

ENEL X LITHIUM-ION BATTERY INNOVATION PROJECT APPROVED BY EUROPEAN COMMISSION WITHIN IPCEI

- *Enel X is one of the 17 industrial players of the pan-European project IPCEI, under which up to 3.2 billion euros of funding approved by the European Commission will be provided to support the development of a sustainable value chain for lithium-ion batteries*
- *Under the project, Enel X will develop tools for fault prediction and degradation modeling for lithium-ion batteries to increase their useful life and safety*

Rome, December 10th, 2019 – Enel X, the Enel Group's advanced energy services business line, will be one of the 17 industrial players that will receive funding approved by the European Commission within the Important Project of Common European Interest ("IPCEI"), a pan-European project aimed at supporting the growing European battery value chain by means of investments in Research and Development (R&D) and First Industrial Deployment (FID) activities.

The project proposed by Enel X involves the development of tools based on machine learning for fault prediction and degradation modeling for next generation lithium-ion batteries. The predictive tools will be aimed at extending the batteries' useful life and increasing their safety, while optimizing operation and maintenance activities. The project is expected to be completed by 2022.

*"Batteries are playing a crucial role in shaping the future of energy systems and we are fully committed to boosting innovation in this field with the aim to be better equipped to take on the energy transition," said **Francesco Venturini**, Head of Enel X. "Being part of such an important European project is a significant recognition of our efforts and expertise, through which we will help to strengthen a sustainable, innovative and advanced value chain for batteries in Europe. Enel X's project aims to develop cutting-edge software and technologies for battery deployment, leveraging on their added value and the contribution they can give to make energy systems more sustainable by promoting the integration of renewables. Through this initiative, we can help to establish Europe as a global digital leader in the battery segment."*

IPCEI follows the launch in 2017 by the European Commission of a "European Battery Alliance" and the subsequent adoption of a Strategic Action Plan for Batteries in May 2018 to boost the development of a European value chain in the field of batteries, due to their key role in the energy transition. The project supports the development of highly innovative and sustainable technologies for lithium-ion batteries that last longer, have shorter charging times, are safer and more environmentally friendly.

Under IPCEI, seven European member states (Belgium, Finland, France, Germany, Italy, Poland and Sweden) will provide in the coming years up to approximately 3.2 billion euros in funding for the overall project, which is expected to be completed by 2031. The project will involve 17 direct participants, mostly industrial players including Enel X, which will closely cooperate with each other and external partners, such as small and medium-sized enterprise (SMEs) and public research organizations across Europe.



Enel X is Enel's global business line dedicated to the development of innovative products and digital solutions in sectors where energy is showing the greatest potential for transformation: cities, homes, industries and electric mobility. The company is a global leader in demand management with a demand management capacity of more than 6 GW globally managed and assigned in the Americas, Europe, Asia, and Oceania.