

# FIRST QUARTER ENERGY STORAGE BATTERY FIELD



How many GWh of energy-storage cells were shipped in the first quarter? The world shipped 38.82 GWh of energy-storage cells in the first quarter this year, with utility-scale and C&I projects accounting for 34.75 GWh and small-scale (including telecom projects, hereafter as small-scale) projects 4.07 GWh, according to Global Lithium-Ion Battery Supply Chain Database of InfoLink.



How long do energy storage batteries last? China's CATL, the world's largest battery producer, says its energy storage batteries can last for 25 years. Will it save the planet? Not on its own but grid-scale energy storage is part of the combination of clean energy technologies that is needed to reach net zero.



Who makes energy storage batteries? Chinese battery companies BYD, CATL and EVE Energy are the three largest producers of energy storage batteries, especially the cheaper LFP batteries. This month Rolls-Royce signed a deal with CATL to help deploy the company's batteries in the EU and the UK.



Are batteries the future of energy storage? Batteries offer one solution because they can quickly store and dispatch energy. As installations of wind turbines and solar panels increase especially in China energy storage is certain to grow rapidly. They are part of the arsenal of clean energy technologies that will enable a net zero emissions future.



Why is the battery industry growing so fast? The fast-growing battery industry is most associated with electric vehicles, but its growth is also being driven by energy storage on a wider scale. The market for this grid-scale storage is enough to power a town or city more than doubled last year.

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Who will be the winner of grid-scale battery energy storage? China is likely to be the main winner from the increased use of grid-scale battery energy storage. Chinese battery companies BYD, CATL and EVE Energy are the three largest producers of energy storage batteries, especially the cheaper LFP batteries.



First Solar officially commissioned the 300 MW Eleven Mile Solar Center in Pinal County, Arizona, which includes a 300 MW/1200 MWh battery energy storage system. The solar farm will power 65,000 homes and support Meta's planned data center in Mesa. This project marks First Solar's first in Arizona and strengthens their 5.6 GW global onshore renewables portfolio.



The batteries will be used for a variety of applications, including bulk storage to provide firm power through the evening, as well as other grid services. "A project like this is a critical energy resource to help grid operators and generators manage an ever-changing system," Bergland said. "These projects can be used to balance and support the grid in the middle of the day."



EVLO Energy Storage Inc. (EVLO), a subsidiary of Hydro-Québec, will deploy three EVLOFLEX battery energy storage systems (BESS) in Virginia, supporting the Virginia Clean Economy Act (VCEA). The projects, set for commissioning in 2025 and 2026, will help transition the state's grid to 100% clean energy by 2050.



The Emirates Water and Electricity Company (EWEC), a leading authority in coordinating water and electricity supply across the UAE, announced an open invitation for developers and developer consortiums to express their interest in developing a pioneering 400-megawatt Battery Energy Storage System (BESS) power project.

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Learn about ib vogt's sale of a significant Battery Energy Storage System (BESS) project in Finland to Renewable Power Capital, marking a milestone in Finland's renewable energy sector and contributing to grid stabilization and the transition to clean energy. Also Read Scatec Completes First Phase of Kalkbult, Linde, and Dreunberg



The project represents Central Asia's first renewable energy initiative to include an integrated BESS component. This innovative addition will enhance the efficiency and flexibility of the power system, ensuring a more secure supply and mitigating the intermittency of renewable energy generation. The financing package includes a loan of up to \$53 million from IFC and ???



According to the quarterly report, Tesla's energy storage deployment reached a record of 4,053 MWh in the first quarter of 2024. For comparison, Tesla only deployed 3,889 MWh in Q1 2023 and 3,202 MWh in Q4 2023. "We deployed 4,053 MWh of energy storage products in Q1, the highest quarterly deployment yet." Tesla indicated in the quarterly



Fluence Energy partners with Excelsior Energy Capital to deploy 2.2 GWh of battery storage projects in the U.S., boosting grid resilience. foster a domestic supply chain for critical clean tech manufacturing in the U.S. and directly support American jobs and battery storage production capacity. Anne Marie Denman, Co-Founder and Partner of



FREYR Battery Reports First Quarter 2024 Results. May 8, 2024 ("G7") major industrialized economies issued a draft statement targeting a 6.5-fold increase in energy storage capacity across the power sector from 230 GW in 2022 to 1,500 GW in 2030. Referencing recent analysis from the International Energy Agency ("IEA"), the G7

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The company's gross profit margin for power batteries in 2023 will be 14.37%, a year-on-year increase of -1.59 pct, and the gross profit margin of energy storage batteries will ???



JSW Neo Energy and Reliance Power have won the auction for the 1,000 MW/2,000 MWh Battery Energy Storage Systems (BESS) project from SECI in India. These tariffs reflect a significant 65% reduction compared to SECI's first standalone BESS tender, which was priced at ???10.83 lakh per MW per month.



Emirates Water and Electricity Company (EWEC), a prominent entity in the planning, purchasing, and supply of water and electricity in the UAE, has issued a Request for Proposals (RFP) to qualified developers and consortiums for a new 400-megawatt (MW) Battery Energy Storage System (BESS) project.



Scatec ASA has secured a 25-year power purchase agreement (PPA) in USD with the Egyptian Electricity Transmission Company (EETC) for a groundbreaking 1 GW solar and 100 MW/200 MWh battery storage hybrid project in Egypt.



GUVNL shall enter into a Battery Energy Storage Purchase Agreement (BESPA) with the successful Bidders selected based on this RfS, for providing Energy Storage facility to GUVNL as per the terms, conditions and provisions of the RfS and BESPA. NTPC Celebrates 50 Years of Powering India: Pioneers Global First in Carbon Capture Technology

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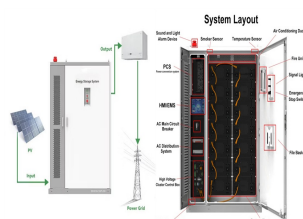
Discover Malaysia's first sodium-sulfur battery energy storage system (BESS) at a large-scale solar farm. Enhance energy security and support grid stability with advanced NaS battery technology.



Taaleri Energia has partnered with Merus Power, which is the developer of the project and is responsible for the turnkey delivery of the battery energy storage system. It is expected that construction on the project will be completed by April 2024.



Trina Storage acknowledges that the cell is a core component of the energy storage system and is committed to in-house battery cell research. Elementa 2, powered by vertically integrated TrinaCell, is a grid-scale modular storage solution that offers numerous benefits, including improved cost performance, enhanced safety, flexibility, convenience, and ???

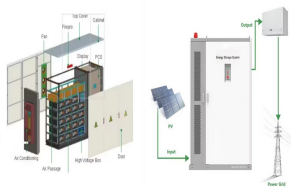


By January of 2024, Yotta was already on track to install 2 megawatt hours of its energy storage systems in just the first quarter, and is targeting the installation of 10 megawatt-hours of



Tesla set a company record by deploying 9.4 GWh of energy storage in the second quarter of 2024, more than doubling its largest previous quarterly deployment. Tesla Battery Deployment Soars in Q2 The company's first two quarters of energy storage deployment in 2024, are equal to just over 91% of the entirety of the capacity deployed

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The paper found that in both regions, the value of battery energy storage generally declines with increasing storage penetration. Also Read SECI Invites Bids for 1000 MW ISTS-Connected Solar PV Power Projects "The first gas plant knocked offline by storage may only run for a couple of hours, one or two times per year," explains Jenkins.



FREYR Battery, Inc. (NYSE: FREY) ("FREYR" or the "Company"), a developer of sustainable, next-generation battery cell production capacity, today reported financial results for the first quarter of 2024. Highlights of the First Quarter 2024 and Subsequent Events: Operations Update. Approaching first automated unit cell production trial at the Customer Qualification ???



TotalEnergies has made the final investment decision for a 100 MW / 200 MWh battery storage project in Dahlem, North Rhine-Westphalia. This marks the first project approved by TotalEnergies from the pipeline of Kyon Energy, Germany's leading battery storage system developer, which was recently acquired by TotalEnergies in February 2024.



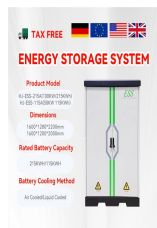
Conrad Energy have taken another step forward in support of the UK's transition to net zero. Mike Denman, Head of Construction, is pleased to confirm that 25 MW 50 MWh battery energy storage site (BESS) in Blackpool was successfully energised to Electricity North West's (ENWL) 33kV network in late January, following stringent pre-commissioning and ???



David Arfin, CEO, and co-founder of NineDot Energy expressed excitement about having Manulife Investment Management and Carlyle as equity investors and partners. Arfin highlighted the understanding of the importance of battery storage in modernizing the urban electric grid by these investors, emphasizing the benefits of making it cleaner, more resilient, ???



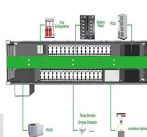
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UK grid-scale battery energy storage systems developer Field is poised to break ground at its 20-MW/40-MWh Newport battery storage project in South Wales.T. UK grid-scale battery energy storage systems developer Field is poised to break ground at its 20-MW/40-MWh Newport battery storage project in South Wales.T The battery is expected to be



In a significant move towards enhancing grid stability and integrating renewable energy, NTPC Limited has issued an invitation for bids for the development of standalone Battery Energy Storage Systems (BESS) with a capacity of 250MW/500MWh at ???



This decline is set to propel the adoption of battery energy storage systems (BESS), crucial for managing the intermittency of wind and solar power sources. ICRA projects that by FY2030, renewable energy, including large hydro, will constitute nearly 40% of India's total electricity generation, up from the current share of less than 25%. The