HJ Solar Energy

First in energy storage installed capacity

Overview

For the first time, installed capacity of renewable energy exceeded that of thermal power, accounting for 56% of the total installed capacity. The installed capacity of new energy storage will exceed pumped storage for the first time, becoming the main energy storage method.

For the first time, installed capacity of renewable energy exceeded that of thermal power, accounting for 56% of the total installed capacity. The installed capacity of new energy storage will exceed pumped storage for the first time, becoming the main energy storage method.

The global energy storage market added 175.4 GWh of installed capacity in 2024, with the three major regional markets—China, the Americas, and Europe—continuing to account for over 90% of global installations. In 2025, the global energy storage market is projected to maintain its growth trajectory.

According to CNESA DataLink's Global Energy Storage Database, as of the end of September 2024, the cumulative installed capacity of operational energy storage projects in China reached 111.49 GW. This includes pumped hydro storage, molten salt thermal storage, and other non-hydro storage.

China has published a national plan to promote large-scale energy storage facilities, encouraging investment and broader participation in the electricity market. The ‘Special action plan for large-scale construction of new energy storage (2025-2027)’ was published last Friday (12 September).

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.

For the first time, installed capacity of renewable energy exceeded that of thermal power, accounting for 56% of the total installed capacity. The installed capacity of new energy storage will exceed pumped storage for the first time, becoming the main energy storage method. According to

incomplete.

China, which already boasts the world's largest energy-storage capacity, is set to nearly double that level by 2027, with an anticipated investment of 250 billion yuan (US$35 billion), according to Beijing's latest action plan. As outlined in the action plan, China's "new-energy storage system". Should energy storage be developed?

Developing energy storage has become a global consensus. It was announced at COP29 in late 2024 that global storage capacity will increase to 1,500 GW by 2030, more than six times the 2022 level. As a result, InfoLink maintains a cautiously optimistic outlook for the medium- to long-term development of energy storage systems.

How did energy storage grow in the first half of 2024?

Global energy storage installed capacity grew 93.8% YoY in the first half of 2024, coming in at 64.9 GWh. A total of 57.3 GWh came from utility-scale storage (including C&I), up 118% year-on-year. Meanwhile, 7.6 GWh came from the residential sector, up 7.7% year-on-year.

How pumped hydro storage compared to non-hydro energy storage?

The share of pumped hydro storage in the total installed capacity fell below 50% for the first time. Among these, the cumulative installed capacity of non-hydro energy storage surpassed 50 GW for the first time, reaching 55.18 GW/125.18 GWh. Power capacity grew by 119% year-on-year, while energy capacity surged by 244% year-on-year.

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.

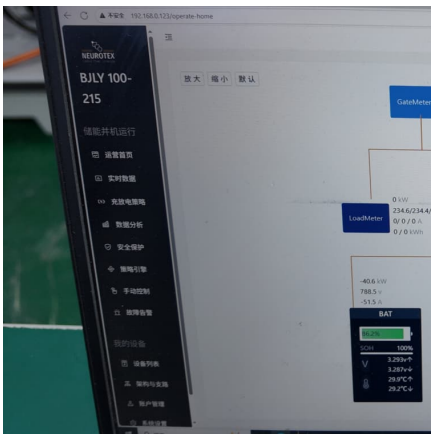
What is the future of energy storage?

Energy storage system shipments are expected to reach 200 GWh, a year-on-year increase of 38%. Energy storage system installations are projected to reach 153 GWh, an increase of 46% YoY. About the author: Robin Song is an energy storage analyst at InfoLink Consulting, focusing on lithium ion battery supply and demand analysis.

How can manufacturers capitalize on energy storage trends?

To capitalize on this trend, manufacturers should focus on market insights and plan for new opportunities. Developing energy storage has become a global consensus. It was announced at COP29 in late 2024 that global storage capacity will increase to 1,500 GW by 2030, more than six times the 2022 level.

First in energy storage installed capacity



China National Energy Administration Released Official Report

China's National Energy Administration (NEA) has released the China New Energy Storage Development Report 2025, marking the first official and comprehensive ...

[U.S. battery capacity increased 66% in 2024]

In the United States, cumulative utility-scale battery storage capacity exceeded 26 gigawatts (GW) in 2024, according to our January 2025 Preliminary Monthly Electric ...

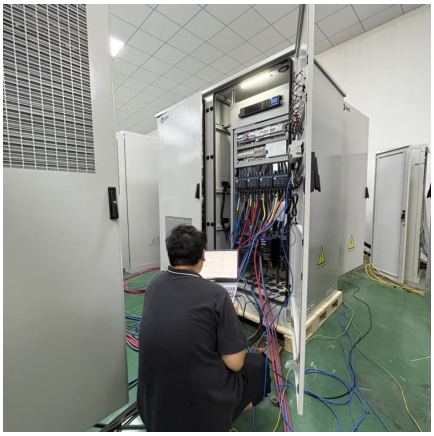
[U.S. energy storage installations grow 33% year-over ...]

Texas and California continued to lead the grid-scale storage market and represented 61% of total installed capacity in the fourth quarter. ...

[Utility-scale leads as Italy adds 4.4 GWh of energy ...]

Italy's cumulative 692,386 energy storage systems, installed by Sep. 30, 2024, had a total power rating of 5,034 MW and storage capacity

of ...



[EESA: 2024 Global Energy Storage Industry Chain Data]

In 2024, the global new energy storage installed capacity will be 79.2GW/188.5GWh, and the installed capacity (GWh) will increase by 82.1% year-on-year.

[Energy storage industry put on fast track in China]

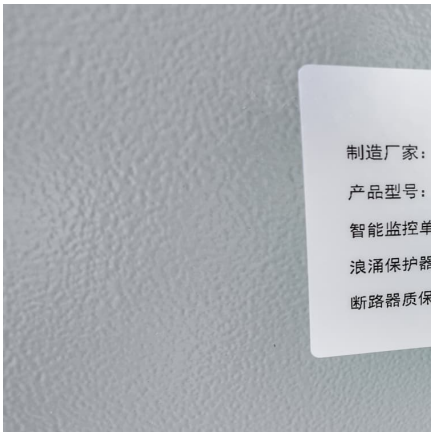
The country's installed new-type energy storage capacity had reached 31.39 gigawatts by the end of 2023, of which 22.6 gigawatts were newly installed in that year alone, ...

[China to supercharge energy-storage tech with world ...]

2 ???· New plan calls for expansion of energy-storage applications, including more projects in desert areas and at retired coal-fired power plant sites.

China leads in new energy storage capacity and might reach 200 ...

For the first time, installed capacity of renewable energy exceeded that of thermal power, accounting for 56% of the total installed capacity. The installed capacity of new ...



[CNESA Global Energy Storage Market Tracking]

Among these, the cumulative installed capacity of non-hydro energy storage surpassed 50 GW for the first time, reaching 55.18 GW/125.18 GWh. Power capacity grew by ...

[Top 20 Countries by Battery Storage Capacity]

Chinese Dominance As with the EV market, China currently dominates global BESS deployments, accounting for approximately two-thirds of installed capacity. However, ...

REPORT: Energy Storage's Meteoric Rise Breaks Another Record

145 MW of community-scale, commercial and industrial (CCI) storage was installed in 2024, a 22% increase over the previous year. California, Massachusetts, and New ...

NEA: New-Type Energy Storage Installed Capacity Reached ...

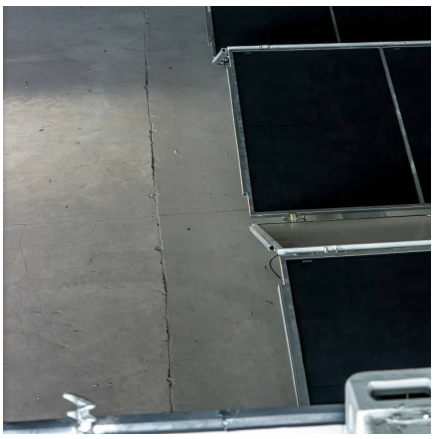
The total installed capacity reached 94.91 GW / 222 GWh, representing a 29% increase compared to the end of 2024. Among regions, Inner Mongolia and Xinjiang each ...

China's new energy storage capacity exceeds 70 million KW

China's new energy storage sector has seen a rapid growth in 2024, with installed capacity surpassing 70 million kilowatts, said an official with the National Energy ...

EIA: Updated Forecasts on U.S. Installed Capacity of ...

In the first half of 2023, the United States saw significant growth in its utility energy storage capacity and reserves: According to S& P Global's ...



[InfoLink: 222 GWh more energy storage worldwide in ...]

The global energy storage market had installed 175.4 GWh of capacity by 2024, with Tesla leading shipments. Europe accounted for 19.1 ...

NEA: New-Type Energy Storage Installed Capacity Reached ...

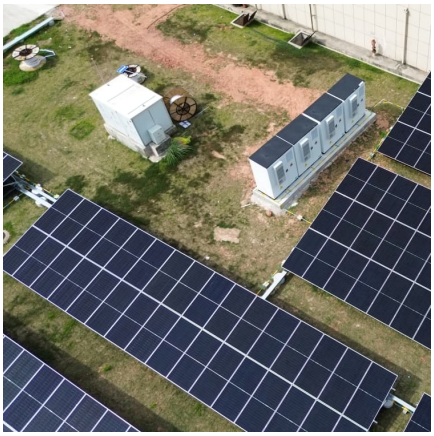
By the end of the first half of 2025, China's new-type energy storage had maintained a stable and rapid growth trajectory. The total installed capacity reached 94.91 GW ...

Energy Storage Systems (ESS) Overview

2 ???· The challenge with Renewable Energy sources arises due to their varying nature with time, climate, season or geographic location. Energy ...

EIA: Monthly Update on Installation Forecasts for Energy Storage ...

Installations Forecasts for Energy Storage in 2023 and 2024 Looking ahead to the installation forecasts for energy storage in 2023 and 2024, EIA data reveals that from ...



Installed Capacity Reaches 168 GWh with 130% Growth: Chinese ...

By the end of 2024, the cumulative installed and operational capacity of new energy storage projects nationwide reached 73.76 GW/168 GWh, approximately 20 times that ...

[German: Europe's Top 1 Energy Storage Market]

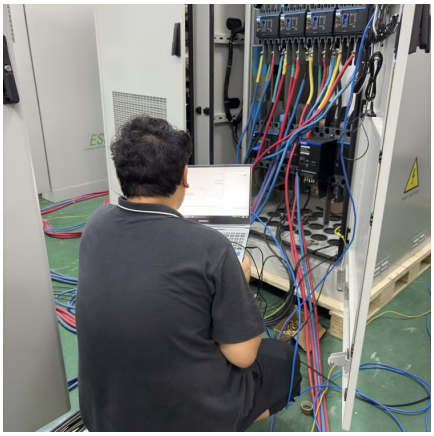
Overall, the energy storage installation in Europe increased significantly in 2023. According to the European Association for Storage of Energy (EASE) data, the total installed ...

CNESA Major Release on the 10th Western China Energy Storage ...

Cumulative Installed Capacity of New Energy Storage Surpasses 100GW for the First Time As of the first half of 2025, China's cumulative installed capacity of new energy ...

[Energy Storage's Meteoric Rise Breaks Another Record]

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 ...



Global Installed Energy Storage Capacity Exploded in 2022, and ...

The global new energy storage sector is experiencing a period of rapid expansion. According to CNESA, the cumulative installed capacity of new energy storage ...

[Industry News -- China Energy Storage Alliance]

Actively Exploring Energy Storage Application Scenarios In the era when the industry is fully shifting toward marketization, the reform of the ...

June , Monthly Project Tracker of New Energy Storage , Large ...

Core Data: o In June, newly commissioned new energy storage reached 2.33GW/5.63GWh in China; for the first time, the "June 30" grid-connection peak cooled down. ...

[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 ratio ...

Energy Storage Systems (ESS) Overview

2 ???· The challenge with Renewable Energy sources arises due to their varying nature with time, climate, season or geographic location. Energy Storage Systems (ESS) can be used for ...

Contact Us

For catalog requests, pricing, or partnerships, please visit: https://www.conrad.edu.pl