

Grid-side energy storage project statistics







Overview

Which states have the most grid-scale storage installations in 2025?

Texas and California continue to lead the market, with 61% of the total installed capacity in Q4, while the remaining 39% was installed across 13 states, expanding storage deployment beyond the leading markets. Grid-scale storage installations are forecasted to reach 13.3 GW in 2025.

Is energy storage the future of energy security & grid reliability?

"After another year of record deployment, energy storage is solidifying its place as a leading solution for strengthening American energy security and grid reliability in a time of historic rising demand for electricity," said ACP VP of Energy Storage Noah Roberts.

How many battery energy storage projects are there?

The U.S. has 575 operational battery energy storage projects 8, using lead-acid, lithium-ion, nickel-based, sodium-based, and flow batteries 10. These projects totaled 15.9 GW of rated power in 2023 8, and have round-trip efficiencies between 60-95% 24.

How many GW of energy storage installations are there in 2024?

HOUSTON/WASHINGTON, D.C., March 19, 2025 — The U.S. energy storage market set a new record in 2024 with 12.3 gigawatts (GW) of installations across all segments, according to the latest U.S. Energy Storage Monitor report released today by the American Clean Power Association (ACP) and Wood Mackenzie.

What types of energy storage are included?

Other storage includes compressed air energy storage, flywheel and thermal storage. Hydrogen electrolysers are not included. Global installed energy storage capacity by scenario, 2023 and 2030 - Chart and data by the International Energy Agency.



What are the different types of energy storage technologies?

Pumped hydro, batteries, hydrogen, and thermal storage are a few of the technologies currently in the spotlight. The global battery industry has been gaining momentum over the last few years, and investments in battery storage and power grids surpassed 450 billion U.S. dollars in 2024. Find the latest statistics and facts on energy storage.



Grid-side energy storage project statistics



<u>US storage market continues upward trend into 2025</u>

"Energy storage is crucial for energy security and to help outpace rising demand." Grid-scale storage takes up the lion's share of install numbers. Q3 2024 reached a new ...

Product Information

Storage Futures , Energy Systems Analysis , NREL

In this multiyear study, analysts leveraged NREL energy storage projects, data, and tools to explore the role and impact of relevant and emerging energy storage technologies ...



Product Information



What does grid-side energy storage include?, NenPower

1. Grid-side energy storage encompasses a comprehensive range of systems and technologies designed to manage and store electricity on the grid level. 1. It includes both ...

Product Information

BYD Energy Storage sign contract for world's largest grid-scale ...

BYD Energy Storage and Saudi Electricity Company have signed contracts for the world's largest grid-scale energy storage projects with a 12.5 GWh capacity.







CHINA'S ACCELERATING GROWTH IN NEW TYPE

-

In terms of application, equipping energy storage in renewable electricity generation projects is the main application field for new type energy storage, with a cumulative installed capacity ...

Product Information

REPORT: Energy Storage's Meteoric Rise Breaks Another Record

Texas and California continue to lead the market, with 61% of the total installed capacity in Q4, while the remaining 39% was installed across 13 states, expanding storage ...

Product Information





Grid-Side Energy Storage Projects: Current Status, Challenges, ...

The global grid-side energy storage market has exploded into a \$33 billion industry, churning out 100 gigawatt-hours annually [1]. These projects are the unsung heroes keeping your lights on ...

Product Information



Solar, battery storage to lead new U.S. generating capacity ...

In 2025, capacity growth from battery storage could set a record as we expect 18.2 GW of utility-scale battery storage to be added to the grid. U.S. battery storage already achieved record ...

Product Information



Support Customized Product



Sungrow signs contract for world's largest energy storage project ...

The project is large in scale, with tight delivery schedule, complex dispatching management, and high requirements for grid support and operation and maintenance. ...

Product Information

800 million yuan!The largest grid-side independent energy storage

The project was signed by Wuyi County, Jinhua City, Zhejiang Province and Sunwoda Smart Energy, with a planned total investment of 800 million yuan, and the project ...







DOE Global Energy Storage Database

The DOE Global Energy Storage Database provides research-grade information on grid-connected energy storage projects and relevant state and federal policies. All data can be ...

Product Information



<u>Case Study: Grid-Connected Battery Energy</u> <u>Storage System ...</u>

The Need for Grid-Connected BESS Integrating renewable energy into the grid presents challenges of stability and reliability. Renewable energy is inherently variable, and without ...

Product Information





Energy Storage Grand Challenge Energy Storage Market ...

Foreword As part of the U.S. Department of Energy's (DOE's) Energy Storage Grand Challenge (ESGC), DOE intends to synthesize and disseminate best-available energy storage data,

Product Information

<u>Unlocking India s Energy Transition: Addressing</u> <u>Grid ...</u>

To maximize the potential of grid modernization, India must introduce targeted policies, including long-term financial incentives for emerging technologies such as energy storage and grid ...

Product Information





U.S. Grid Energy Storage Factsheet

In 2021, 1,595 energy storage projects were operational globally, with 125 projects in construction. 51% of operational projects are located in the U.S. 10 California leads the U.S. in power ...

Product Information



Grid-Side Energy Storage Market Size, Share, Growth, Trends, ...

The global grid-side energy storage market size was projected at USD 2.6 billion in 2024 and is anticipated to reach USD 5.28 billion by 2033, registering a CAGR of 8.2% during ...

Product Information



Contact Us

For catalog requests, pricing, or partnerships, please visit: https://les-jardins-de-wasquehal.fr