

Portugal Porto Smart Energy Storage Project





Overview

The project consists of the installation of a 4 MW power plant and 3 MWh of power capacity, with the aim of providing primary response, replacing a thermal generator at all times, improving the efficiency of the thermal park and reducing the rejection rate of energy from renewable sources, as well as ensuring energy supply for at least 15 minutes in the event of a thermal group failure. Will Porto Santo be able to run the electricity grid full-time?

According to a report by the BBC, the island would require 500 bidirectional EVs to run the electricity grid full-time. Porto Santo could add more battery storage capacity, but because energy consumption spikes during the summer with tourism, it isn't viable to exceed 80 percent penetration of renewables.

How will EV batteries work in Porto Santo?

During the final phase, it is hoped that the EV batteries will be able to store the excess energy generated primarily by Porto Santo's wind and solar farms, allowing for a steady electrical supply to be fed back into the grid.

Will Porto Santo become a 'smart fossil free island'?

A new innovative plan has been formulated by the Regional Government of Madeira, Group Renault and Empresa de Electricidade da Madeira (EEM) in a bid to turn Porto Santo into the first 'Smart Fossil Free Island' in the world.

Where does Porto Santo get its electricity from?

The North Atlantic island, some 500 miles east of Casablanca and roughly on the same latitude, gets a good amount of sun and wind. But, in 2017, these renewable sources accounted for only 15 percent of Porto Santo's electricity supply; the rest of the energy mix came from non-renewable resources.



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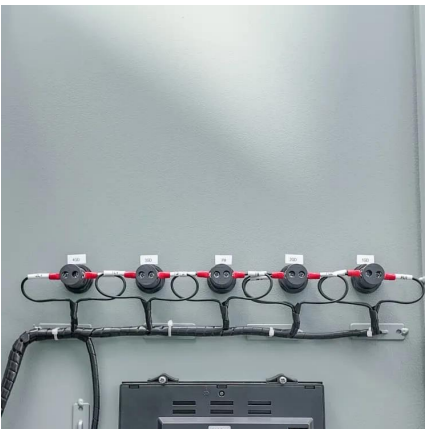


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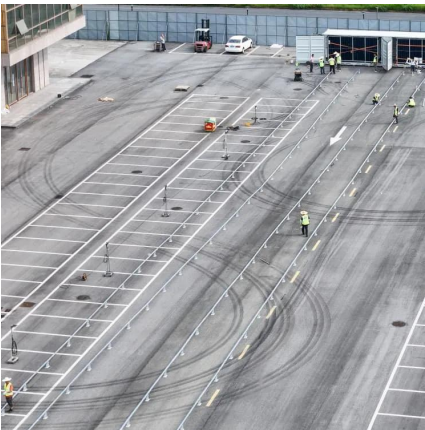
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Portugal

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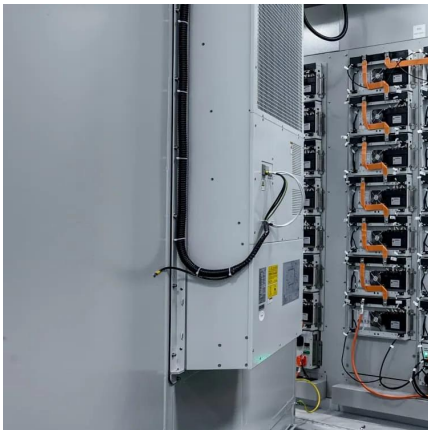


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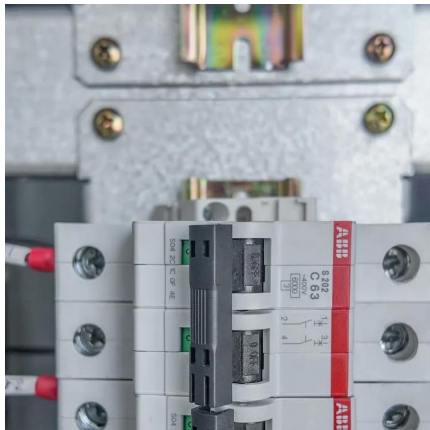
Local energy from waste for greater Porto in ...

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Project co-funded by the EU - Other renewable energy (including hydroelectric, geothermal and marine energy) and renewable energy integration (including storage, power to gas and ...

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