

# 2025 ENERGY STORAGE BIDDING SCALE

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Why was the energy storage roadmap updated in 2022? The Energy Storage Roadmap was reviewed and updated in 2022 to refine the envisioned future states and provide more comprehensive assessments and descriptions of the progress needed (i.e., gaps) to achieve the desired 2025 vision.



What is the new energy storage development implementation plan 2021-2025? The New Energy Storage Development Implementation Plan (2021-2025), issued in March 2022 by the NDRC and NEA, aims to reduce the cost of NTESS by over 30% by 2025 and develop independent and controllable core technology and equipment for NTESS by 2030.



How did energy storage grow in 2022 & 2023? The US utility-scale storage sector saw tremendous growth over 2022 and 2023. The volume of energy storage installations in the United States in 2022 totaled 11,976 megawatt hours (MWh), a figure surpassed in the first three quarters of 2023 when installations hit 13,518 MWh by cumulative volume.



Will the storage market grow in 2030? With the intention to more than double solar and wind capacity by 2030 (and co-location becoming increasingly more common), the storage market is expected to grow strongly to 2030 as energy price volatility increases. This will bring opportunities for standalone projects and projects co-located with these renewable assets.



How many energy storage projects are there in Australia? Australia is one of the world's leading markets for energy storage deployments with more than 3.5 GW energy storage projects in the first quarter, of which BESS projects exceeded 2.1 GW, accounting for nearly 60% of the total. These BESS projects are mainly scheduled to commence operation during 2025 and 2026.

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What is China's energy storage capacity in 2022? In 2022, China's cumulative installed NTESS capacity exceeded 13.1 GW, with lithium-ion batteries accounting for 94% (equivalent to 28.7% of total global capacity). China is positioning energy storage as a core technology for achieving peak CO2 emissions by 2030 and carbon neutrality by 2060.



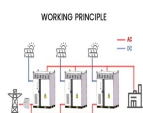
In a recent Energy-Storage.news Premium interview, Franck Bernard, the energy storage head of developer Gurin Energy said that the Japanese BESS market is ready for scale-up, with the company planning to begin building a 500MW/2,000MWh project in the country in 2026. Read more of Energy-Storage.news" coverage of Japan.



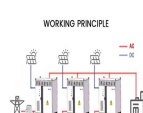
Italy preps energy storage auctions. Terna has until March 31, 2025, to submit a proposal to the ministry to amend energy market regulations to enable hydroelectric energy storage to be part of the procurement program. Tackling merchant risk ??? A deep dive into Europe grid-scale energy storage contracted revenue Current market



Concurrently, energy storage bidding has experienced an unprecedented increment in demand. Compared to 2022, the actual demand for energy storage projects has surged considerably, resulting in a substantial increase in the scale of energy storage and contributing to an exceptionally rapid market growth.



The panel discussion on Day 1 of the Energy Storage Summit EU in London last week. Image: Solar Media. Italy's grid-scale energy storage market opportunities are unlike anywhere else, but many challenges and uncertainties around the different revenue streams remain, including the upcoming MACSE capacity market auction.



More than 300 utility-scale battery storage projects are expected to come online by 2025, with Texas hosting about 50% of the new battery storage capacity. Battery storage capacity in Texas alone exceeds that of the next eight largest contributors combined. The surge in U.S. utility-scale battery

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storage is driving a grid transformation.

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114KWh ESS



TSI BMS (CE, IEC, UN38.3) 25

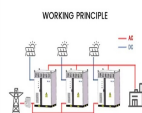
The annual auctions began in October 2021. After the first round, which was for the 2025-2026 delivery period, head of analysis at consultancy Clean Horizon Corentin Baschet told Energy-Storage.news that the award of contracts to 130MW/540MWh of BESS, all new-build, was a sign that the country's energy storage market was maturing.



From pv magazine Brazil. Brazil's Ministry of Mines and Energy has announced plans to open a public consultation for a capacity reserve auction focused solely on battery storage, set for 2025.



Italian BESS investors are now focusing on business models & MACSE bidding strategy. 2025 is set to see the start of a surge in Italian storage asset investment, led by BESS. The catalyst for this is the implementation of the new MACSE policy support mechanism, offering 15 year indexed contracts on up to 100% of asset capacity.



Over a gigawatt of bids from battery storage project developers have been successful in the first-ever competitive auctions for low-carbon energy capacity held in Japan. A total 1.67GW of projects won contracts, including 32 battery energy storage system (BESS) totalling 1.1GW and three pumped hydro energy storage (PHES) projects totalling 577MW.



The auction, which was for delivery of projects to begin operation in 2024, has been credited with kickstarting the Italian market for grid-scale energy storage s biggest winner was utility Enel, which won more than 90% of contracts up for grabs. Italy is set to become one of Europe's most active markets, as profiled in a feature article for our quarterly journal PV Tech ???

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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.



PPA prices for MW scale storage systems in the US solar+storage PPA price Xcel Standalone Storage Bid TEP AZ, Dec-19 HI KIUC, Oct-18 SRPAZ, Apr-18 HI KIUC, Sep-19 HI KIUC, Apr-17 Xcel Energy, stand-alone, COD 2023 NV Energy, COD 2021 LADWP, COD 2023 HI Electric, COD2021 HI Electric, COD2022 NV Energy, COD 2023 SVCECA, COD 2021



The results of Italy's main grid capacity market auction for 2025, published by Terna, show energy storage represented 51.1% of the 174 MW of new capacity assigned.. Thermoelectric plants made up the balance, with the new capacity secured for ???67,500 (\$72,900) per megawatt per year, for a total cost of ???11.75 million.

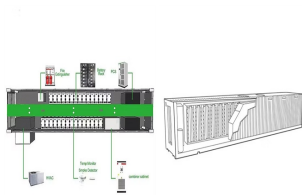
## Commercial and Industrial ESS

Air Cooling / Liquid Cooling

- Design-friendly Solution
- Renewable Energy Integration
- Modular Design for Flexible Expansion

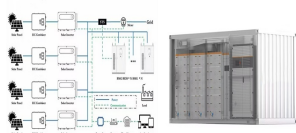


The total cost of energy-storage systems should fall 50 to 70 percent by 2025 as a result of design advances, economies of scale, and streamlined processes. additional cost reductions expected under the best-



Brazilian authorities say they plan to hold a large-scale energy storage auction in 2025, potentially creating a market for large-scale storage facilities in the country. "We have enough contracted energy," Silveira said, noting that future auctions aim to guarantee energy security for the next six to seven years.

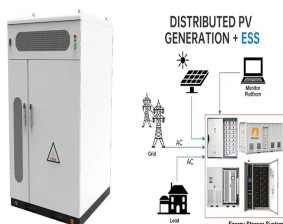
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While more than 90% of proposed battery storage additions at grid-scale in the country will be in Ontario and Alberta, according to Patrick Bateman, and both provinces are current leaders in storage adoption in Canada, at present Ontario has around 225MW of behind-the-meter large-scale commercial and industrial (C& I) batteries and around the



6 ? The National Energy Commission of Chile (CNE), through Exempt Resolution No. 581, has published a timeline for the energy auctions it plans to hold in the 2025-28 period. Overall, the CNE seeks to



MW project on Jurong Island. Image: Sembcorp. Singapore has surpassed its 2025 energy storage deployment target three years early, with the official opening of the biggest battery storage project in Southeast Asia. The opening was hosted by the 200MW/285MWh battery energy storage system (BESS) project's developer Sembcorp, ???



Following the launch of the first round of energy storage project bidding in 2023, Greece announced the winning list of the second round of energy storage project bidding in February this year, which included 11 BESS projects with a total scale of nearly 300 MW. These projects are required to be put into operation no later than December 31, 2025.



In total more than 300 utility-scale projects are expected to come online by the end of 2025. With Texas' ERCOT merchant energy storage market opportunity facilitating rapid growth, around half of all new additions will be in that state, EIA said, and a list of the five biggest projects in California and Texas planned for 2024-2025 includes



loss between charging and discharging), while still being cost-effective. Several longer-duration energy storage technologies are currently in their pilot and demonstration phase with the California Energy Commission (CEC). 2 Batteries do not generate energy, but rather store energy and

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move it from one time of day to another.

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In July 2021 China announced plans to install over 30 GW of energy storage by 2025 (excluding pumped-storage hydropower), a more than three-fold increase on its installed capacity as of 2022. The United States' Inflation Reduction Act, passed in August 2022, includes an investment tax credit for stand-alone storage, which is expected to



Accelerate your energy storage journey at the 10th anniversary Energy Storage Summit in London. 3.5 GW of this is set to come online in 2024 with pipelines continuing to expand into 2025, and the utility scale sector is set to take off in Italy with recent forecasts stating that by the end of 2030, the country will have 22 GW of capacity



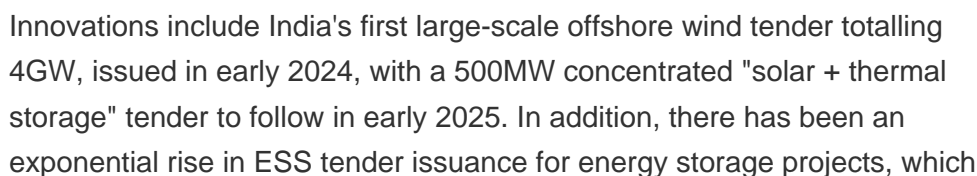
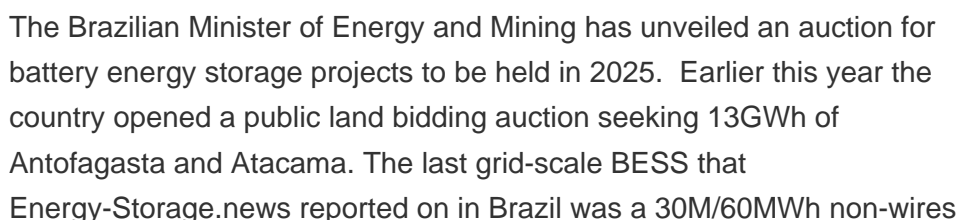
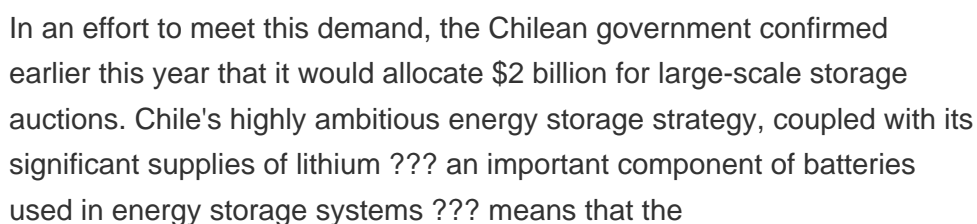
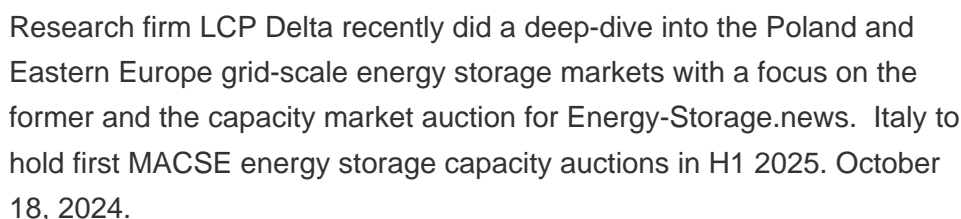
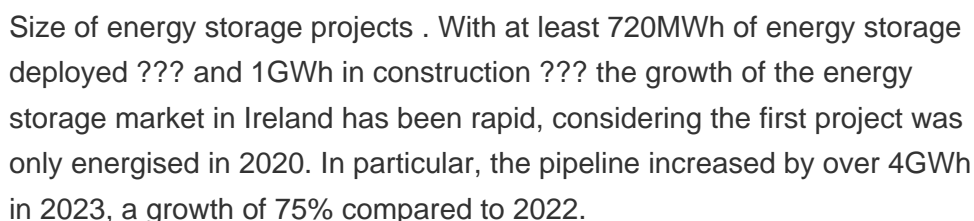
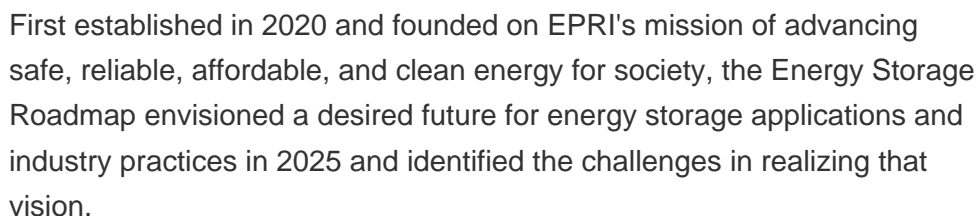
Our full stack flexibility platform encompasses real-time and at-scale renewable and gas generation power management. We provide asset control, market integration (JEPX, OCCTO, MMS) and ancillary service enablement (e.g.. Returning for its third edition in 2025, the Energy Storage Summit Asia remains the region's premier networking event



The new market rules will allow grid operator Terna to run large-scale energy storage auctions. Terna will now run a consultation with the industry on the proposed new auction system and the first auctions should take place in late 2023/early 2024, two developers interviewed for a special feature in PV Tech Power (Vol.35) (Premium access) recently told ???



The ???100 million (US\$106 million) allocation is part of a ???416 million package for PV co-located battery energy storage system (BESS) technology that was initially to total ???41.6 million a year, starting in 2025, for ten years. The 2025 programme is set to open on 1 January 2025, and more details will be released to the House later this year.



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will form a crucial part of India's