



EDF and Nanyang Technological University sign a Research Collaboration Agreement in the field of design and construction of micro-grid technologies in Singapore

EDF signed a Research Collaboration Agreement (RCA) with Nanyang Technological University (NTU) of Singapore, which will enable the French energy company to take part in the Renewable Energy Integration Demonstrator Singapore (REIDS). EDF notably intends to build a micro-grid on the island of Semakau in Singapore, in order to test EDF R&D's innovative micro-grid technologies.

REIDS (Renewable Energy Integration Demonstrator-Singapore) is an initiative led by Nanyang Technological University (NTU) and supported by the Economic Development Board (EDB) and the National Environment Agency (NEA). This Singapore-based R&D platform is dedicated to designing, demonstrating and testing solutions for sustainable multi-activity off-grid communities in Southeast Asia.

Micro-grids can meet the need for electrification of hundreds or thousands of islands in the Southeast Asian region that are not connected to the main power grid because they serve as independent energy sources for off-grid and island communities. By taking part in the REIDS demonstrator, EDF intends to implement an innovative micro-grid concept, leveraging EDF expertise, technologies and references. Building a micro-grid on the island of Semakau in Singapore will enable the Group to test a design and technologies adapted to the South East Asian needs. EDF aims to develop a complete, affordable and customer focused solution. The agreement also plans to set up a common research project between NTU Singapore and EDF Lab Singapore on micro-grids.

This project has also been facilitated by the relationship built between NTU and the French "Think Smartgrids" association, following the Letter of Intent signed by Philippe Monloubou, chairman of the association and CEO of Enedis, the main French Distribution System Operator (DSO). The L.O.I. was signed last March in Singapore, during the visit of the President of the French Republic.

EDF has developed a unique expertise in designing, developing and operating various types of smart grid and micro-grid projects (demonstration and commercial) on islands and overseas territories. Over the last years, the Group's R&D has notably been involved in a series of leading smart grid demonstration projects in continental France and overseas territories, as well as in commercial projects based on distributed energy resources in US, UK and France (Mafate in La Réunion, Nicegrid in Nice, Toucan and Kaw in Guyana). EDF R&D has also developed innovative labs and solutions to tackle key challenges of distributed energy power systems, like "Concept Grid" (a leading R&D smart grid Lab), solutions for Distributed Energy Resources (DER) controls, energy management, weather forecasting and energy storage.



Bernard SALHA, Senior Executive Vice President (VP) of EDF Group, President of EDF Research and Development, declared: *“We are very glad to team up with Nanyang Technological University, which is very renowned in Singapore and worldwide, and to benefit from its expertise in terms of research and micro-grids demonstration. The participation in the REIDS platform will enable EDF to enhance its knowledge of local markets, reinforce its R&D and demonstrate the reliability of off-grid and micro-grid solutions which could be developed in South East Asia”.*

Professor Lam Khin Yong, NTU’s Acting Provost, Chief of Staff and Vice President for Research, said: *“As a leading global university in sustainability research, NTU is proud to partner EDF, one of world’s largest energy producer with activities in electricity generation, distribution, natural gas, nuclear and renewable energy. Leading NTU’s efforts in this initiative is ERI@N with its expertise in power systems and networks in the context of the Renewable Energy Integration – Singapore (REIDS) initiative. This partnership will see the development of scalable electrification solutions for Asian countries.”*

About EDF

A key player in energy transition, the EDF Group is an integrated electricity company, active in all areas of the business: generation, transmission, distribution, energy supply and trading, energy services. A global leader in low - carbon energies, the Group has developed a diversified generation mix based on nuclear power, hydropower, new renewable energies and thermal energy. The Group is involved in supplying energy and services to approximately 37.1 million customers, of which 26 million in France. The Group generated consolidated sales of €71 billion in 2016. EDF is listed on the Paris Stock Exchange.

About Nanyang Technological University

Nanyang Technological University (NTU Singapore) is ranked 11th globally (QS World University Ranking 2018). It provides a high-quality global education to about 33,000 undergraduate and postgraduate students. NTU Singapore has colleges of Engineering, Business, Science, Humanities, Arts, & Social Sciences, and an Interdisciplinary Graduate School. Hailing from 80 countries, the university's 4,300-strong faculty and research staff bring dynamic international perspectives and years of solid industry experience. <http://www.ntu.edu.sg>

About Think Smartgrids

The French Think Smartgrids association is made up of 100 members from the world of business, academia, competitiveness clusters, actors of the electricity sector and SMEs. It benefits from two observing members: the Regulation Energy commission and the French State, through the Directorate for Enterprises and the Directorate-General for Energy and Climate. Chaired by Ph. Monloubou, CEO of Enedis, the main French DSO, the association aims to gather and develop the smartgrids’ French sector; promote it abroad and bring the voice of its members to the key players. www.thinksmartgrids.fr

Please, only print this document if absolutely necessary.

EDF SA
22-30, avenue de Wagram
75382 Paris cedex 08
EDF SA share capital € 1 370 938 843,50 euros
552 081 317 R.C.S. Paris

www.edf.com

CONTACT:

EDF Press office: +33 1 40 42 46 37