

# 2025 ENERGY STORAGE FIELD FORECAST



Will energy storage grow in 2022? The global energy storage deployment is expected to grow steadily in the coming decade. In 2022, the annual growth rate of pumped storage hydropower capacity grazed 10 percent, while the cumulative capacity of battery power storage is forecast to surpass 500 gigawatts by 2045.



Will Power Plants increase battery storage capacity in 2025? Developers and power plant owners plan to significantly increase utility-scale battery storage capacity in the United States over the next three years, reaching 30.0 gigawatts (GW) by the end of 2025, based on our latest Preliminary Monthly Electric Generator Inventory.



How much battery storage will the United States use in 2022? As of October 2022, 7.8 GW of utility-scale battery storage was operating in the United States; developers and power plant operators expect to be using 1.4 GW more battery capacity by the end of the year. From 2023 to 2025, they expect to add another 20.8 GW of battery storage capacity.



What will the energy sector look like in 2025? EIU's report provides in-depth analysis of the trends and disruptions that will define the energy sector in the year ahead. In 2025 falling interest rates will benefit borrowers, but erode bank profitability. Financial markets will shift as bond markets rally, equities remain stable and IPO activity picks up in Asia.



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.



Which energy storage technology is most widely used in 2022? Mechanical technologies, particularly pumped hydropower, have historically been the most widely used large-scale energy storage. In 2022, global pumped storage hydropower capacity surpassed 135 gigawatts, with

# 2025 ENERGY STORAGE FIELD FORECAST

---

China, Japan, and the United States combined accounting for almost one third of this value.

# 2025 ENERGY STORAGE FIELD FORECAST



The supply of rare earths in China has been the focus of significant attention in recent years. Due to changes in regulatory policies and the development of strategic emerging industries, it is critical to investigate the scenario of rare earth supplies in 2025. To address this question, this paper constructed a dynamic computable equilibrium (DCGE) model to forecast the production, ???



U.S. Energy Information Administration | Short-Term Energy Outlook 2  
Overview U.S. energy market indicators 2023 2024 2025 Brent crude oil spot price (dollars per barrel) \$82 \$81 \$78 Retail gasoline price (dollars per gallon) \$3.50 \$3.30 \$3.20 U.S. crude oil production (million barrels per day) 12.9 13.2 13.5 Natural gas price at Henry Hub (dollars per million British



Despite declining prices, global energy consumption is forecast to grow by just 1.6% in 2025. Developed countries will see little, if any, growth within the sector, while developing countries will spearhead demand as their economies expand. Healthcare outlook 2025. In 2025 EIU forecasts that healthcare spending will rise by nearly 6%



We expect solar electric generation will be the leading source of growth in the U.S. electric power sector. In our January Short-Term Energy Outlook (STEO), which contains new forecast data through December 2025, we forecast new capacity will boost the solar share of total generation to 5.6% in 2024 and 7.0% in 2025, up from 4.0% in 2023.. The STEO includes ???



The Energy Information Administration expects renewable deployment to grow by 17% to 42 GW in 2024 and account for almost a quarter of electricity generation. 5 The estimate falls below the low end of the National Renewable Energy Laboratory's assessment that Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA

# 2025 ENERGY STORAGE FIELD FORECAST



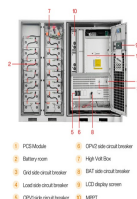
In July 2024, two new battery energy storage systems reached commercial operations in ERCOT. Each site is a 9.9 MW/9.9 MWh site in the South Load Zone. This brings the total installed rated power of batteries in ERCOT to 5,305 MW. Total installed energy capacity now sits at 7,437 MWh.. This meant the ratio of installed energy capacity to rated power ???



The Whole European Value Chain. This is an event where you are guaranteed to meet over 2000 delegates from across Europe's energy storage value chain.. With 44 countries represented in 2024, the Summit brings together investors, developers, IPPs, banks, government and policy-makers, TSOs and DSOs, EPCs, optimisers, manufacturers, data and analytics providers, ???



By Helen Kou, Energy Storage, BloombergNEF. Three years into the decade of energy storage, deployments are on track to hit 42GW/99GWh, up 34% in gigawatt hours from our previous forecast. China is solidifying its position as the largest energy storage market in the world for the rest of the decade.



Flywheel Energy Storage Systems Market Size, Share & Trends Analysis Report By Application (UPS, Distributed Energy Generation, Transport, Data Center, Others), By Region, And Segment Forecasts, 2025 - 2030 - The global flywheel energy storage systems market size is expected to reach USD 631.81 billion by 2030, registering a CAGR of 5.2% ???

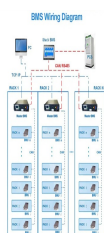


The Energy Storage Market is expected to reach USD 51.10 billion in 2024 and grow at a CAGR of 14.31% to reach USD 99.72 billion by 2029. GS Yuasa Corporation, Contemporary Amperex Technology Co. Limited, BYD Co. Ltd, UniEnergy Technologies, LLC and Clarios are the major companies operating in this market.

# 2025 ENERGY STORAGE FIELD FORECAST



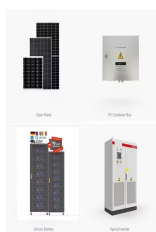
This report characterizes the brain computer interface market, technologies, and players. This includes coverage across non-invasive and invasive technologies, comparisons across key technical benchmarks, and market forecasts from 2025 to 2045. This research includes 20 company profiles including coverage of Neuralink and Blackrock Neurotech. This report ???



3 expenditures for 2023-2028 for the Grid Modernization, Grid Technology and Energy Storage BPEs. A 4 further breakdown of the O& M expenses and capital expenditures in this volume for the Grid 5 Modernization, Grid Technology and Energy Storage BPEs are shown below in Table I-1 and Table I-2. 629 E3



Developers and power plant owners plan to significantly increase utility-scale battery storage capacity in the United States over the next three years, reaching 30.0 gigawatts (GW) by the end of 2025, based on our latest Preliminary Monthly Electric Generator Inventory.. Developers and power plant owners report operating and planned capacity additions, including ???



Discover the bright future of solar energy in 2025 with predictions on adoption, costs, technology, transportation, and agrivoltaics. Leaps Forward in Solar Energy Storage Solutions and Maryland. However, despite this short-term contraction, Wood Mackenzie forecasts a robust growth of 118% in the US community solar market over the next



Demand for Li-ion battery storage will continue to increase over the coming decade to facilitate increasing renewable energy penetration and afford homeowners with greater energy independence. This IDTechEx report provides forecasts and analyses on Li-ion BESS players, project pipelines, supply and strategic agreements, residential and grid-scale markets, ???

# 2025 ENERGY STORAGE FIELD FORECAST



1 ? Energy prices appear to be at a short-term peak, so fixing now risks locking in rates that could become uncompetitive in the New Year - especially if prices fall away as expected in 2025.

114KWh ESS



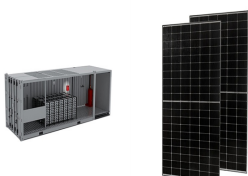
First established in 2020 and founded on EPRI's mission of advancing safe, reliable, affordable, and clean energy for society, the Energy Storage Roadmap envisioned a desired future for energy storage applications and industry practices in 2025 and identified the challenges in realizing that vision.



More ambitious policies in the US and Europe drive a 13% increase in forecast capacity versus previous estimates New York, October 12, 2022  
??? Energy storage installations around the world are projected to reach a cumulative 411 gigawatts (or 1,194 gigawatt-hours) by the end of 2030, according to the latest forecast from research company BloombergNEF (BNEF).



CEA's survey of major industry players suggests the energy storage industry is in for an explosive five-year growth period as global lithium-ion battery cell production capacity is ???



Accelerate your energy storage journey at the 10th anniversary Energy Storage Summit in London. With Europe's storage capacity booming, join 2000+ industry leaders to explore key challenges and opportunities.  
Energy Storage Summit 2025. 17 February 2025 - 19 February 2025 and the utility scale sector is set to take off in Italy with



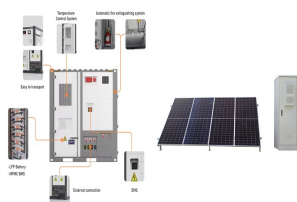
# 2025 ENERGY STORAGE FIELD FORECAST



What is the outlook for the natural gas spot price in 2024 and 2025? We expect the U.S. benchmark Henry Hub natural gas spot price to average higher in 2024 and 2025 than in 2023, but to remain lower than \$3.00 per million British thermal units (MMBtu), in our February Short-Term Energy Outlook (STEO). We forecast increases in natural gas prices as ???



Our new approach combines analysis of well-level historical production data with upcoming field developments to provide a more detailed outlook for the region. of crude oil will be produced in the GOM in 2024 and 1.9 million b/d in 2025. We expect GOM natural gas production to average 1.8 billion cubic feet a day (Bcf/d) in both 2024 and



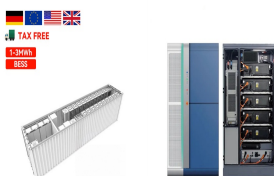
3 Practical Use Cases of CleanTech in Energy. Energy Storage Solutions: Scalable storage technologies, like advanced batteries and thermal storage systems, stabilize energy supply by storing excess power generated from renewable sources. Also, it integrates renewables into the grid to reduce dependency on fossil fuels and enhance grid resilience.



"The new capacity will boost the solar share of total generation to 6% in 2024 and 7% in 2025, up from 4% in 2023," said the agency. "We forecast that overall U.S. electricity generation



Global outlook. Key drivers. Regional focus. Supply chain. Energy storage capacity additions will have another record year in 2023 as policy and market fundamentals continue to propel the industry. Data compiled March 2023. Source: S& P Global Commodity Insights.



The forecast for 2025 is underpinned by rising residential electricity rates, which increased by 5% year-over-year as of March 2024, and by 30% over the past five years. Technological advancements in solar panel efficiency and energy storage, along with innovative financing models, are

# 2025 ENERGY STORAGE FIELD FORECAST

---

expected to lower costs and improve the return on



# 2025 ENERGY STORAGE FIELD FORECAST

---



- TELECOM CABINET
- BRAND NEW ORIGINAL
- HIGH EFFICIENCY

In our latest Short-Term Energy Outlook (STEO), we forecast that crude oil production in the United States will grow to an average of 13.7 million barrels per day (b/d) and marketed natural gas production will grow to an average of 114.3 billion cubic feet per day (Bcf/d) in 2025. Most of the forecast growth in oil and natural gas production comes from the Permian ???



9 ? The 2025 Building Energy Efficiency Standards will apply to newly constructed buildings, additions, and alterations. Workshops will be held to present revisions and obtain public comments. Proposed standards will be adopted in 2024 with an effective date of January 1, 2026. The California Energy Commission updates these standards every three years.