Press Releases

Enel, Enertrag and Leclanché Team Up to Build Storage Plant in Germany

Rome/Berlin, February 20th, 2018 – Enel, through its renewables subsidiary Enel Green Power Germany (EGP Germany), has signed an agreement with German wind energy company ENERTRAG AG and Swiss energy storage solutions company Leclanché SA to build and manage a 22 MW lithium-ion battery storage plant in Cremzow, in the German state of Brandenburg. The project is Enel's first storage plant in Germany and its construction will involve an investment of around 17 million euros.

The storage plant will provide frequency regulation services to Germany's Primary Control Reserve (PCR**) market to rapidly stabilise the grid, and will later be integrated with ENERTRAG wind farms.** The first 2 MW section of the Cremzow plant is expected to be operational in April 2018, while the launch of the entire plant is planned for the end of this year.

"The project in Cremzow is an important milestone for us because, after the success of similar projects in Italy and Chile, it will further demonstrate how beneficial storage is for energy systems, in particular when coupled with renewables," said **Antonio Cammisecra**, Head of Enel's Global Renewable Energies division, Enel Green Power (EGP). *"Storage is increasingly becoming a key tool in ensuring grid stability and is also a pathway towards the widespread adoption of renewables worldwide, facilitating their integration into power grids."*

Joerg Mueller, Head of ENERTRAG-Board said *"commercial batteries and their ability to provide balancing power will be one of the key enablers for the next phase of the energy transition towards renewables. The Cremzow project will play an essential role in safely phasing-out lignite in the state of Brandenburg. As a next step, the Cremzow battery will address the proof of black start capabilities of ENERTRAGs renewable regional power plant in the Uckermark area."*

"We are delighted to have been chosen by Enel Green Power and ENERTRAG to develop and deliver this large pioneering energy storage project in Germany", said **Anil Srivastava**, CEO of Leclanché. *"Battery energy storage systems have a very significant role to play in stabilising grids as the world transitions to greater use of variable renewable energy sources. They also help reduce the huge waste of renewable energy that is curtailed when grids are at capacity."*

The facility will be owned by a special purpose vehicle (SPV) in which EGP Germany has a 90% majority stake and ENERTRAG the remaining 10% stake. Leclanché will act as engineering, procurement and construction (EPC) contractor for the project, in charge of integrating battery and power conversion systems and energy management software.

The project will provide the grid with a real-time primary frequency regulation service contributing to its stability. When the grid's frequency decreases due to high power demand, the battery will rapidly deliver its stored energy, while in response to frequency increases due to low demand, the battery is charged with the surplus energy. Furthermore, the integration with ENERTRAG wind farms will allow for the use of surplus energy produced by the facilities to charge the battery, cutting back on the need to curtail wind power generation when it is higher than demand on the grid.

The German PCR market has evolved greatly in recent years with the early 2017 auction of approximately 600 MW of PCR attracting bidders from Austria, Belgium, France, Netherlands and Switzerland, whereby confirming the market's cross-border appeal. The introduction of battery storage systems is an important development in the German PCR market: in 2017, BESS (Battery Energy Storage Systems) provided about 200 MW of PCR, equal to about 31% of the market.

Enel Green Power, the Renewable Energies division of Enel Group, is dedicated to the development and operation of renewables across the world, with a presence in Europe, the Americas, Asia, Africa and Oceania. Enel Green Power is a global leader in the green energy sector with a managed capacity of around 40 GW across a generation mix that includes wind, solar, geothermal, biomass and hydropower, and is at the forefront of integrating innovative technologies into renewable power plants.

ENERTRAG generates electricity and heat exclusively from renewable sources and is among Europe's largest wind energy suppliers. With more than 667 wind turbines, ENERTRAG produces approximately 2.9 billion kilowatt hours of electricity annually – enough to meet the demands of one million people. ENERTRAG services wind turbines and delivers customer solutions across the entire value chain from concept to power delivery.

Leclanché is one of the world's leading fully vertically integrated energy storage solution providers. It delivers a wide range of energy storage solutions for homes, small offices, large industries, electricity grids, as well as

hybridisation for mass transport systems such as bus fleets and ferries. Leclanché today has a rich portfolio of Battery Energy Storage Systems (BESS) that include bespoke battery systems from industry leading lithium-ion solutions. Leclanché is listed on the Swiss stock exchange, and is the only listed pure-play energy storage company in the world.
