

iSTERMY

Interoperable, modular and Smart hybrid energy STORage systeM for stationarY applications



Project context

Current crucial challenges for energy storage revolve around the combination of different batteries with different power, energy, voltage and lifetime; the integration of the batteries with different characteristics with suitable power electronics in a smart and cost-effective way; the optimization of the entire system as well as determining when which battery has to be used for which service.

iSTORMY will address these challenges by proposing innovations at the different system levels!

Targets

iSTORMY proposes an innovative, interoperable hybrid energy storage concept. Based on:

- Hybrid battery pack including master Battery Management System.
- Universal and Self-healing Energy Management System.
- Modular Power Electronics interface.

Impact

The key impacts of the project are:

- Ø Cost <0,05€/kWh/cycle by 2030.
- Decreased CO2 emissions.
- 🖸 Extend lifetime 1st life batteries ~20%.
- Demonstration and validation of the protoype in a real environment at EDF Concept Grid.

