

Energy storage design for Southern Europe power grid





Overview

What is the European energy storage inventory?

A new interactive platform delivers real-time clean energy storage insights as Europe shifts toward sustainable energy sources. Energy storage helps to balance supply and demand. The European Energy Storage Inventory is the first of its kind at European level to show all forms of clean energy storage solutions.

Why is energy storage important?

Energy storage helps balance supply and demand by storing surplus energy for use during low-production times, maintaining consistent energy delivery despite renewable generation variation. It supports grid stability through rapid-response backup systems that regulate frequency and voltage, essential for renewable energy networks.

What is the EU energy technology inventory?

The inventory provides policymakers with up-to-date data to shape energy security strategies and the EU's revised Strategic Energy Technology Plan (SET Plan). The inventory also has the potential to feed into the Clean Energy Technology Observatory, ensuring that storage trends are considered in EU-wide energy technology assessments.

Which countries have the most storage facilities in Europe?

Europe's current total operational power is around 66 GW, and planned projects mean this might double to 132 GW by 2035. According to findings from the inventory, Germany, Italy and Spain have the main relevant storage facilities among the member States.



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Clean Peaking Plants
Battery-Based Energy Storage Versus Transmission Expansion
Providing Grid Inertia
An obvious option for southern Europe in particular is to modernize and expand interconnection capacity. By linking power markets with different, and ideally complementary, power generation and demand profiles, fluctuations can cancel each other out. Various cross-border transmission projects are under way in the region, such as the 2,000 MW Eurasia See more on [blog.fluenceenergy](#) cep - Centre for European Policy

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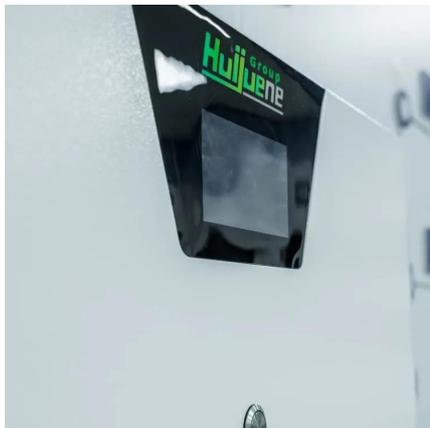
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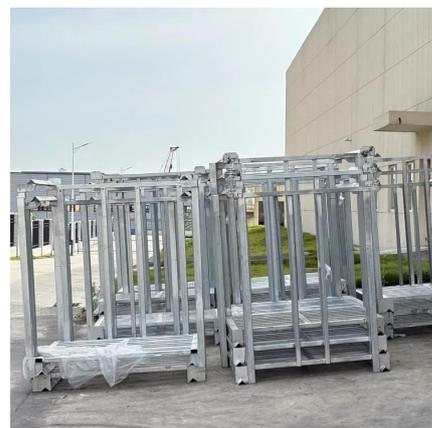


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