



How can energy storage be used in future states? Target future states collaboratively developed as visions for the beneficial use of energy storage. Click on an individual state to explore identified gaps to achievement. Energy storage is essential to a clean and modern electricity grid and is positioned to enable the ambitious goals for renewable energy and power system resilience.



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.



Will new energy storage be more expensive in 2025? The NDRC said new energy storage that uses electrochemical means is expected to see further technological advances, with its system cost to be further loweredby more than 30 percent in 2025 compared to the level at the end of 2020.



Will China expand its energy storage capacity by 2025? 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.



What is the future of energy storage? Storage enables electricity systems to remain in balance despite variations in wind and solar availability, allowing for cost-effective deep decarbonization while maintaining reliability. The Future of Energy Storage report is an essential analysis of this key component in decarbonizing our energy infrastructure and combating climate change.





When will new energy storage development be introduced? The commission said earlier it will introduce a plan for new energy storage development for 2021-25and beyond, while local energy authorities should also make plans for the scale and project layout of new energy storage systems in their regions.



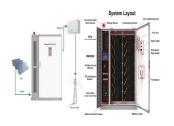
In July 2024, two new battery energy storage systems reached commercial operations in ERCOT. Each site is a 9.9 MW/9.9 MWh site in the South Load Zone. This brings the total installed rated power of batteries in ERCOT to 5,305 MW.Total installed energy capacity now sits at 7,437 MWh.. This meant the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



New York State aims to reach 1,500 MW of energy storage by 2025 and 6,000 MW by 2030. Energy storage will help achieve the aggressive Climate Leadership and Community Protection Act goal of getting 70% of New York's electricity from renewable sources by 2030. Additionally, these projects will provide meaningful benefits to Disadvantaged



NextEra Energy Resources Development LLC, a wholly owned subsidiary of NextEra Energy Inc., is focused on the Corby Energy Storage project (125 MW in Vacaville, Calif. in Solano County), which



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, ???





Rendering of a project to put a 100MW hydrogen electrolyser facility at the site of a gas power plant in Lingen, Germany. Image: RWE . The German government has opened a public consultation on new frameworks to procure energy resources, including long-duration energy storage (LDES).



6 ? Wind power, solar energy, and battery storage together make up over 95% of the new or planned projects currently seeking grid interconnection nationally, with natural gas accounting for the



6% credit + additional credit of 24% if labor standards are met\* for specific energy and storage technologies. Available for projects beginning construction before 2025. 48E. Clean Electricity ITC. 6% credit + additional 24% if labor standards are met\* for zero- or negative-emitting technologies and energy storage technologies.



The UK is a step closer to energy independence as the government launches a new scheme to help build energy storage infrastructure. 2025 and 2050, reducing household energy energy projects



Slocum BESS DTE's first large-scale Battery Energy Storage System (BESS) is a 14-megawatt, 4-hour duration Lithium-ion battery system. The pilot project, Slocum BESS, is scheduled to be completed in 2025 and will replace the five diesel engines that had served DTE customers at the Slocum station site in Trenton, Michigan for six decades.



In July 2021 China announced plans to install over 30 GW of energy storage by 2025 (excluding pumped-storage hydropower), 2022, includes an investment tax credit for stand-alone storage, which is expected to boost the competitiveness of new grid-scale storage projects.





Europe and China are leading the installation of new pumped storage capacity ??? fuelled by the motion of water. Batteries are now being built at grid-scale in countries including ???



Technicians inspect a solar power storage plant in Huzhou, Zhejiang province, in April. [Photo by Tan Yunfeng/For China Daily] 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, ???



The U.S. storage market hit a new high in Q3 2023, installing the most capacity in a quarter to date with 7,322 megawatt hours (MWh) becoming operational in the third quarter of 2023.As outlined in the American Clean Power Association (ACP) and Wood Macke (ACP) and Wood Mackenzie's latest US Energy Storage Monitor report, the U.S. grid



of storage projects. This flexibility is especially important as the electric system evolves to become more decarbonized, decentralized, and complex. Benefits to New Yorkers Deploying 1,500 MW of energy storage by 2025 will bring a host of benefits for New York, including: ??? Avoiding more than one million metric tons of CO 2



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, together with Singapore's Energy Market Authority (EMA).





The project is a large-scale solar energy initiative developed on 10,000 acres of land north of the city of London near Plumwood in Madison County. The project is expected to have a maximum generating capacity of up to 800 MW of clean electricity. It will also include a Battery Energy Storage System (BESS) of up to 300 MW.



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 ???



US Grid-Scale Energy Storage Installations Surge, Setting New Q2 Record. but capacity additions will level out as deployments increase with an average annual growth rate of 7.6% between 2025 and 2028. Across all segments, the industry is expected to deploy 12.8 GW/ 36.9 GWh in 2024. "Growth flattens in 2025 and 2026 as project



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 two projects of 600MW or more each. Energy-Storage.news'' publisher Solar Media will host the



DTE Energy is issuing a Request for Proposal (RFP) for new standalone energy storage projects totaling approximately 120 MW. Michigan, is expected to be operational in January 2025. The



WASHINGTON, D.C. ??? In support of the Biden-Harris Administration's Investing in America agenda, today the U.S. Department of Energy (DOE) announced nearly \$2 billion for 38 projects that will protect the U.S. power grid against growing threats of extreme weather, lower costs for



communities, and increase grid capacity to meet load growth ???





<image>

Concerning utility-scale energy storage, there is a pressing need for its deployment. Additionally, the crucial role played by grid-side energy storage installations, dominated by standalone and shared energy storage, is expected to be a significant driver for the growth of utility-scale storage. Projections for New Installations of ESS in 2024

RIL's aim is to build one of the world's leading New Energy and New Materials businesses that can bridge the green energy divide in India and globally. It will help achieve our commitment of Net Carbon Zero status by 2035. Energy storage; We aim to complete the first phase of the carbon fibre plant during 2025. The plant will have



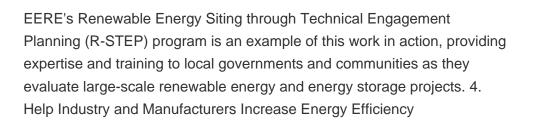




Image: Ninedot Energy. A 110MW/440MWh battery storage project in New York has been given the green light by regulators, ahead of the launch of tenders which could create a significant market opportunity in the state. The New York State Public Service Commission (PSC) gave its approval earlier this month for the battery energy storage system



Developers expect to bring more than 300 utility-scale battery storage projects on line in the United States by 2025, and around 50% of the planned capacity installations will be ???



The strong pipeline of renewable energy and energy storage projects under construction or undergoing commissioning, combined with continuing strong investment in rooftop PV systems, has Victoria well placed to achieve its 2025 target of 40% renewable electricity generation



and tracking well towards its 2030 energy storage target of at least 2.6 GW.





India Energy Storage Alliance (IESA) is a leading industry alliance focused on the development of advanced energy storage, green hydrogen, and e-mobility techno IESA to Organise International Summit on Lithium-Ion Batteries in New Delhi 27 Sep 2024 MATTER Experience Hub: Ahmedabad opening 26 Sep 2024 IESA submits recommendations from ???



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.



International Electric Power is proposing a long-duration energy storage project on the Marine Corps Base Camp Pendleton, California utilising Eos Energy Enterprises's zinc cathode battery technology. for a BESS project in ERCOT, Texas, expected to be online by summer 2025. Rolwind claims first EIA approval for standalone, 800MWh BESS in



EDF Renewables in North America has signed a 150MW solar-plus-storage 20-year power purchase agreement (PPA) with utility EI Paso Electric in New Mexico, US. The Milagro solar-plus-storage project will be located on undeveloped private land in the Santa Teresa area of Do?a Ana County and is expected to reach commercial operation in 2025.



The five largest new U.S. battery storage projects that are scheduled to be deployed in California and Texas in 2024 or 2025 are: Lunis Creek BESS SLF (Texas, 621 MW) Clear Fork Creek BESS SLF (Texas, 600 MW) Hecate Energy Ramsey Storage (Texas, 500 MW) Bellefield Solar and Energy Storage Farm (California, 500 MW)