



Press release
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ENGIE chooses Singapore for its green-energy R&D centre of excellence in Southeast Asia

With support from the Singapore Economic Development Board (EDB), ENGIE Lab Singapore opened today, to act as a regional hub for energy innovation and technology in Southeast Asia.

ENGIE Lab Singapore focuses on three fields: smart energy systems for cities and islands, industrial energy efficiency and gas technologies. It will support and collaborate with the ENGIE entities that are already established in the region. The teams will manage R&D projects and provide services based on their technological expertise which includes managing new energies, digital systems such as Internet of Things (IoT) and mobile apps, as well as strengthen existing technologies to enhance energy-related infrastructures and energy uses.

“The opening of the ENGIE Lab Singapore is a key milestone of the development strategy of ENGIE in Southeast Asia to support the transition to low-carbon energy sources,” said Isabelle Kocher, ENGIE Chief Executive Officer. *“Singapore’s dynamic innovation ecosystem and regional connectivity provides the right environment for us to set up this leading-edge R&D centre to develop practical solutions to meet the energy challenges in the region, and will help businesses to maintain their technological excellence.”*

With more than 1,600 employees already in Singapore spanning activities in power generation, energy services, energy trading, LNG and research, the formal opening of ENGIE Lab Singapore paves the way for further green energy developments in Singapore and the region, and further partnerships in the field of low-carbon technologies and innovation.

The establishment of ENGIE Lab Singapore follows two years of successful collaboration in the region. Since September 2014, ENGIE has already developed a strong partnership with Nanyang Technological University (NTU) through its energy laboratory “ERI@N”. Both parties agreed to collaborate on various research and academic training topics and are working on new ways to lead the energy transition through a series of innovative projects, such as:

- PowerZee, a gaming app involving students to reduce energy consumption on NTU campus
- Renewable Energy Integration Demonstrator (REIDS) program, the largest micro-grid demonstration platform in tropical area
- IoT open innovation challenge for the cities of tomorrow
- Advanced monitoring and analytics systems for gas pipelines



"We are pleased that ENGIE is growing its activities in Singapore, across the energy services, power generation and energy trading businesses. ENGIE's decision to establish its first Asia-Pacific research centre in Singapore is testament to our strong base of capabilities that can enable companies to develop, test and commercialise innovative urban solutions to serve Asia and beyond. We look forward to ENGIE deepening its partnership with Singapore's research institutes and universities to customise smart city and energy management solutions for the region," Dr. Beh Swan Gin, Chairman, EDB.

ENGIE Lab Singapore is the latest addition to the strong international R&D network of the Group, which now includes 11 high-level research centres called "ENGIE Labs", with a total of 1,100 researchers and experts, across all the continents. The ENGIE Labs worldwide ecosystem continuously brings new added-value to the fast changing global energy market and contributes actively to the innovation strategy of the Group. It is part of "ENGIE Tech", the new businesses factory of the Group, created in June 2016.

Innovative projects and actions carried out by ENGIE Lab Singapore with Nanyang Technological University (NTU)

Power Zee – How to engage students on a campus to reduce their energy footprint?

PowerZee is an application that can be uploaded on a smart phone by students of NTU Campus. Based on gaming principles, it empowers students to decrease energy consumption in buildings by doing simple things which they gain points for, such as using the staircase instead of the elevator, or a fan instead of air conditioning. After testing a prototype version on the NTU campus, ENGIE and ERI@N are now involved in the further deployment and commercialization of PowerZee, targeting numerous universities in the region.

REIDS – The Renewable Energy Integration Demonstrator in Singapore project paving the way for new smart energy grids for islands and remote locations

The REIDS initiative aims at developing a micro-grid demonstrator on Semakau Island in Singapore, which will address the issue of energy access for off-grid areas, a major challenge for the energy world today. Together with Schneider Electric R&D teams, ENGIE Lab Singapore will develop a Multiple Energies Solution, integrating various renewable energy sources and storage systems from a series of partners. This program will focus on creating synergies and optimizing the use of those different technologies to provide affordable, reliable and sustainable energy for islands and remote sites in the region.

An open innovation challenge on connected objects in the city

ENGIE Lab Singapore is currently involved in the organization of an Open Innovation challenge in Asia-Pacific region focused on the Internet of Things (IoT), in partnership with NTU, EDB and Sigfox. During this process, innovative concepts linking the IoT and the challenges of the city of tomorrow will be selected, prototyped and tested within the EcoCampus Living Lab of NTU.

Enhancing energy efficiency on industrial sites

ENGIE Lab Singapore also offers high-level expertise on energy efficiency for industry. It will provide consulting services for optimizing industrial processes and help countries to reduce their industrial carbon footprint.

Transition from traditional energy sources to natural gas

ENGIE Lab Singapore is also committed to work on the transition from the use of traditional energy sources to clean ones. The Lab is currently carrying out its first project with NTU and Singapore Power on natural gas network, monitoring techniques to improve fault detection and to decrease maintenance costs.



About ENGIE

ENGIE develops its businesses (power, natural gas, and energy services) around a model based on responsible growth to take on the major challenges of energy's transition to a low-carbon economy: access to sustainable energy, climate-change mitigation and adaptation, and the rational use of resources. The Group provides individuals, cities and businesses with highly efficient and innovative solutions largely based on its expertise in four key sectors: renewable energy, energy efficiency, liquefied natural gas and digital technology. ENGIE employs 154,950 people worldwide and achieved revenues of €69.9 billion in 2015. The Group is listed on the Paris and Brussels stock exchanges (ENGI) and is represented in the main international indices: CAC 40, BEL 20, DJ Euro Stoxx 50, Euronext 100, FTSE Eurotop 100, MSCI Europe, DJSI World, DJSI Europe and Euronext Vigeo (Eurozone 120, Europe 120 and France 20).

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