

Ingeteam installs a mobile energy storage lab for the European Commission



After winning a European public tender, Ingeteam has set up an energy storage system including the supply, installation and maintenance of a mobile renewable energy storage laboratory at the European Commission's Joint Research Centre (JRC). The centre is based in Petten, the Netherlands.

The increasing use of renewable energy sources in power networks has given rise to a need for variability in energy production, and reliable balancing technologies are therefore required to:

- provide additional power when energy production from renewable sources is too low, and
- store energy when excess power is generated from renewable energy sources.

This balancing can be provided by energy storage technologies, not only in the transmission and distribution networks but also in smaller-scale networks. The necessary battery storage system must enable a variety of experiments to be conducted in this field.

The portable storage system includes a 20-foot container, and both the 166 kVA power conversion system (PCS) and the energy management system (EMS) are manufactured by Ingeteam. Also, the 180 kWh is integrated in the lithium iron batteries on which the solution is based.

This makes it a practical storage solution enabling sea and road transportation in the form of an ordinary container, while totally simplifying the assembly and installation work at the locations where it is used.

This compact, versatile solution can be used by both the JRC labs and any other interested European company to test out their developments and innovations.

The laboratory has already been installed in two locations: Italy and the Netherlands.