

# CHINA-EUROPE NEW ENERGY STORAGE



What will China's energy storage capacity be in 2024? Forecasts on the Installed Capacity in China in 2024 TrendForce anticipates that China's new installed energy storage capacity will reach 29.2 GW/66.3GWh in 2024, marking a substantial year-on-year increase of 46% and 50%, sustaining a high growth trajectory.



How big is China's energy storage capacity? According to incomplete statistics from CNESA DataLink Global Energy Storage Database, by the end of June 2023, the cumulative installed capacity of electrical energy storage projects commissioned in China was 70.2GW, with a year-on-year increase of 44%.



How many new energy storage projects are commissioned in China? Figure 2: Cumulative installed capacity of new energy storage projects commissioned in China (as of the end of June 2023) In the first half of 2023, China's new energy storage continued to develop at a high speed, with 850 projects (including planning, under construction and commissioned projects), more than twice that of the same period last year.



What is the demand for energy storage facilities in China? The rapid growth of renewable energy generation has created a large market demand for energy storage facilities. By the end of the first quarter of 2024, the cumulative installed capacity of new energy-storage projects in China had reached 35.3 million kW.



Which countries are supplying large-sized energy storage in Europe? The demand for large-sized energy storage is being driven by government tenders and market-based projects, sustaining its strong growth momentum. Notably, Germany, Britain, and Italy lead in installed demand within Europe. Forecasts on the Installed Capacity in Europe in 2024

# CHINA-EUROPE NEW ENERGY STORAGE



What percentage of China's new energy storage facilities use lithium batteries? About 97 percent of China's new energy-storage facilities used lithium batteries in 2023. Recognizing the diverse scenarios and needs in power systems, China is encouraging technological innovation in new energy storage, achieving breakthroughs across various technical approaches.



The role of energy storage in changing power systems. Taking a step back, let's recognise the role of energy storage. In the middle of the last decade, energy storage started being deployed across Europe's power markets. First delivering fast frequency response services in Germany, UK and Ireland, energy storage took a foothold.



China aims to further develop its new energy storage capacity, which is expected to advance from the initial stage of commercialization to large-scale development by 2025, with an installed capacity of more than 30 million kilowatts, regulators said. China is currently the world's biggest power generator. While it is aiming for renewable



North America, China, and Europe will be the largest regions for energy storage deployment, which is based on the positive scenario prediction of the cumulative installed capacity of China's new energy storage in 2027 by the CNESA [80] (calculation on the 2C discharge rate). The mid-long term target sets the installed capacity of 1000 GWh.



According to CNESA, the cumulative installed capacity of new energy storage worldwide reached 45.7 GW in 2022, with annual new installations reaching 20.4 GW. China, Europe, and the US will continue to lead the global energy storage market in 2022, accounting for 86% of the global market. This represents a 6 percentage point increase from the

# CHINA-EUROPE NEW ENERGY STORAGE



Europe has seen its first year when energy storage deployments by power capacity exceeded 10GW in 2023. The eighth annual edition of the European Market Monitor on Energy Storage (EMMES) was published last week by consultancy LCP Delta and the European Association for Storage of Energy (EASE).



In the first half of 2023, China's new energy storage continued to develop at a high speed, with 850 projects (including planning, under construction and commissioned projects), more than twice that of the same period last year.



It is more significant development for China's energy storage. In 2023, the annual growth rate of new energy storage set a new record, with two years ahead of schedule achieving the national 14th Five-Year Plan target. According to incomplete statistics from the China Energy Storage Alliance (CNESA) Global Energy Storage Database, in 2023, China added approximately 8.0GW/16.7GWh, higher than the new scale level last year (7.3GW/15.9GWh).



Compared to China, developed countries such as Europe, the United States, and Australia have more mature policies and business models related to energy storage. Financial and tax subsidies, mandatory new energy storage, and electricity prices. Moreover, it analyzes the business models of new energy distribution and storage, user-side energy



In the first half of 2023, China's new energy storage continued to develop at a high speed, with 850 projects (including planning, under construction and commissioned projects), more than twice that of the same period last year. The newly commissioned scale is 8.0GW/16.7GWh, higher than the new scale level last year (7.3GW/15.9GWh).



By the end of the first quarter of 2024, the cumulative installed capacity of new energy storage projects in China had reached 35.3 million kW. This marks an increase of more than 12 percent over

# CHINA-EUROPE NEW ENERGY STORAGE



As the primary incremental markets globally, China, the United States, and Europe are projected to account for 84% of the total new installations in 2024, sustaining their leadership in driving demand growth for the global energy storage market. TrendForce predicts that by 2024, new energy storage installations in Asia will hit 34.3 GW/78



In 2024, global installations of ESS are poised to hit 74GW/173GWh, with China, the United States, and Europe contributing a whopping 85% to the total installations. Utility-scale Energy Storage: Forecasted for 2024, new installations are set to reach 55GW / 133.7GWh, reflecting a solid 33% and 38% increase. The decline in lithium prices



Their new energy-storage capacity in 2022 accounted for 86 percent of the global total, up 6 percentage points from 2021. The CNESA report estimated that China's cumulative installed capacity of new energy storage in 2027 may reach 138.4 gigawatts if the country's provincial-level regions achieve their targets of energy-storage construction.



ACWA Power has signed agreements worth over \$1.78 billion covering renewable energy, battery storage, and research and development across Gulf countries, China, central Asia, and North Africa



Ahead and heading into a new era for new energy, it is expected that China's energy storage capacity and its BESS capacity in particular will grow at a CAGR rate of 44% between 2023 and 2027. Finally, BESS development financing globally thus far has stemmed from various sources: funds, corporate funds, institutional investors, or bank financing.



The company's stand at ees Europe / Intersolar in Munich last month. Image: HyperStrong. Dr. Jianhui Zhang, CEO of China's top battery energy storage system (BESS) solution provider HyperStrong, shares updates on the company's latest products, solutions, digital capabilities,

# CHINA-EUROPE NEW ENERGY STORAGE

---

achievements and its international expansion, from the ees / the smarter E a?|

# CHINA-EUROPE NEW ENERGY STORAGE



In 2023, Europe may add 17 GWh of installed energy storage capacity, with 9 GWh in the residential sector. Overall, China, the U.S., and Europe saw installed capacities growing at varying paces in the first half of 2023. China and Europe posted better-than-expected growth in utility-scale and residential sectors, respectively.



The Winners Are Set to Be Announced for the Energy Storage Awards! 21 November 2024, Hilton London Bankside. Book Your Table. Europe. Rolwind claims first EIA approval for standalone, 800MWh BESS in Spain. November 12, 2024. Storm disruption to power supply "demonstrates need for long-duration energy storage" in New South Wales



Based on a brief analysis of the global and Chinese energy storage markets in terms of size and future development, the publication delves into the relevant business models and cases of a?|



On August 25, the largest energy storage project in Europe developed by China Huaneng Group Co., Ltd.a??the British Mendi Battery Energy Storage Project began cold commissioning. This marked the project's entry into the final stage of development and is scheduled to be put into commercial operation by the end of the year.



China overtakes the US as the largest energy storage market in megawatt terms by 2030. We increased our China forecast by 66% to account for new provincial energy storage targets, power market reforms and industry expectations supporting significant new capacity. Europe, Middle East and Africa (EMEA) added 4.5GW/7.1GWh in 2022. Residential



According to the research report released at the . According to the research report released at the "Energy Storage Industry 2023 Review and 2024 Outlook" conference, the scale of new grid-connected energy storage projects in China will reach 22.8GW/49.1GWh in 2023, nearly

# CHINA-EUROPE NEW ENERGY STORAGE

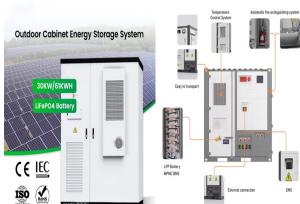
---

three times the new installed capacity of 7.8GW/16.3GWh in 2022.

# CHINA-EUROPE NEW ENERGY STORAGE



China, the United States, and Europe collectively dominated the global landscape, comprising 84% of total installations. Reflecting on 2023, China's new energy storage installations for the period from January to October reached an impressive 13.1GW/27.1GWh, far surpassing the levels seen in the same period the previous year.



Electromagnetic energy storage literature shows a phenomenon where China dominates the field, as the number of papers published by China in 2021 surpasses the total number of papers published by the United States, Japan, and Europe. Thermal energy storage and chemical energy storage have similar overall publication volumes, with China and



"Europe can still diversify energy storage supply chain away from one country" 100MW thermal solar salt energy storage system in Xinjiang, China, to be complete by end of 2024. November 1, 2024 New Mexico county issues US\$190 million revenue bond for Aypa Power's Sun Lasso BESS.



According to Bloomberg NEF, a quarter of the residential photovoltaic (PV) systems installed across Europe in 2023 were equipped with energy storage systems. Notably, residential storage dominates the energy storage landscape in Germany, boasting the highest penetration rate of allocated storage systems at an impressive 78%. Italy follows