):

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Derivatives (excluding commodity instruments)	(138)	(16)	37	93	59	(29)	(282)

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Derivatives (excluding commodity instruments)	(105)	(156)	(106)	(62)	(55)	(12)	286

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.

The maturities of the Group's undrawn credit facility programs are analyzed in the table below:

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Confirmed undrawn credit facility programs	13,232	760	1,263	429	5,514	5,012	255

Of these undrawn programs, an amount of €2,894 million is allocated to covering commercial paper issues.

At December 31, 2018, no single counterparty represented more than 5% of the Group's confirmed undrawn credit lines.

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Confirmed undrawn credit facility programs	13,389	704	540	1,421	5,018	5,515	191

18.3.2 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 statement of financial position 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.

At December 31, 2018

In millions of euros	Total	2019	2020	2021	2022	2023	Beyond 5 years
Derivative instruments carried in liabilities							
Relating to portfolio management activities	*(2,114)*	*(811)*	*(780)*	*(342)*	*(108)*	*(37)*	*(36)*
Relating to trading activities	*(10,579)*	*(10,579)*	*-*	*-*	*-*	*-*	*-*
Derivative instruments carried in assets							
Relating to portfolio management activities	*2,080*	*672*	*937*	*306*	*126*	*32*	*6*
Relating to trading activities	*9,952*	*9,952*	*-*	*-*	*-*	*-*	*-*
TOTAL AT DECEMBER 31, 2018	**(661)**	**(766)**	**157**	**(36)**	**18**	**(5)**	**(30)**

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Derivative instruments carried in liabilities							
Relating to portfolio management activities	*(2,179)*	*(713)*	*(858)*	*(374)*	*(172)*	*(49)*	*(12)*
Relating to trading activities	*(7,801)*	*(7,801)*	-	-	-	-	-
Derivative instruments carried in assets							
Relating to portfolio management activities	*2,018*	*463*	*794*	*433*	*220*	*56*	*52*
Relating to trading activities	*6,770*	*6,770*	-	-	-	-	-
TOTAL AT DECEMBER 31, 2017	**(1,192)**	**(1,281)**	**(64)**	**59**	**48**	**7**	**40**

18.3.3 Commitments relating to commodity purchase and sale contracts entered into within 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 (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 (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 the GEM, Latin America and North America reportable segments (expressed in TWh):

In TWh	Total at Dec. 31, 2018	2019	2020-2023	Beyond 5 years	Total at Dec. 31, 2017
Firm purchases	(3,070)	(500)	(994)	(1,576)	(5,680)
Firm sales	1,329	337	503	489	2,046

NOTE 19 EQUITY

19.1 Share capital

	Number of shares			Value (in millions of euros)		
	Total	Treasury stock	Outstanding	Share capital	Additional	Treasury stock
AT DECEMBER 31, 2016	**2,435,285,011**	**(37,522,838)**	**2,397,762,173**	**2,435**	**32,506**	**(761)**
Purchase/disposal of treasury stock	-	(9,335,181)	(9,335,181)	-	-	(122)
AT DECEMBER 31, 2017	**2,435,285,011**	**(46,858,019)**	**2,388,426,992**	**2,435**	**32,506**	**(883)**
Link 2018 worldwide employee share plan	6,036,166	26,655,602	32,691,768	6	60	459
Cancellation of treasury stock shares	(6,036,166)	6,036,166	-	(6)	-	81
Purchase of shares from the French State	-	(11,111,111)	(11,111,111)	-	-	(152)
Delivery of treasury stock (bonus)	-	1,386,192	1,386,192	-	-	35
AT DECEMBER 31, 2018	**2,435,285,011**	**(23,891,170)**	**2,411,393,841**	**2,435**	**32,565**	**(460)**

Changes in the number of shares during 2018 resulted from:

- employee share issuances as part of the “Link 2018” worldwide employee share plan. All in all, 30.9 million shares were subscribed and 1.8 million bonus shares were awarded under employee contribution schemes, representing a total of 32.7 million shares. At August 2, 2018 the transaction resulted in the sale to employees of 26.7 million shares partly repurchased from the French State in September 2017 (€153 million) and in July 2018 (€152 million) for a total amount of 22.2 million shares, on the one hand, and in a capital increase for €66 million, on the other. This last amount is broken down into a capital increase for €6 million and additional paid-in capital for €60 million;
- an equity decrease of €81 million broken down into a €6 million capital decrease and a €75 million decrease in consolidated reserves;
- the delivery of treasury stock for 1.4 million shares as part of bonus share plans.

Changes in the number of shares during 2017 result from net treasury stock acquisitions for 9 million shares, mainly repurchased from the French State in accordance with its share transfer program (0.46% of ENGIE’s share capital). These shares have been allocated to the employee savings transactions planned by the Group.

19.1.1 Potential share capital and instruments providing a right to subscribe for new ENGIE SA shares

At December 31, 2017, the last stock subscription option plan came to an end.

Shares to be allocated under bonus share plans, performance share award plans as well as the stock purchase option plans, described in Note 24 “Share-based payments”, are covered by existing ENGIE SA shares.

19.1.2 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 May 18, 2018. 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, 2018, the Group held 23.9 million treasury shares, allocated in full 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 €150 million.

19.2 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 fiscal year), amounted to €36,547 million at December 31, 2018, including €32,565 million in additional paid-in capital.

Consolidated reserves include the cumulative income of the Group, the legal and statutory reserves of ENGIE SA, the cumulative actuarial gains and losses, net of tax and 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.

The cumulative actuarial gains and losses Group share represent losses of €3,275 million at December 31, 2018 (losses of €3,095 million at December 31, 2017). Deferred taxes relating to these actuarial gains and losses amount to €790 million at December 31, 2018 (€744 million at December 31, 2017).

19.2.1 Issuance of deeply-subordinated perpetual notes

On January 16, 2018, ENGIE SA carried out an issue of green deeply-subordinated perpetual notes for an amount of €1 billion offering a coupon of 1.375% with an annual reimbursement option from April 2023.

In accordance with the provisions of IAS 32 – *Financial Instruments – Presentation,* and given their characteristics, these instruments were accounted for in equity in the Group's consolidated financial statements for a total amount of €989 million.

On June 6, 2018, ENGIE gave notice of the annual prepayment option of the €600 million tranche (a total amount of €621 million accrued interest included), previously recognized in equity for a net amount of €584 million. ENGIE SA made the reimbursement on July 10, 2018.

On December 5, 2018, ENGIE gave notice of the annual prepayment option of the GBP 300 million tranche (a total amount of €352 million accrued interest included), previously recognized in equity for a net amount of €340 million.

At December 31, 2018 the level of deeply-subordinated notes amounted to €3,750 million.

The coupons ascribed to the owners of these notes, of which €145 million was paid in 2018, are accounted for as a deduction from equity in the Group’s consolidated financial statements; the relating tax saving is accounted for in the income statement.

19.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €33,320 million at December 31, 2018 (compared with €33,969 million at December 31, 2017), after deducting the interim dividend paid on 12 October 2018 for a total amount of €892 million, including €32,565 million of additional paid-in capital.

19.2.3 Dividends

The table below shows the dividends and interim dividends paid by ENGIE SA in respect of 2017 and 2018.

	Amount distributed *(in millions of euros)*	Net dividend per share *(in euros)*
In respect of 2017		
Interim dividend (paid on October 13, 2017)	836	0.35
Remaining dividend for 2017 (paid on May 24, 2018)	836	0.35
Remaining additional dividend for 2017 (paid on May 24, 2018)	11	0.07
In respect of 2018		-
Interim dividend (paid on October 12, 2018)	892	0.37

The Shareholders' Meeting of May 18, 2018 approved the distribution of a total dividend of €0.70 per share in respect of 2017. In accordance with Article 26.2 of the bylaws, a dividend increase of 10% (€0.07 per share) has been allocated to shares registered in the name of the holder for at least two years at December 31, 2017, provided they are held in this form by the same shareholder until the payment date. This 10% increase may only apply, for any one shareholder, for a number of shares not representing more than 0.5% of the capital.

As an interim dividend of €0.35 per share was paid on October 13, 2017, for an amount of €836 million, ENGIE SA settled the remaining dividend balance of €0.35 per share in cash on May 24, 2018, for an amount of €836 million, for shares benefiting from an ordinary dividend, as well as the remaining €0.42 per share for shares benefiting from the bonus dividend. In addition, the Board of Directors' Meeting of July 26, 2018 approved the payment of an interim dividend of €0.37 per share payable on October 12, 2018 for a total amount of €892 million.

Proposed dividend in respect of 2018

Shareholders at the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31, 2018, will be asked to approve a dividend of €1.12 per share, representing a total payout of €2,701 million based on the number of shares outstanding at December 31, 2018. This proposed dividend per share includes an ordinary dividend of €0.75 per share and an exceptional dividend of €0.37 per share. It will be increased by 10% for all shares held for at least two years on December 31, 2018 and up to the 2018 dividend payment date. Based on the number of outstanding shares on December 31, 2018, this increase is valued at €24 million.

Subject to approval by the Shareholders' Meeting of May 17 2019, this dividend, net of the interim dividend paid (€892 million), will be detached on May 21, 2019 and paid on May 23, 2019 for an estimated amount of €1,809 million, outstanding shares excluded. It is not recognized as a liability in the financial statements at December 31, 2018, since the financial statements at the end of 2018 are presented before the appropriation of earnings.

19.3 Total gains and losses recognized in equity (Group share)

All the items shown in the table below correspond to cumulative gains and losses (Group share) at December 31, 2018 and December 31, 2017, which are recyclable to income in subsequent periods.

In millions of euros	Dec. 31, 2018	Dec. 31, 2017 (1)
Debt instruments	28	(1)
Net investment hedges	(313)	(320)
Cash flow hedges (excl. commodity instruments)	(725)	(542)
Commodity cash flow hedges	(30)	(37)
Deferred taxes on the items above	244	201
Share of entities accounted for using the equity method in recyclable items, net of tax	(223)	(473)
Translation adjustments	(1,130)	(1,063)
Recyclable items relating to discontinued operations, net of tax	-	(6)
TOTAL RECYCLABLE ITEMS	**(2,149)**	**(2,240)**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

19.4 Capital management

ENGIE SA seeks to optimize its financial structure at all times by pursuing an optimal balance between its 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 19.1.2 "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 "A" rating by 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 net financial expense and taxes paid, and the denominator includes adjusted net financial debt. Net debt is mainly adjusted for nuclear provisions, provisions for unfunded pension plans and operating lease commitments.

The Group's objectives, policies and processes for managing capital have remained unchanged over the past few years.

ENGIE SA is not obliged to comply with any minimum capital requirements except those provided for by law.

NOTE 20 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 and provisions for site restoration costs. The discount rates used reflect 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

Parameters 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 and to the dismantling of nuclear facilities, as well as those relating to the dismantling of gas infrastructures in France, include:

- cost estimates (notably the retained scenario for managing radioactive nuclear fuel consumed) *(see Note 20.2)*;
- the timing of expenditure (notably, for nuclear power generation activities, the timetable for reprocessing radioactive nuclear fuel consumed and for dismantling facilities as well as the timetable for the end of gas operations regarding the main gas infrastructure businesses in France) *(see Notes 20.2 and 20.3)*;
- and the discount rate applied to cash flows.

These parameters are based on information and estimates deemed by the Group to be the most appropriate as of today.

Modifications to certain parameters could lead to a significant adjustment in these provisions.

In millions of euros	Dec. 31, 2017[(1)]	Additions	Reversals (utilizations)	Reversals (surplus provisions)	Changes in scope of consolidation	Impact of unwinding discount adjustments	Translation adjustments	Other	Dec. 31, 2018	Non-current	Current
Post-employment and other long-term benefits	6,142	294	(399)	(8)	-	113	(9)	238	6,371	6,264	107
Back-end of the nuclear fuel cycle	5,914	102	(52)	-	-	207	-	-	6,170	6,114	57
Dismantling of plant and equipment[(2)]	5,728	52	(73)	-	(58)	209	(4)	227	6,081	6,081	-
Site rehabilitation	313	6	(14)	-	(81)	3	(6)	1	222	222	1
Litigation, claims, and tax risks	703	97	(107)	(86)	12	2	(8)	17	629	16	613
Other contingencies	2,915	331	(673)	(79)	(199)	20	1	23	2,340	497	1,842
TOTAL PROVISIONS	**21,715**	**882**	**(1,317)**	**(173)**	**(327)**	**554**	**(26)**	**505**	**21,813**	**19,194**	**2,620**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

(2) Of which €5,337 million in provisions for dismantling nuclear facilities, compared to €5,159 million at December 31, 2017.

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 the interest income on plan assets.

The "Other" column mainly comprises actuarial gains and losses arising on post-employment benefit obligations in 2018 which are recorded in "Other comprehensive income" as well as provisions recorded against a dismantling or site rehabilitation asset.

Additions, reversals and the impact of unwinding discounting adjustments are presented as follows in the consolidated income statement:

In millions of euros	Dec. 31, 2018
Income/(loss) from operating activities	555
Other financial income and expenses	(541)
Income taxes	59
Income/(loss) from discontinued operations	(18)
TOTAL	**55**

The different types of provisions and the calculation principles applied are described below.

20.1 Post-employment benefits and other long-term benefits

See Note 21 "Post-employment benefits and other long-term benefits" for a description of the main pension plans and other post-employment and long-term benefits.

20.2 Nuclear power generation activities

In the context of its nuclear power generation activities, the Group assumes obligations relating to the back-end of the nuclear fuel cycle and the dismantling of nuclear facilities.

20.2.1 Legal framework

The Belgian law of April 11, 2003 granted Group subsidiary Synatom responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing radioactive fissile material from such plants. The tasks of the Commission for Nuclear Provisions set up pursuant to the above-mentioned law is to oversee the process of computing and managing these provisions. The Commission also issues opinions on the maximum percentage of funds that Synatom can lend to operators of nuclear plants and on the types of assets in which Synatom may invest its outstanding funds (*see Note 17.1.4 "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material"*).

To enable the Commission for Nuclear Provisions to carry out its work in accordance with the law, Synatom is required to submit a report every three years describing the core inputs used to measure these provisions.

Synatom submitted its triennial report to the Commission for Nuclear Provisions on September 12, 2016. The Commission issued its opinion on December 12, 2016 based on the prior opinion given by ONDRAF, the Belgian agency for radioactive waste and enriched fissile material.

If any changes are observed from one triennial report to another that could materially impact the financial inputs used, the industrial scenario, estimated costs or their timing, the Commission for Nuclear Provisions may decide to revise its opinion.

The provisions related to nuclear power generation activities are measured taking into account the prevailing contractual and legal framework, which sets the operating life of the Tihange 1 reactor and the Doel 1 and 2 reactors at 50 years, and the other reactors at 40 years.

The provisions take into account all existing or planned environmental regulatory requirements on a European, national and regional level. If new legislation were to be introduced in the future, the cost estimates used as a basis for the calculations could vary. However, the Group is not aware of any planned legislation on this matter which could materially impact the amount of the provisions, other than the matters described in Note 20.2.2 below.

The estimated provision amounts also include margins for contingencies and other risks in order to take into account the degree of control of techniques related to dismantling and radioactive spent fuel management, being understood that contingency margins for the disposal of waste are determined by ONDRAF and included in its fees. Thus, the Group considers that the provisions approved by the Commission for Nuclear Provisions take into account all currently available information to manage the contingencies and other risks associated with processes such as dismantling nuclear facilities and managing radioactive spent fuel.

Based on the information disclosed in Notes 20.2.2 and 20.2.3 below, core inputs for measuring provisions including management scenarios, implementation program and timetable, detailed technical analyses (physical and radiological inventories), estimation methods and timing of expenditures, as well as discount rates, are those approved by the Commission for Nuclear Provisions in 2016.

Consequently, changes in provisions in the Group's financial statements in 2018 therefore mainly relate to recurring items linked to the passage of time (the unwinding of discounting adjustments) and provisions for fuel spent during the year.

20.2.2 Provisions for the back-end of the nuclear fuel cycle

Accounting standards

Allocations to the provisions for the back-end of the nuclear fuel cycle are computed based on the average unit cost of the quantities expected to be used up to the end of the operating life of the plants, applied to quantities used at the closing date. An annual allocation is also recognized with respect to unwinding the discount on the provisions.

When spent nuclear fuel is removed from a reactor and temporarily stored on-site, it remains radioactive and requires processing. There are two scenarios for managing radioactive spent fuel:

- either based essentially on reprocessing;
- or based essentially on conditioning without reprocessing.

ENGIE considers that the "mixed" scenario adopted by the Commission for Nuclear Provisions in 2016 continues to apply, whereby around one-quarter of total fuel is reprocessed, and the rest disposed of directly without reprocessing.

Furthermore, ONDRAF proposed on February 9, 2018 that geological storage be adopted as the national policy for managing high-level and/or long-lived radioactive waste. The proposal is subject to the approval of the Belgian government after obtaining the opinion of the Federal Agency for Nuclear Control (*Agence Fédérale de Contrôle Nucléaire* – AFCN).

The provisions booked by the Group for nuclear fuel processing and storage cover all of the costs linked to the “mixed” scenario, including on-site storage, transportation, reprocessing, conditioning, storage and geological removal. They are calculated based on the following 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;
- part of the radioactive spent fuel is transferred for reprocessing. The resulting plutonium and uranium is sold to a third party;
- 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;
- the reprocessing residues and conditioned radioactive spent fuel are transferred to ONDRAF;
- the cost of burying fuel in deep geological repositories is estimated by ONDRAF;
- the long-term obligation is calculated using estimated internal costs and external costs assessed based on offers received from third parties;
- the discount rate used is 3.5% and was calculated based on an inflation rate of 2.0% (actual rate of 1.5%). It is based on an analysis of trends in and average, past and prospective benchmark long-term rates.

The costs effectively incurred in the future may, however, differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs and related cost estimates. In particular:

- As regards the partial reprocessing scenario, Belgium's current legal framework does not prescribe methods for managing nuclear waste. The reprocessing of radioactive spent fuel was suspended following a resolution adopted by the House of Representatives in 1993. The scenario adopted is based on the assumption that the Belgian government will allow Synatom to reprocess spent fuel and that an agreement will be reached between Belgium and France designating Orano (formerly Areva) as responsible for these reprocessing operations. The Commission's 2016 opinion recommends that the necessary steps be officially initiated to ensure that this partial reprocessing scenario is implemented.

  A scenario assuming the direct disposal of waste without reprocessing would lead to a decrease in the provision compared to the provision resulting from the “mixed” scenario currently used and approved by the Commission for Nuclear Provisions.

- The Belgian government has not yet taken a decision as to whether the medium- and high-level radioactive waste should be buried in a deep geological repository or stored over the long term. In accordance with the European Directive, in 2015 the government submitted its proposed national program for the management of spent fuel and radioactive waste to the European Commission. This program was approved by ministerial order in 2016, based on the assumption that the waste would be buried in a deep clay layer at Boom. This assumption was accepted by the Commission for Nuclear Provisions in 2016 although to date, there is no accredited site in Belgium where the waste may be buried. However, the Commission for Nuclear Provisions asked for a scenario to be developed that includes the creation of a storage facility concept that the authorities would be likely to authorize.

  In these conditions, in 2018 ONDRAF's Board of Directors adopted a new reference scenario for the geological storage of this waste, based on a new architecture and a potentially greater burial depth, on condition that a suitable site could be identified in Belgium. On that basis and in accordance with the procedures set out in the Royal Decree of March 30, 1981 "determining the tasks and setting the operational procedures of the public agency for the management of radioactive waste and fissile material", ONDRAF set the new fees to be charged for the management and storage of high-level and/or long-lived waste. These fees were approved by ONDRAF's Board of Directors on September 28, 2018 and notified to the Commission for Nuclear Provisions and Synatom. However, they have yet to be integrated in the agreements to be entered into by ONDRAF and the nuclear waste producers, including Electrabel and Synatom.

The new technical arrangements will result in the following:

- Estimated costs of €8.0 billion based on 2017 economic conditions, meaning a twofold increase in the cost of geological storage of waste compared with the cost assumptions used in the 2016 proposal submitted to the Commission for Nuclear Provisions. This amount includes technical optimizations for €2.7 billion, based on 2017 economic conditions, to be confirmed by a special working group by 2020.

- Significant delays in the payment schedule for the various expenses related to the conditioning and storage of nuclear waste. These delays could be as long as 35 years for some expense categories, such as facilities for conditioning radioactive spent fuel and for the removal of conditioned fuel, thus reducing the net present value of the expenses and, therefore, the impact of the increase in burial costs on the measurement of nuclear provisions.

ONDRAF has asked the Commission for Nuclear Provisions to ensure that provisions are sufficient to cover the expenses for the back end of the nuclear fuel cycle, should the optimizations subject to expert appraisal fail to materialize.

Given the expected trend in assumptions for geological waste storage costs, reprocessed volumes, unit reprocessing costs and the timetable for operations, the Group believes, based on information available to date, that the impact of the new technical scenario on the provisions for the back-end cycle should not significantly alter the net present value of its commitments as estimated today.

The amount of provisions for radioactive spent fuel at December 31, 2018 therefore remained based on the industrial scenarios and cash flow projections approved by the Commission for Nuclear Provisions in December 2016 at the time of the last triennial report.

The new estimate, taking into account the new fees and timetable, will be included in Synatom's proposal to be submitted to the Commission for Nuclear Provisions no later than at the time of the next triennial report in 2019.

Sensitivity

Provisions for the back-end of the nuclear fuel cycle remain sensitive to assumptions regarding costs, the timing of operations and expenditure, as well as to discount rates. Based on the new scenario notified by ONDRAF:

- a 10% increase in ONDRAF fees for the removal of high-level and/or long lived waste would lead to an increase in provisions of approximately €140 million at unchanged contingency margins;
- a five-year advance in ONDRAF's program for high-level and/or long-lived radioactive waste conditioning and removal would lead to an increase in provisions of approximately €90 million. A five-year delay in the payment schedule for these various expenses would lead to a decrease of a similar amount;
- a change of ten basis points in the discount rate used could lead to an adjustment of approximately €190 million in provisions for the back-end of the nuclear fuel cycle. A fall in discount rates would lead to an increase in outstanding provisions, while a rise in discount rates would reduce the provision amount.

These sensitivities are calculated on a purely financial basis and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation.

20.2.3 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 engagement at the time of commissioning represents the initial amount of the provision for dismantling with, as 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. 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 are recognized in expenses for the period.

Nuclear power plants have to be dismantled at the end of their operating life. Provisions are set aside in the Group's accounts to cover all costs relating to (i) the shutdown phase, which involves removing radioactive spent fuel from the site and (ii) the dismantling phase, which consists of decommissioning and cleaning up the site.

The dismantling strategy is based on the facilities being dismantled (i) immediately after the reactor is shut down, (ii) on a "serial" rather than on a site-by-site basis, and (iii) completely, the land being subsequently returned to greenfield status.

Provisions for dismantling nuclear facilities are calculated based on the following inputs:

- 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 "in series";
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- a discount rate of 3.5% (including inflation of 2.0%) is applied to determine the net present value (NPV) of the obligation. This rate is the same as that used for the back-end of the nuclear fuel cycle;
- the operating life is 50 years for Tihange 1 and Doel 1 and 2, and 40 years for the other facilities;
- the start of the technical shutdown procedures depends on the facility concerned and on the timing of operations for the nuclear reactor as a whole. The shutdown procedures are immediately followed by dismantling operations.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs. The assumptions used have a significant impact on the related implementation costs. However, these inputs and assumptions are based on information and estimates which the Group deems reasonable to date and which have been approved by the Commission for Nuclear Provisions.

The scenario adopted is based on a dismantling program and on timetables that have to be approved by the nuclear safety authorities.

Provisions are also recognized for the Group's share of the expected dismantling costs for the nuclear facilities in which it has drawing rights.

Sensitivity

Based on currently applied inputs for estimating costs and the timing of payments, a change of ten basis points in the discount rate used could lead to an adjustment of approximately €60 million in dismantling provisions. A fall in discount rates would lead to an increase in outstanding provisions, while a rise in discount rates would reduce the provision amount.

This sensitivity is calculated on a purely financial basis and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation.

20.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

20.3.1 Dismantling obligations arising on other non-nuclear plant and equipment

Certain 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. This obligation is the result of prevailing environmental regulations in the countries concerned, contractual agreements, or an implicit Group commitment.

Based on estimates of proven and probable gas reserves through 2260 using current production levels, dismantling provisions for gas infrastructures in France have a present value near zero.

20.3.2 Hazelwood Power Station & Mine (Australia)

Following the Group and its partner Mitsui's announcement in November 2016 of their decision to close the coal-fired Hazelwood Power Station, the adjoining mine was shut down in late March 2017. The Group holds a 72% interest in the 1,600 MW power station, which was previously fully consolidated and has been consolidated on joint operation since September 2018.

At end-2018, the Group's share (72%) of the provision covering the obligation to dismantle and rehabilitate the mine amounted to €310 million.

Dismantling and site rehabilitation work was initiated in 2017 and includes site rehabilitation, with the purpose of ensuring long-term land and wall stability, the demolition and dismantling of all of the site's industrial facilities, the monitoring of environmental incidents and any related remediation plans, as well as long-term site monitoring.

Several laws that have a direct or indirect impact on mine rehabilitation and on the agencies that administer the laws are currently being reformed. Consequently, the ultimate regulatory obligations could be revised during the life of the project and could therefore have an impact on provisions.

The average discount rate used to determine the amount of the provisions is 4.22%.

The amount of the provision recognized is based on the Group’s best current estimate of the dismantling 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.

20.4 Litigation and tax risks

This caption includes essentially provisions for commercial litigation, and tax claims and disputes.

20.5 Other contingencies

This caption includes notably provisions for onerous contracts relating to storage and transport capacity reservation contracts recognized in 2017 (*see Note 10.5*).

NOTE 21 POST-EMPLOYMENT BENEFITS AND OTHER LONG-TERM BENEFITS

Accounting principles

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 income.

Net interest on the net defined benefit liability (asset) is presented in net financial income/(loss).

21.1 Description of the main pension plans

21.1.1 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 special EGI pension plan is a legal pension plan available to new entrants.

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 represents a defined benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated activities and specific benefits vested by employees of regulated activities 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.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2018, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €3.2 billion.

The duration of the pension benefit obligation of the EGI pension plan is 20 years.

21.1.2 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, ENGIE CC and some ENGIE Energy Management Trading 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 projected benefit obligation relating to these plans represented around 15% of total pension obligations and related liabilities at December 31, 2018. The average duration is 10 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 2018, the minimum rate of return stood at 1.75%.

An expense of €24 million was recognized in 2018 in respect of these defined contribution plans (€31 million in 2017).

21.1.3 Multi-employer plans

Employees of some Group companies are affiliated to multi-employer pension plans.

Under multi-employer plans, risks are pooled to the extent that the plan is funded by a single contribution rate determined for all affiliated companies and applicable to all employees.

Multi-employer plans are particularly common in the Netherlands, where employees are normally required to participate in a compulsory industry-wide plan. These plans cover a significant number of employers, thereby limiting the impact of potential default by an affiliated company. In the event of default, the vested rights are maintained in a special compartment and are not transferred to the other members. Refinancing plans may be set up to ensure the funds are balanced.

The ENGIE Group accounts for multi-employer plans as defined contribution plans.

The expense recognized in 2018 in respect of multi-employer pension plans was stable as compared to 2017 at €70 million.

21.1.4 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, Belgium and the Netherlands concern:

- the United Kingdom: the large majority of defined benefit pension plans is 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 was 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.

21.2 Description of other post-employment benefit obligations and other long-term benefits

21.2.1 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;
- long-service awards.

The Group’s main obligations are described below.

21.2.1.1 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 is measured as the difference between the energy sale price and the preferential rate granted.

The provision set aside in respect of reduced energy prices stood at €3.0 billion at December 31, 2018. The duration of the obligation is 21 years.

21.2.1.2 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.

21.2.1.3 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 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.

21.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other 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.

21.2.3 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.

21.3 Defined benefit plans

21.3.1 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 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, 2016	**(6,422)**	**69**	**130**
Exchange rate differences	31	17	-
Transfer to "Liabilities directly associated with assets classified as held for sale"	233		
Changes in scope of consolidation and other	(86)	8	-
Actuarial gains and losses	92	5	13
Periodic pension cost of continued operations	(427)	(50)	3
Periodic pension cost of discontinued operations	(28)	-	-
Asset ceiling	2	-	-
Contributions/benefits paid	464	53	12
At December 31, 2017	**(6,142)**	**101**	**159**
Exchange rate differences	(22)	-	-
Changes in scope of consolidation and other	95	(26)	(12)
Actuarial gains and losses	(237)	7	8
Periodic pension cost of continued operations	(457)	(68)	3
Asset ceiling	-	-	-
Contributions/benefits paid	392	93	11
AT DECEMBER 31, 2018	**(6,371)**	**108**	**168**

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 €525 million in 2018 (€477 million in 2017). The components of this defined benefit cost in the period are set out in Note 21.3.4 “Components of the net periodic pension cost”.

The Eurozone represented 97% of the Group’s net obligation at December 31, 2018 (compared to 96% at December 31, 2017).

Cumulative actuarial gains and losses recognized in equity amounted to €3,472 million at December 31, 2018, compared to €3,327 million at December 31, 2017.

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 €231 million in 2018 and a net actuarial gain of €99 million in 2017.

21.3.2 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, 2018				Dec. 31, 2017			
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	**(7,653)**	**(3,739)**	**(539)**	**(11,931)**	**(7,945)**	**(3,731)**	**(556)**	**(12,232)**
Service cost	(308)	(62)	(42)	(412)	(278)	(57)	(46)	(381)
Interest expense	(165)	(73)	(8)	(245)	(189)	(73)	(9)	(271)
Contributions paid	(16)	-	-	(16)	(13)	-	-	(13)
Amendments	(3)	(5)	10	2	(7)	-	-	(7)
Changes in scope of consolidation	(37)	31	49	43	3	1	5	9
Curtailments/settlements	1	-	-	1	6	-	-	6
Non-recurring items	-	2	-	2	-	(2)	-	(2)
Financial actuarial gains and losses	(44)	(35)	(1)	(80)	23	(53)	23	(8)
Demographic actuarial gains and losses	101	1	1	103	(195)	1	(8)	(201)
Benefits paid	397	97	40	533	498	129	46	673
Transfer to "liabilities directly associated with assets classified as held for sale"	-	-	-	-	404	44	6	454
Other (of which translation adjustments)	16	(11)	(10)	(5)	39	1	-	40
Projected benefit obligation at December 31 A	**(7,712)**	**(3,794)**	**(499)**	**(12,006)**	**(7,653)**	**(3,739)**	**(539)**	**(11,931)**
B - CHANGE IN FAIR VALUE OF PLAN ASSETS								
Fair value of plan assets at January 1	**5,904**	**-**	**-**	**5,904**	**5,919**	**1**	**-**	**5,920**
Interest income on plan assets	128	-	-	128	144	-	-	144
Financial actuarial gains and losses	(253)	-	-	(253)	321	-	-	321
Contributions received	309	15	-	324	298	21	-	318
Changes in scope of consolidation	32	-	-	32	-	-	-	-
Settlements	-	-	-	-	(9)	(1)	-	(10)
Benefits paid	(341)	(15)	-	(357)	(441)	(21)	-	(462)
Transfer to "liabilities directly associated with assets classified as held for sale"	-	-	-	-	(222)			(222)
Other (of which translation adjustments)	(11)	-	-	(11)	(105)	-	-	(105)
Fair value of plan assets at December 31 B	**5,767**	**-**	**-**	**5,767**	**5,904**	**-**	**-**	**5,904**
C - FUNDED STATUS A+B	**(1,945)**	**(3,794)**	**(499)**	**(6,239)**	**(1,749)**	**(3,739)**	**(539)**	**(6,027)**
Asset ceiling	(25)	-	-	(25)	(14)	-	-	(14)
NET BENEFIT OBLIGATION	**(1,970)**	**(3,794)**	**(499)**	**(6,263)**	**(1,763)**	**(3,739)**	**(539)**	**(6,041)**
ACCRUED BENEFIT LIABILITY	**(2,078)**	**(3,794)**	**(499)**	**(6,371)**	**(1,865)**	**(3,739)**	**(538)**	**(6,142)**
PREPAID BENEFIT COST	**108**	**-**	**-**	**108**	**101**	**-**	**-**	**101**

(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.

21.3.3 Change in reimbursement rights

Changes in the fair value of reimbursement rights relating to plan assets managed by Contassur are as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Fair value at January 1	**159**	**130**
Interest income on plan assets	*3*	*3*
Financial actuarial gains and losses	*8*	*13*
Actual return	11	16
Curtailments/settlements	(12)	-
Employer contributions	18	16
Employee contributions	-	-
Benefits paid	(7)	(3)
Other	-	-
FAIR VALUE AT DECEMBER 31	**168**	**159**

21.3.4 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined benefit obligations for the years ended December 31, 2018 and 2017 breaks down as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Current service cost	412	360
Actuarial gains and losses(1)	(1)	(14)
Plan amendments	(2)	6
Gains or losses on pension plan curtailments, terminations and settlements	(1)	2
Non-recurring items	(2)	1
Total recognized under current operating income after share in net income of entities accounted for using the equity method	**407**	**355**
Net interest expense	117	122
Total accounted for under net financial income/(loss)	**117**	**122**
TOTAL	**525**	**477**

(1) On the long-term benefit obligation.

21.3.5 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 are twofold: 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 at December 31 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	(5,648)	4,294	(23)	(1,377)
Overfunded plans	(1,375)	1,473	(2)	96
Unfunded plans	(4,977)	-	-	(4,977)
AT DECEMBER 31, 2018	**(12,000)**	**5,767**	**(25)**	**(6,258)**
Underfunded plans	(5,876)	4,505	(9)	(1,380)
Overfunded plans	(1,286)	1,399	(5)	108
Unfunded plans	(4,768)	-	-	(4,768)
AT DECEMBER 31, 2017	**(11,930)**	**5,904**	**(14)**	**(6,041)**

The allocation of plan assets by principal asset category can be analyzed as follows:

In %	Dec. 31, 2018	Dec. 31, 2017
Equity investments	27	27
Sovereign bond investments	25	24
Corporate bond investments	27	28
Money market securities	4	3
Real estate	2	2
Other assets	15	17
TOTAL	**100**	**100**

All plan assets were quoted on an active market at December 31, 2018.

The actual return on assets of EGI sector companies stood at a negative 5% in 2018.

The actual return on plan assets of Belgian entities amounted to approximately 3% in Group insurance and a negative 5% 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	57	26	3	11	4	100
Sovereign bond investments	77	2	21	-	-	100
Corporate bond investments	76	18	1	3	1	100
Money market securities	67	-	4	-	29	100
Real estate	90	-	7	-	3	100
Other assets	12	8	3	3	73	100

21.3.6 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	
		2018	2017	2018	2017	2018	2017	2018	2017
Discount rate	Eurozone	2.0%	1.9%	2.1%	2.0%	1.6%	1.8%	1.9%	1.9%
	UK Zone	2.5%	2.6%	-	-	-	-	-	-
Inflation rate	Eurozone	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	UK Zone	3.3%	3.2%	-	-	-	-	-	-

21.3.6.1 Discount and inflation rate

The discount rate applied is determined based on the yield, at the date of the calculation, 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 or decrease in the discount rate would result in a change of approximately 16% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase or decrease in the inflation rate (with an unchanged discount rate) would result in a change of approximately 13% in the projected benefit obligation.

21.3.6.2 Other assumptions

The increase in the rate of medical costs (including inflation) was estimated at 2.8%.

A 100-basis-point change in the assumed increase in medical costs would have the following impacts:

In millions of euros	**100 basis point increase**	**100 basis point decrease**
Impact on expenses	-	-
Impact on pension obligations	6	(5)

21.3.7 Estimated employer contributions payable in 2019 under defined benefit plans

The Group expects to pay around €265 million in contributions into its defined benefit plans in 2019, including €126 million for EGI sector companies. Annual contributions in respect of EGI sector companies will be made by reference to rights vested in the year, taking into account the funding level for each entity in order to even out contributions over the medium term.

21.4 Defined contribution plans

In 2018, the Group recorded a €133 million expense in respect of amounts paid into Group defined contribution plans (€142 million in 2017). These contributions are recorded under "Personnel costs" in the consolidated income statement.

NOTE 22 FINANCE LEASES

Accounting principles

Leases are analyzed based on the situations and indicators set out in IAS 17 in order to determine whether they constitute operating leases or finance leases.

A finance lease is defined as a lease which transfers substantially all the risks and rewards incidental to the ownership of the related asset to the lessee.

The following main factors are considered by the Group to assess wether or not a lease transfers substantially all the risks and rewards incidental to ownership: whether (i) the lessor transfers ownership of the asset to the lessee by the end of the lease term; (ii) the lessee has an option to purchase the asset and if so, the conditions applicable to exercising that option; (iii) lease term is for the major part of the economic life of the asset; (iv) the asset is of a highly specialized nature; and (v) the present value of minimum lease payments amounts to at least substantially all of the fair value of the leased asset.

Accounting for finance leases

On initial recognition, assets held under finance leases are recorded as property, plant and equipment and the related liability is recognized under borrowings. At inception of the lease, finance leases are recorded at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments.

Accounting for arrangements that contain a lease

IFRIC 4 deals with the identification of services and take-or-pay sales or purchasing contracts that do not take the legal form of a lease but convey rights to customers/suppliers to use an asset or a group of assets in return for a payment or a series of fixed payments. Contracts meeting these criteria should be identified as either operating leases or finance leases. In the latter case, a finance receivable should be recognized to reflect the financing deemed to be granted by the Group where it is considered as acting as lessor and its customers as lessees.

The Group is concerned by this interpretation mainly with respect to:

- some energy purchase and sale contracts, particularly where the contract conveys to the purchaser of the energy an exclusive right to use a production asset;
- certain contracts with industrial customers relating to assets held by the Group.

22.1 Finance leases for which ENGIE acts as lessee

The carrying amounts of property, plant and equipment held under finance leases are broken down into different categories depending on the type of asset concerned.

The main finance lease agreements concluded by the Group primarily concern power plants in the Latin America segment (mostly ENGIE Energía Perú – Peru) and ENGIE Cofely's cogeneration plants.

The undiscounted and present values of future minimum lease payments break down as follows:

	Dec. 31, 2018		Dec. 31, 2017	
In millions of euros	Undiscounted value	Present value	Undiscounted value	Present value
Year 1	125	121	155	151
Years 2 to 5 inclusive	209	193	334	306
Beyond year 5	69	61	27	20
TOTAL	**403**	**376**	**516**	**477**

The following table provides a reconciliation of liabilities under finance leases as reported in the statement of financial position *(see Note 17.2.3 "Borrowings and debt")* with undiscounted future minimum lease payments by maturity:

In millions of euros	Total	Year 1	Years 2 to 5 inclusive	Beyond year 5
Liabilities under finance leases	380	118	193	69
Impact of discounting future repayments of principal and interest	23	7	16	-
UNDISCOUNTED FUTURE MINIMUM LEASE PAYMENTS	**403**	**125**	**209**	**69**

22.2 Finance leases for which ENGIE acts as lessor

These leases mainly fall within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They concern (i) energy purchase and sale contracts where the contract conveys an exclusive right to use a production asset; and (ii) 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) and Lanxess (Electrabel – Belgium).

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Undiscounted future minimum lease payments	919	1,013
Unguaranteed residual value accruing to the lessor	27	27
TOTAL GROSS INVESTMENT IN THE LEASE	**946**	**1,041**
Unearned financial income	**170**	**197**
NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)	**777**	**844**
Of which present value of future minimum lease payments	*758*	*828*
Of which present value of unguaranteed residual value	*19*	*16*

Undiscounted future minimum lease payments receivable under finance leases can be analyzed as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Year 1	182	130
Years 2 to 5 inclusive	420	456
Beyond year 5	317	427
TOTAL	**919**	**1,013**

NOTE 23 OPERATING LEASES

Accounting standards

All leases that do not meet the definition of a finance lease are classified as operating leases.

Payments made under operating leases are recognized as an expense on a straight-line basis over the lease term.

23.1 Operating leases for which ENGIE acts as lessee

The Group has entered into operating leases mainly in connection with miscellaneous buildings and fittings.

Operating lease income and expenses for 2018 and 2017 can be analyzed as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017 (1)
Minimum lease payments	(686)	(642)
Contingent lease payments	(13)	(17)
Sub-letting income	-	(1)
Sub-letting expenses	(29)	(35)
Other operating lease expenses	(99)	(94)
TOTAL	(828)	(789)

(1) Comparative data at December 31, 2017 have been restated due to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities (see Note 2 “Restatement of 2017 comparative data”).

The present values of future minimum lease payments under non-cancelable operating leases can be analyzed as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017 (1)
Year 1	353	459
Years 2 to 5 inclusive	839	1,159
Beyond year 5	895	696
TOTAL	2,087	2,314

(1) Comparative data at December 31, 2017 have been restated due to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities (see Note 2 “Restatement of 2017 comparative data”).

23.2 Operating leases for which ENGIE acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They primarily concern power plants operated in the Africa/Asia segment.

Operating lease income for 2018 and 2017 can be analyzed as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017 (1)
Minimum lease payments	126	271
Contingent lease payments	-	6
TOTAL	126	277

(1) Comparative data at December 31, 2017 have been restated due to the classification as “Discontinued operations” of ENGIE's upstream liquefied natural gas (LNG) activities (see Note 2 “Restatement of 2017 comparative data”).

The present values of future minimum lease payments receivable under non-cancelable operating leases can be analyzed as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017(1)
Year 1	31	286
Years 2 to 5 inclusive	72	58
Beyond year 5	67	3
TOTAL	**170**	**347**

(1) Comparative data at December 31, 2017 have been restated due to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities (see Note 2 "Restatement of 2017 comparative data").

NOTE 24 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	Note	Dec. 31, 2018	Dec. 31, 2017
Employee share issues[1]	24.2	31	1
Bonus/performance share plans	24.3	46	36
Other Group companies' plans		3	1
TOTAL		**80**	**38**

(1) Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.

24.1 Stock option plans

No new ENGIE stock option grants were approved by the Group's Board of Directors in either 2018 or 2017.

At December 31, 2017, the last stock purchase plan expired.

24.2 Link 2018

24.2.1 Description of available ENGIE share plans

In 2018, Group employees and former Group employees were entitled to purchase ENGIE shares as part of the "LINK 2018" worldwide employee share ownership plan. The offering mainly involved the sale of treasury shares, including 22.2 million shares bought back from the French State following the private placements carried out in *(see Note 19.1).* Employees could subscribe to either:

- the Link Classique Plan: this plan allows employees to subscribe to shares at a discount, either directly or via an employee mutual fund and with an employer top-up contribution;
- the Link Multiple Plan: under this plan, employees may subscribe to shares at a discount, either directly or via an employee mutual fund, and also benefit from any increase in the share price (leverage effect) in addition to the amounts invested. Through a Swap Agreement with a bank, employees are guaranteed to recover 100% of the invested amount as well as a minimum capitalized return;
- the Link+ Plan: under this plan, employees may subscribe to shares at a discount, either directly or via an employee mutual fund, and also benefit from any increase in the share price (higher leverage effect than the Link Multiple Plan) in addition to the amounts invested. This plan is subject to a lock-up period of ten years. Through a Swap Agreement with a bank, employees are guaranteed to recover 100% of the invested amount as well as a guaranteed minimum capitalized return;

- Share Appreciation Rights (SARs): this leveraged plan entitles beneficiaries who purchase shares to receive a cash bonus equal to the increase in the share price after a period of five years. The resulting employee liability is covered by warrants.

The Link Classique Plan and the Link+ Plan featured an employer contribution under the terms and conditions described below:

- participating French employees were entitled to bonus ENGIE shares depending on the amount of their own contribution to the plans:
  - the Link Classique Plan: for an employee contribution of €150, the employer contribution corresponded to 200% of this amount ; for an additional employee contribution of €150, the employer contribution represented 100% of the amount. The employer contribution was capped at €450;
  - the Link+ Plan: for an employee contribution of €100, the employer contribution corresponded to 300% of this amount.
- for employees in other countries, ENGIE shares were granted through a bonus share award plan, subject to the still being employed with the Group and depending on their own contribution to the plan:
  - for an employee contribution of €150, two bonus shares were granted for every one share subscribed;
  - for employee contributions from €150 to €300, one bonus share was granted for every share subscribed.

The bonus shares will be awarded to employees on August 2, 2023, provided that they are still employed by the ENGIE Group.

24.2.2 Accounting impacts

Subscription price for the 2018 plan represents the average closing price of the ENGIE share on the NYSE Euronext Paris Eurolist market over the 20 trading days between May 24, 2018 and June 20, 2018 inclusive. The reference price is set at €13.65 less 20% for the Link Classique and the Link Multiple plans, i.e. €10.92 and less 30% for the Link+ plan, i.e. €9.56.

The expense recognized in the consolidated financial statements in respect of the Link Classique, Link Multiple and Link+ plans corresponds to the difference between the fair value of the shares subscribed and the subscription price. The fair value takes into account the lock-up period of five or ten years, as provided for by French legislation. It also considers the opportunity cost implicitly borne by ENGIE under the leveraged share ownership plan in allowing its employees to benefit from more attractive financial conditions than those that would have been available to them as individual investors.

The following assumptions were applied:

	5 years	10 years
Risk-free interest rate	0.26%	0.88%
Spread applicable to the retail banking network	3.64%	3.60%
Employee financing cost	3.90%	4.48%
Share lending cost	1.00%	1.50%
Share price at grant date	13.65	13.65
Volatility spread	1.90%	7.50%

The accounting impacts are break down as follows:

	Link Classique	Link Multiple	Link+	Link+ France - additional employer's contribution	Link Classique France - additional employer's contribution	Total
Amount subscribed (*in millions of euros*)	24	187	111	-	-	321
Number of shares subscribed (*in millions of shares*)	2.2	17.1	11.6	0.9	0.9	32.7
Discount (*€/share*)	2.7	2.7	4.1	13.7	13.7	-
Non-transferability restriction (*€/share*)	(3.3)	(3.3)	(7.6)	(7.6)	(3.3)	-
Opportunity cost (*€/share*)	-	0.3	1.0	-	-	-
Cost for the Group (in millions of euros)	**-**	**4**	**12**	**6**	**9**	**31**

Subscriptions to the Link 2018 worldwide employee share ownership plan totaled €321 million and break down as follows:

- the sale of treasury shares to employees amounted to €255 million;
- a capital increase and additional paid-in capital of €66 million (excluding issuance costs). This amount is broken down into €4 million for Link Classique and €62 million for Link Multiple.

The Group recognized a total expense of €31 million for 2018 in respect of the 30.9 million shares subscribed and 1.8 million bonus shares awarded under employer contributions.

The accounting impact of cash-settled Share Appreciation Rights consists in recognizing a payable to the employee over the vesting period, with a corresponding adjustment recorded in income. At December 31, 2018, the fair value of the liability relating to the 2014 and 2018 awards amounted to €0.8 million.

24.3 Bonus shares and performance shares

24.3.1 New awards in 2018

ENGIE Performance Share plan of December 11, 2018

On December 11, 2018, the Board of Directors approved the award of 5 million performance shares to members of the Group's executive and senior management, breaking down into three tranches:

- performance shares vesting on March 14, 2022, subject to a further one-year lock-up period;
- performance shares vesting on March 14, 2022, without a lock-up period; and
- performance shares vesting on March 14, 2023, without a lock-up period.

In addition to a condition requiring employees to be employed with the Group at the vesting date, each tranche is made up of instruments subject to three different conditions, excluding the first 150 performance shares granted to beneficiaries (excluding top management) which are exempt from performance conditions. The performance conditions, each of which accounts for one-third of the total grant, are as follows:

- a market performance condition relating to ENGIE's Total Shareholder Return compared to that of a reference panel of ten companies, as assessed between November 2018 and January 2022;
- two internal performance conditions relating to net recurring income Group share and to Return On Capital Employed (ROCE) in 2020 and 2021.

As part of this plan, performance shares without conditions were also awarded to the winners of the Innovation and Incubation programs (21,150 shares awarded).

ENGIE Bonus Share plan of August 2, 2018

As part of the Link 2018 employee share plan, bonus shares were awarded to subscribers of the Link Classique plan (outside France), with two bonus shares awarded for €150 of shares purchased, and one bonus share awarded for shares purchased beyond €150 and up to €300. A total of 301,816 shares were awarded under this plan, subject to the employees still being employed with the ENGIE Group on August 2, 2023.

24.3.2 Fair value of bonus share plans with or without performance conditions

The following assumptions were used to calculate the fair value of the new plans awarded by ENGIE in 2018:

Award date	Vesting date	End of the lock-up period	Price at the award date	Expected dividend	Financing cost for the employee	Non-transferability cost	Market-related performance condition	Fair value per unit
August 2, 2018	August 2, 2023	August 2, 2023	14.0	0.75	NA	NA	no	10.28
Weighted average fair value of the August 2, 2018 plan								**10.28**
December 11, 2018	March 14, 2022	March 14, 2023	12.3	0.75	4.4%	0.32	yes	8.95
December 11, 2018	March 14, 2022	March 14, 2022	12.3	0.75	4.4%	0.32	yes	9.32
December 11, 2018	March 14, 2022	March 14, 2022	12.3	0.75	4.4%	0.40	no	10.00
December 11, 2018	March 14, 2023	March 14, 2023	12.3	0.75	4.4%	0.32	yes	8.62
Weighted average fair value of the December 11, 2018 plan								**8.90**

24.3.3 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.

24.3.4 Free share plans with or without performance conditions in force at December 31, 2018, and impact on income

The expense recorded during the year on plans in effect was as follows:

	Expense for the year *(In millions of euros)*	
	Dec. 31, 2018	**Dec. 31, 2017**
Bonus share plans	-	-
Performance share plans	46	36
of which expense for the year	*46*	*37*
of which reversal for performance conditions not achieved	*-*	*(1)*
TOTAL	**46**	**36**

NOTE 25 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 26 “Executive compensation”.

Transactions with joint ventures and associates are described in Note 4 “Investments in entities accounted for using the equity method”.

Only material transactions are described below.

25.1 Relations with the French State and with entities owned or partly owned by the French State

25.1.1 Relations with the French State

On July 30, 2018, the French State sold to ENGIE a 0.46% in the Group’s share capital (11.1 million shares for €151.7 million). Consequently, the share of ENGIE owned by the French State decreased from 24.10% to 23.64%, allowing it to appoint four representatives to the Group’s 19-member Board of Directors (instead of five previously).

Since August 2018, the French State has held 34.51% of the Group’s theoretical voting rights (or 34.79% of the exercisable voting rights) compared to 34.87% at the end of July 2018, and 28.07% at the end of December 2017.

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.

On November 6, 2015, the French State and ENGIE renewed the public service contract which sets out how such engagements are implemented, the Group's public service obligations and the conditions for rate regulation in France:

- as part of its public service obligations, the Group reaffirmed its commitments in terms of security of supply, quality of customer relations, solidarity and assistance to low-income customers, sustainable development and protection of the environment, as well as in terms of research;
- regarding the conditions for rate regulation in France, the contract confirms the overall regulatory framework for setting and changing natural gas tariffs in France, according to the Decree of December 18, 2009, which notably forecasts rate changes based on costs incurred, while also defining the transitional framework following the elimination of regulated natural gas tariffs for business customers.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, rates for accessing the French LNG terminals, as well as revenues related to storage capacity are all regulated.

25.1.2 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 (previously ERDF SA), a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and January 1, 2008, respectively, and act in accordance with the agreement previously signed by the two incumbent operators.

25.2 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 21 "Post-employment benefits and other long-term benefits".

NOTE 26 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 11 members at December 31, 2018 (12 members at December 31, 2017).

Their compensation breaks down as follows:

In millions of euros	Dec. 31, 2018	Dec. 31, 2017
Short-term benefits	21	17
Post-employment benefits	6	8
Shared-based payments	5	6
Termination benefits	0	-
TOTAL	**32**	**31**

The amount of pension benefit obligations in respect of members of the Group's Executive Committee stood at €29 million at December 31, 2018, being specified that this is an estimated amount as these commitments are, as a rule, not individualized. The Group has a policy of financing pension obligations through hedging assets, without these being specifically dedicated to the retirement obligations of a dedicated population.

NOTE 27 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.

27.1 Composition of change in working capital requirements

In millions of euros	Change in working capital requirements at Dec. 31, 2018	Change in working capital requirements at Dec. 31, 2017(1)
Inventories	(268)	(487)
Trade and other receivables, net	(2,311)	732
Trade and other payables, net	2,177	7
Tax and employee-related receivables/payables	237	102
Margin calls and derivative instruments hedging commodities relating to trading activities	197	993
Other	117	267
TOTAL	**149**	**1,613**

(1) *Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 and to the classification as "Discontinued operations" of ENGIE's upstream liquefied natural gas (LNG) activities sold in July 2018 (see Note 2 "Restatement of 2017 comparative data").*

27.2 Inventories

Accounting standards

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 withdrawn 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 16).

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.

An impairment loss is recognized when the net realizable value of inventories is lower than their weighted average cost.

Certain inventories are used for trading purposes and are recognized at fair value less the estimated costs necessary to make the sale in accordance with IAS 2. Any changes in this fair value are recognized in the consolidated income statement for the year to which they occur.

Greenhouse gas emissions rights

European Directive 2003/87/EC establishes a greenhouse gas (GHG) emissions allowance trading scheme within the European Union. Under the Directive, each year the sites concerned have to surrender a number of allowances equal to the total GHG emissions of their installations during the previous calendar year. As there are no specific rules under IFRS dealing with the accounting treatment of GHG emissions allowances, the Group decided to apply the following principles:

- emission rights are classified as inventories, as they are consumed in the production process;
- emission rights purchased on the market are recognized at acquisition cost;
- emission rights granted free of charge are recorded in the statement of financial position for a value of nil.

The Group records a liability at the year-end in the event that it does not have enough emission rights to cover its GHG emissions during the year. This liability is measured at the market value of the allowances required to meet its obligations at the year-end or based on the price of future contracts concluded to hedge this lack of emission rights.

Energy savings certificates (ESC)

In the absence of current IFRS Standards or IFRIC Interpretations on accounting for energy savings certificates (ESC), the following principles are applied:

- in the event that the number of ESCs held exceeds the obligation at the reporting date, they are accounted in inventories; otherwise, a liability is recorded;
- ESC inventories are valued at weighted average cost (acquisition cost for ESCs acquired or cost incurred for ESCs generated internally).

In millions of euros	Dec. 31, 2018	Dec. 31, 2017[1]
Inventories of natural gas, net	1,274	1,423
Inventories of uranium	595	575
CO_2 emission rights, green certificates and energy saving certificates, net	654	650
Inventories of commodities other than gas and other inventories, net	1,635	1,513
TOTAL	**4,158**	**4,161**

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

27.3 Other assets and other liabilities

	Dec. 31, 2018				Dec. 31, 2017[1]			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Other assets and liabilities	474	9,337	(960)	(12,529)	566	8,508	(1,007)	(11,531)
Tax receivables/payables	*-*	*6,999*	*-*	*(7,449)*	*-*	*6,529*	*-*	*(6,685)*
Employee receivables/payables	*275*	*72*	*(5)*	*(2,461)*	*259*	*27*	*(3)*	*(2,376)*
Dividend receivables/payables	*-*	*12*	*-*	*(170)*	*-*	*6*	*-*	*(119)*
Other	*198*	*2,255*	*(954)*	*(2,449)*	*306*	*1,946*	*(1,004)*	*(2,351)*

(1) Comparative data at December 31, 2017 have been restated due to the application of IFRS 9 and IFRS 15 (see Note 2 "Restatement of 2017 comparative data").

At December 31, 2018, other non-current assets also include a receivable towards EDF Belgium in respect of nuclear provisions amounting to €74 million (€75 million at December 31, 2017).

NOTE 28 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.

Provisions recorded in respect of these proceedings totaled €629 million at December 31, 2018 (€703 million at December 31, 2017).

The main disputes and investigations presented hereafter are recognized as liabilities or give rise to contingent assets or liabilities.

In the normal course of its business, the Group is also 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.

28.1 Latin America

28.1.1 Concessions in Buenos Aires and Santa Fe

In 2003, ENGIE and its joint shareholders, water distribution concession operators in Buenos Aires and Santa Fe, initiated two arbitration proceedings against the Argentinean State before the International Center for Settlement of Investment Disputes (ICSID). The purpose of these proceedings was to obtain compensation for the loss in value of investments made since the start of the concession, in accordance with bilateral investment protection treaties.

As a reminder, prior to the stock market listing of SUEZ Environnement Company, ENGIE and SUEZ (formerly SUEZ Environnement) entered into an agreement providing for the economic transfer to SUEZ of the rights and obligations relating to the ownership interests held by ENGIE in Aguas Argentinas and Aguas Provinciales de Santa Fe, including the rights and obligations resulting from the arbitration proceedings.

On April 9, 2015, the ICSID ordered the Argentinean State to pay USD 405 million in respect of termination of the Buenos Aires water distribution and treatment concession contracts (including USD 367 million to ENGIE and its subsidiaries), and on December 4, 2015, to pay USD 225 million in respect of termination of the Santa Fe concession contracts. The Argentinean State sought the annulment of these awards. By decision dated May 5, 2017, the claim for the annulment of the Buenos Aires award was rejected. The claim to annul the award in the Santa Fe case was rejected by a decision dated December 14, 2018. Consequently, the two ICSID awards, which are a step in the settlement of the dispute, are now final.

28.1.2 Planned construction of an LNG terminal in Uruguay

GNLS SA, a joint subsidiary of Marubeni and ENGIE, was selected in 2013 to build an offshore LNG terminal in Uruguay. On November 20, 2013, GNLS contracted out the design and construction of the terminal to Construtora OAS SA. Following a number of problems and defects, GNLS terminated the contract in March 2015 and made use of its guarantees. OAS challenged the termination of the contract but did not take action against GNLS. OAS went bankrupt in Uruguay on April 8, 2015. In September 2015, GNLS and the authorities agreed to cancel the planned construction.

On May 24, 2017, OAS and GNLS appeared before the Uruguayan courts in a conciliation process at the request of OAS. The conciliation process was unsuccessful. OAS then threatened to call GNLS before the Uruguayan courts to claim damages. Since GNLS had incurred significant losses as a result of the termination of the contract, it filed a request for arbitration on August 22, 2017 in accordance with the terms of the contract providing for dispute resolution in Madrid by the ICC International Court of Arbitration, claiming a principal amount of USD 373 million. OAS responded by summonsing GNLS before the Montevideo Commercial Court, claiming USD 311 million in damages. ENGIE was officially named as a party to the proceedings on December 5, 2018. Both proceedings are still pending.

28.2 Benelux

28.2.1 Resumption and extension of operations at the nuclear reactors

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 2 and Tihange 1 reactors. On June 22, 2017, the Constitutional Court referred the case to the Court of Justice of the European Union for a preliminary ruling. The Brussels Court of Appeal dismissed Greenpeace's claims in a decision dated June 12, 2018. The other actions are still pending.

In addition, some local authorities and various organizations have challenged the authorization to restart operations at the Tihange 2 reactor. On November 9, 2018, the *Conseil d'État* rejected the action brought by some German local authorities seeking the annulment of this decision. Civil proceedings are still ongoing before the Brussels Court of First Instance.

28.2.2 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 refuse 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. However, given that ENGIE Energie Nederland Holding BV considers the court's reasoning to be contradictory and disputable, both in light of Dutch and European law, it has appealed the decision.

28.2.3 Claim by the Dutch tax authorities related to power plant impairment losses

The Dutch tax authorities plan to disallow the tax deduction of asset impairment losses reported by ENGIE Energie Nederland NV on its 2010-2013 tax returns. The authorities challenged both the period of coverage of the impairment losses and the amount. Accordingly, they added back the full amount of the accumulated asset impairment losses over the abovementioned period, i.e., an amount of €1.9 billion. ENGIE has contested the tax authorities' position as regards both the period and the amount and filed an appeal in November 2018.

28.3 France

28.3.1 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse sale by SUEZ (now ENGIE) of a withholding tax (*précompte*) receivable in 2005 for an amount of €995 million (receivable relating to withholding tax paid in respect of the 1999-2003 fiscal years). In May 2016, the French tax authorities issued an assessment notice for part of the resulting corporate income tax, in an amount of €89.6 million. ENGIE paid this sum and filed an application to institute proceedings before the Montreuil Administrative Court in July 2017.

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, and cases seeking the repayment of the *précompte* in respect of the 2002, 2003 and 2004 fiscal years are still pending before the appellate courts.

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 used in closed and pending court cases.

28.4 Europe excluding France & Benelux

28.4.1 Spain – Punica

In the Punica case (investigation into the awarding of contracts), 12 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 is in progress and is scheduled to be closed by March 30, 2022.

28.4.2 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 Savone Court to be tried on the merits. The proceedings began on December 11, 2018 and will continue through 2019.

28.4.3 Italy – Tax dispute relating to excise duties and ENGIE Italia VAT (formerly GDF SUEZ Energie)

In 2017, the Italian tax authorities challenged the excise duty waiver for gas transfers carried out by ENGIE Italia for industrial customers in Italy on the grounds that it did not have a certificate for these customers. The authorities plan to issue a tax reassessment for a total amount of €126 million (excise duties, VAT, late payment penalties and interest). ENGIE Italia has challenged the legality of this procedure both in light of Italian and European law and in any event deems the sanction to be disproportionate compared to a formal requirement.

In 2018, ENGIE Italia launched an appeal with the Perugia Court of First Instance requesting the cancellation of the tax reassessment notice.

In October 2018, the Court of First Instance dismissed the cancellation request, simply applying an outdated ministerial decree and ignoring ENGIE Italia's legal arguments.

ENGIE Italia appealed the ruling in November 2018.

28.5 Infrastructures Europe

28.5.1 Commissioning

In the dispute between GRDF and various gas suppliers, in a decision dated June 2, 2016, the Paris Court of Appeal (i) recalled that the risk of unpaid compensation for the "transmission" part of the agreement with the end customer should be borne by the grid manager and not the gas supplier; (ii) held that the compensation for customer management services provided by the supplier on behalf of the grid manager should be fair and commensurate with the grid manager's cost savings; and (iii) ordered GRDF to bring its transmission agreements into compliance with these principles. GRDF appealed the decision handed down by the Court of Appeal before the Court of Cassation. On January 18, 2018, the Energy Regulatory Commission (*Commission de Régulation de l'Énergie* – CRE) published a decision setting the rate for access to the grids for management services provided to single contract customers from January 1, 2018. This compensation is included in the costs covered by the transmission rate and is therefore ultimately borne by the grids' users. On June 18, 2018, the CRE's Standing Committee for Disputes and Sanctions (*Comité de règlement des différends et des sanctions* – CoRDiS), which has been tasked by the Court of Appeal to evaluate the amount of the customer management services, instructed GRDF to propose to Direct Energie (retroactively since 2005 and going forward) and to ENI (retroactively since June 2, 2016 and going forward) a new addendum providing for compensation of €91 per year for T3, T4 and TP customers, and €8.10 per year for T1 and T2 customers. Both GRDF on the one hand and Direct Energie and ENI on the other have appealed the decision dated June 18, 2018 before the Paris Court of Appeal. The CRE has been asked to submit its observations by December 2018. A decision may be handed down during the second quarter of 2019.

Regarding the customer management services carried out on behalf of the grid manager in the electricity sector (in this case ERDF, now ENEDIS), following proceedings brought by ENGIE, in a decision of July 13, 2016, the *Conseil d'État* also ruled that the same principle whereby the grid manager pays compensation to the supplier should apply. In the same decision, the *Conseil d'État* denied the CRE the right to set a customer threshold beyond which the compensation would not be payable, which until then prevented ENGIE from receiving any compensation. In light of this decision, ENGIE brought an action against ENEDIS with the purpose of obtaining payment for these customer management services. ENGIE also brought an action before the *Conseil d'État* against the CRE's decision of October 26, 2017 in respect of the compensation for customer management services in the electricity sector, seeking the annulment of the decision for the period prior to January 1, 2018 only.

28.6 Other

28.6.1 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 do not have a suspensive effect, ENGIE paid a sum of €123 million into an escrow account on October 22, 2018 for one of the proceedings in question, no aid actually having been paid in the other transaction. 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.

28.6.2 United Kingdom – State aid investigation regarding Gibraltar

On October 7, 2016, the European Commission announced its decision to open a state aid investigation against the United Kingdom with regard to Gibraltar’s tax system. The decision covers Gibraltar’s tax ruling practices and cited 165 tax rulings, which could constitute State aid. One of the rulings was obtained by a subsidiary of International Power Ltd in 2011 as part of the dismantling of a facility in Gibraltar. ENGIE contested this decision on November 25, 2016, pending the Commission's final decision.

28.6.3 Claim against sales tax adjustments in Brazil

On December 14, 2018, the Brazilian tax authorities issued tax deficiency notices to Engie Brasil Energia for fiscal years 2014, 2015 and 2016, considering that it was liable for the PIS and COFINS federal sales taxes on the amounts reimbursed to it in respect of certain fuels used by thermo-power generation plants. The adjustments were for an aggregate amount of BRL 480 million, comprising BRL 229 million of tax plus interest and penalties.

Engie Brasil Energia is contesting these tax deficiency notices and filed a tax claim in January 2019.

NOTE 29 SUBSEQUENT EVENTS

No significant subsequent events have occurred since the closing of the accounts at December 31, 2018.

NOTE 30 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 April 28, 2014 decided to renew the terms of office of Deloitte and EY as Statutory Auditors for a six-year period from 2014 to 2019.

	Deloitte			EY			
In million of euros	**Deloitte & Associés**	**Network**	**Total**	**EY & others**	**Network**	**Total**	**Total**
Statutory audit and review of consolidated and parent company financial statements	**5.2**	**7.9**	**13.0**	**6.4**	**4.7**	**11.1**	**24.1**
ENGIE SA	2.3	-	2.3	3.2	-	3.2	5.5
Controlled entities	2.9	7.9	10.8	3.2	4.7	7.9	18.7
Non-audit services	**0.9**	**1.9**	**2.8**	**0.8**	**1.7**	**2.5**	**5.3**
ENGIE SA	**0.6**	**-**	**0.6**	**0.6**	**-**	**0.6**	**1.2**
Of which services related to legal and regulatory requirements	*0.4*	*-*	*0.4*	*0.3*	*-*	*0.3*	*0.7*
Of which other audit services	*0.2*	*-*	*0.2*	*0.3*	*-*	*0.3*	*0.5*
Of which reviews of internal control	-	-	-	-	-	-	-
Of which due diligence services	-	-	-	-	-	-	-
Of which tax services	-	-	-	-	-	-	-
Controlled entities	**0.3**	**1.9**	**2.3**	**0.2**	**1.6**	**1.9**	**4.2**
Of which services related to legal and regulatory requirements	-	*0.4*	*0.4*	*0.2*	*0.2*	*0.4*	*0.8*
Of which other audit services	*0.2*	*0.3*	*0.5*	*0.1*	*0.4*	*0.5*	*1.0*
Of which reviews of internal control	*0.1*	*0.2*	*0.3*	-	*0.1*	*0.1*	*0.4*
Of which due diligence services	-	*0.7*	*0.7*	-	*0.1*	*0.1*	*0.8*
Of which tax services	-	*0.4*	*0.4*	-	*0.8*	*0.8*	*1.2*
Total	**6.0**	**9.8**	**15.9**	**7.3**	**6.4**	**13.6**	**29.5**

NOTE 31 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS

Some companies in the Benelux, GEM & LNG and Other segments do not publish annual financial statements pursuant to domestic provisions in 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: ENGIE Energie Nederland NV, ENGIE Energie Nederland Holding BV, ENGIE Nederland Retail BV, ENGIE United Consumers Energie BV, Epon Eemscentrale III BV, Epon Eemscentrale IV BV, Epon Eemscentrale V BV, Epon Eemscentrale VI BV, Epon Eemscentrale VII BV, Epon Eemscentrale VIII BV, Epon International BV, Epon Power Engineering BV, ENGIE Portfolio Management BV, IPM Energy Services BV, Electrabel Invest Luxembourg, ENGIE Corp Luxembourg SARL, ENGIE Treasury Management SARL and ENGIE Invest International SA.

A public limited company with a share capital of 2,435,285,011 euros
Corporate headquarters: 1, place Samuel de Champlain
92400 Courbevoie - France
Tel: +33 (1) 44 22 00 00
Register of commerce: 542 107 651 RCS PARIS
VAT FR 13 542 107 651

engie.com