

How many households can a German energy storage facility hold?

The storage facility, able to hold the daily energy requirements of 1,500 German households, is set to be commissioned in 2019. Scientists from the Institute of Thermo-fluid Dynamics at the Technical University of Hamburg and the energy supplier Hamburg Energie have been involved in the development.

What is the heat storage facility in Hamburg-Altenwerder?

The heat storage facility, which was ceremonially opened today in Hamburg-Altenwerder, contains around 1,000 tonnes of volcanic rock as an energy storage medium. It is fed with electrical energy converted into hot air by means of a resistance heater and a blower that heats the rock to 750°C.

Why is Hamburg promoting storage development?

Hamburg's municipal energy supplier developed an IT platform to which the storage unit is connected. The platform guarantees that maximum possible proceeds are achieved by an optimized storage usage. The Federal Ministry of Economics and Energy is promoting storage development as part of the Future Energy Solutions project.

What is electric thermal energy storage (ETEs)?

The 130MWh Electric Thermal Energy Storage (ETES) demonstration project, commissioned in Hamburg-Altenwerder, Germany, in June 2019, is the precursor of future energy storage solutions with gigawatt-scale charging and discharging capacities. Siemens Gamesa, Hamburg University of Technology, and Hamburg Energie.

What does Hamburg energy do?

Hamburg Energie is responsible for marketing the stored energy on the electricity market. The energy provider is developing highly flexible digital control system platforms for virtual power plants. Connected to such an IT platform, ETES can optimally store renewable energy at maximum yield.

Can ETES be scaled-up to store more than 1GWh of electricity?

Siemens Gamesa, Hamburg University of Technology, and Hamburg Energie. The ETES system has the potential to be scaled-up for storing more than 1GWh of electricity. Image courtesy of Siemens Gamesa Renewable Energy, S.A. The 130MWh Electric Thermal Energy Storage (ETES) demonstration project was commissioned in June 2019.

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