Off-grid energy storage porto novo

Off-grid energy storage porto novo

Hitachi ABB Power Grids has teamed up with Groupe Renault to give EV batteries a new lease of life and support the integration of renewable energy into the grid, as part of the "Sustainable Porto Santo" initiative.

Porto Santo, a Portuguese island in the Madeira archipelago, is home to about 6,000 people. The Portuguese government aims to make Porto Santo the first smart, fossil-free island in the world and launched the "Sustainable Porto Santo" initiative. A fundamental part of this initiative is to increase the production of renewable energy. The challenge, however, is the unpredictable and intermittent nature of solar and wind energy.

Groupe Renault, Europe"s largest electric vehicle (EV) maker, has provided the island with a sustainable energy transition platform comprising of a full ecosystem of EV solutions based on Vehicle-to-Grid technologies, and an aggregation platform to manage the flexibility provided by EVs and their batteries. When EV batteries reach the end of their useful first lives, they are either disposed, recycled or reused. At the end of their service life in electric vehicles, however, batteries may still retain 70-80 percent of their initial capacity.

"Hitachi ABB Power Grids" energy storage solution will be part of an intelligent electrical ecosystem for Porto Santo and ensure the complete utilization of the island"s wind and solar generation potential," said Markus Heimbach, Managing Director of Hitachi ABB Power Grids" High Voltage business unit. "This is yet another example of how Power Grids" is contributing toward a sustainable energy future through a stronger, smarter and greener grid."

"Integrating second life EV batteries from Groupe Renault with Hitachi ABB Power Grids" battery energy storage solution provides the capability to store excess energy generated by the island"s renewable sources," says Yasmina Badreddine, Project manager 2ndlife batteries, Group Renault. "This way, the power stored in the batteries can be fed back into the network during periods of high demand, with smart precision."

Hitachi ABB Power Grids is global technology leader with a combined heritage of almost 250 years, employing around 36,000 people in 90 countries. Headquartered in Switzerland, the business serves utility, industry and infrastructure customers across the value chain, and emerging areas like sustainable mobility, smart cities, energy storage and data centers. With a proven track record, global footprint and unparalleled installed base, Hitachi ABB Power Grids balances social, environmental and economic values. It is committed to powering good for a sustainable energy future, with pioneering and digital technologies, as the partner of choice for enabling a stronger, smarter and greener grid.https://hitachienergy

Hitachi ABB Power Grids" energy storage solution being part of an intelligent electrical ecosystem for Porto Santo ensuring complete utilization of the island"s wind and solar generation potential

Off-grid energy storage porto novo

Together with Groupe Renault and EEM in Porto Santo, we have realised the world"s first project where the three forms of flexibility - smart charging, vehicle-to-grid and second-life battery storage - are intelligently controlled by a central software platform.

"An entire CO2-free island" is the goal of the joint project by Groupe Renault and the local energy provider Empresade Electricidadeda Madeira S.A. (EEM). By making use of photovoltaics, wind power, electric vehicles and second-life batteries, the Portuguese island of Porto Santo wants to become a smart, fossil-free island.

To make that a reality, we developed the charging and energy management system with a smart marketplace. This optimizes the interaction between conventional electric cars, secondlife stationary storages and bidirectional electric vehicles (Vehicle-toGrid, V2G)

The project was successfully completed at the end of 2022 and handed over to the responsible energy provider and partner Empresa de Electricidade da Madeira S.A.(EEM).

Over the course of four years, we were able to gain important insights into the interaction of different players in the energy system by building the island"s smart electrical ecosystem and actually increase the use of renewable energy sources by operating the networked system. These insights are being applied in the further development of our technologies.

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346