

Italian phase change energy storage project

What drives growth in Italy's energy storage sector?

LONDON (ICIS)-Market actors predict growth in the Italian energy storage sector will be driven by the system balancing needs of the grid operator in the face of increasing renewable penetration and conventional plant closures. However, permitting bottlenecks remain a key concern.

Where will EP Produzione build a battery energy storage system?

EP Produzione will build 170 MW of battery energy storage systems with a two-hour storage duration at two sites. One project will be located at the company's Fiume Santo coal-fired power plant in Sardinia, originally set up in the 1960s.

How big is Italy's energy storage sector?

However, permitting bottlenecks remain a key concern. Figures by industry group Italia Solare put the current size of the Italian energy storage sector at approximately 450MW of total installed capacity.

How much solar storage will Italy need by 2025?

Italian transmission system operator (TSO) Terna said that 1GW of storage linked to solar farms will be needed by 2025 to help maintain system adequacy, with additional 6GW of utility-scale storage needed by 2030. The majority of revenue for storage assets comes from participation in Terna's fast reserve scheme.

Which projects have a battery energy storage system been implemented?

Internationally, we have already implemented major projects such as the Tynemouth stand-alone storage system in the UK and the La Caba; a photovoltaic plant in Chile, which is equipped with a Battery Energy Storage System that ensures its efficiency and stability.

Where is EP Produzione delivering a second battery system?

The second battery system will be delivered at Ferrara Energy Center, Emilia-Romagna, northern Italy, with the goal of reusing the current industrial area. EP Produzione was awarded a total of five projects in the 2025 capacity market auction, each with a 15-year off-take contract. To continue reading, please visit our ESS News website.

In a context where increased efficiency has become a priority in energy generation processes, phase change materials for thermal energy storage represent an outstanding possibility. Current research around thermal energy ...

-- This project is inactive --Infinita, under the Baseload CSP FOA, developed and demonstrated a subscale system for baseload CSP power generation using thermal energy storage (TES) in a ...

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Italy has set its objectives in the energy national plan (PNIEC) pushing to a high integration of the renewable power generation (55% of renewable share in the electric sector by 2030). In the ...

The management of energy consumption in the building sector is of crucial concern for modern societies. Fossil fuels' reduced availability, along with the environmental implications they cause, emphasize the necessity for ...

The grid-scale Italian energy storage market has been kickstarted from two different directions. The first was big wins for battery storage projects in ancillary service and capacity market ...

Conventional phase change materials struggle with long-duration thermal energy storage and controllable latent heat release. In a recent issue of *Angewandte Chemie*, Chen et ...

Independent investment and asset manager KGAL GmbH & Co KG said today that its KGAL ESPF 5 fund has teamed up with Italy's IMCS to jointly develop battery energy storage systems (BESS) projects in Italy, ...

Thermal energy storage based on phase change materials (PCMs) can improve the efficiency of energy utilization by eliminating the mismatch between energy supply and demand. It has become a hot research ...

Rome - July 4, 2023 - Matrix Renewables ("Matrix"), the TPG Rise-backed global renewable energy platform, today announced that it has started a partnership with Gravel A through a ...