

# NATIONAL DEVELOPMENT ENERGY STORAGE 20 MILLION



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



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 lowered by more than 30 percent in 2025 compared to the level at the end of 2020.



What is the market potential of diurnal energy storage? The market potential of diurnal energy storage is closely tied to increasing levels of solar PV penetration on the grid. Economic storage deployment is also driven primarily by the ability for storage to provide capacity value and energy time-shifting to the grid.



Can NREL's capacity expansion model accurately represent diurnal battery energy storage? For this work, researchers added new capabilities to NREL's Regional Energy Deployment System (ReEDS) capacity expansion model to accurately represent the value of diurnal battery energy storage when it is allowed to provide grid services—an inherently complex modeling challenge.



Should energy storage be cheaper? Today's energy storage technologies are not sufficiently scaled or affordable to support the broad use of renewable energy on the electrical grid. Cheaper long-duration energy storage can increase grid reliability and resilience so that clean, reliable, affordable electricity is available whenever and wherever to everyone.

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The NREL Storage Futures Study (SFS), conducted under the U.S. Department of Energy's (DOE's) Energy Storage Grand Challenge, analyzed how energy storage could be crucial to developing a resilient, low-carbon U.S. power grid through 2050. The study looked at the ways technological advancements in energy storage could impact both storage at



The Energy Storage Grand Challenge sustains American global leadership in energy storage. AMMTO announced the selection of 20 projects across six U.S. national laboratories to advance innovation and deployment of clean energy technologies critical for climate protection. U.S. Department of Energy to "Supercharge" Energy Storage



Background. The Long Duration Energy Storage (LDES) program has been allocated over \$270 million to invest in demonstration and deployment of non-lithium-ion long duration energy storage technologies across California, paving the way for opportunities to foster a diverse portfolio of energy storage technologies that will contribute to a safe and reliable ???



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 kW, and realize full market-oriented development of new energy storage by 2030, according to the National Development and



What would it take to decarbonize the electric grid by 2035? A new report by the National Renewable Energy Laboratory (NREL) examines the types of clean energy technologies and the scale and pace of deployment needed to achieve 100% clean electricity, or a net-zero power grid, in the United States by 2035. This would be a major stepping stone to economy ???

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NY-BEST Executive Director Dr. William Acker said, "NY-BEST applauds Governor Hochul and the Public Service Commission on the approval of New York State's 6 GW Energy Storage Roadmap, which establishes nation-leading programs to unlock the rapid deployment of energy storage, reinforcing New York's position as a global leader in the clean



WASHINGTON, D.C. ??? In support of the Biden-Harris Administration's Investing in America agenda, the U.S. Department of Energy (DOE) today announced nearly \$62 million for 20 projects across 15 states to accelerate the research, development, demonstration, and deployment of next-generation clean hydrogen technologies. These projects will advance ???



Department of Energy Awards \$125 Million for Research to Enable Next-Generation Batteries and Energy Storage led by Argonne National Laboratory and the Aqueous Battery Consortium (ABC) led by Stanford University. The projects provide an outstanding opportunity for workforce development in energy storage research and inclusive research



The Solar Futures Study explores solar energy's role in transitioning to a carbon-free electric grid. Produced by the U.S. Department of Energy Solar Energy Technologies Office (SETO) and the National Renewable Energy Laboratory (NREL) and released on September 8, 2021, the study finds that with aggressive cost reductions, supportive policies, and large-scale ???

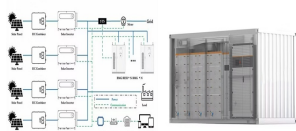


WASHINGTON, D.C. ??? In support of President Biden's Investing in America agenda, the U.S. Department of Energy (DOE) today announced \$20 million for 16 projects across 8 states to accelerate the natural subsurface generation of hydrogen. This energy resource would potentially produce no carbon emissions when burned or used in a fuel cell and will ???

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PNNL is distinguished in energy storage research and development by its capabilities to: For transportation applications, we collaborate with researchers across the country on large energy storage initiatives. We lead national programs like the Battery 500 Consortium to improve energy storage for electric vehicles. The goal is to more than



WASHINGTON, D.C. ??? In support of the Biden-Harris Administration's Investing in America agenda, the U.S. Department of Energy (DOE) today announced \$33 million for nine projects across seven states to advance concentrating solar-thermal (CST) systems technologies for solar fuel production and long-duration energy storage. CST technologies use ???



In addition, the "Energy Law of the People's Republic of China (draft for comment)" encouraged the development of smart grid and energy storage technology. The National Energy Administration's response to Recommendation No. 9178 of the Third Session of the Thirteenth National People's Congress stated that for some energy storage projects



WASHINGTON, D.C. ??? As part of the Biden-Harris Administration's Investing in America agenda, the U.S. Department of Energy (DOE) today announced over \$3 billion for 25 selected projects across 14 states to boost the domestic production of advanced batteries and battery materials nationwide. The portfolio of selected projects, once fully contracted, are ???



Akaysha gets AU\$250 million debt deal from banks. Akaysha Energy, the developer owned by global investment group Blackrock, has closed its debt deal with seven banks toward the financing of two grid-scale projects in Queensland which together will play a total 710MWh battery capacity into the National Electricity Market (NEM).

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The DOE announced yesterday that energy storage technologies offering between 10 and 24-hours storage duration will be eligible for a slice of the US\$349 million total. Up to 11 demonstration projects will be selected that have the potential to move the needle towards the Department's long-term goal of reducing the cost of LDES by 90%.



The Long-Duration Energy Storage (LDES) portfolio will validate new energy storage technologies and enhance the capabilities of customers and communities to integrate grid storage more effectively. OCED Announces \$400 Million in New Funding to Lower Energy Costs, Support Economic Development, and Enhance Energy Resiliency for America's



National Development and Reform Commission and the National Energy Development of New Energy Storage during the 14th Five -Year Plan Period, emphasizing the fundamental role of new energy storage technologies in a new power system. The Plan states that these 20. 25. 30. 35. 40. 45. 2020. 2025. 2030. 2035. 2040. 2045. 2050. Liquid fuels



energy storage system designed by Energy Dome. ??? Project will be the first-of-its-kind CO<sub>2</sub>-based energy storage system in the United States. ??? This innovative and efficient approach to long-duration energy storage will enable a more sustainable, reliable ???



This notice of funding opportunity from the U.S. Department of Energy will provide up to \$46 million to accelerate the research, development, This topic seeks proposals to develop advanced materials for use in high-pressure hydrogen storage tanks, cryogenic service conditions, and fiber reinforced polymer hydrogen pipelines.

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WASHINGTON, D.C. ??? As part of President Biden's Investing in America agenda, the U.S. Department of Energy (DOE) today announced up to \$475 million in funding for five projects in Arizona, Kentucky, Nevada, Pennsylvania, and West Virginia to accelerate clean energy deployment on current and former mine land. This funding???made possible by the ???



Falling costs, rising value of energy storage. The final text of the Energy Storage and Grids Pledge for COP29 recognises the essential role both play in the power sector's decarbonisation, including facilitating the increased integration of renewable energy and providing stable and secure supply of electricity.



The U.S. Department of Energy (DOE) today announced \$17.9 million in funding for four research and development projects to scale up American manufacturing of flow battery and long-duration storage systems. Sandia National Laboratory's Energy Storage Test Pad, Battery Test Facility, and Battery Abuse Testing Laboratory; and Oak Ridge



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, ???



China is currently in the early stage of commercializing energy storage. As of 2017, the cumulative installed capacity of energy storage in China was 28.9 GW [5], accounting for only 1.6% of the total power generating capacity (1777 GW [6]), which is still far below the goal set by the State Grid of China (i.e., 4%???5% by 2020) [7]. Among them, Pumped Hydro Energy ???



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Governor Kathy Hochul today announced over \$5 million is now available for long duration energy storage projects through New York State's Renewable Optimization and Energy Storage Innovation Program. in long duration energy storage solutions can help replace fossil fuel peaker plants while incentivizing clean energy development that will



WASHINGTON, D.C.???As part of the Biden-Harris Administration's Investing in America agenda, the U.S. Department of Energy (DOE) today announced the selection of six projects totaling \$11.6 million funded by the Inflation Reduction Act in the second round of a program that will improve planning, siting, and permitting processes for large-scale renewable ???



The U.S. Department of Energy announced \$20 million supporting efforts to validate geologic storage technologies and support the commercialization of carbon capture and storage. DOE's Office of Fossil Energy and Carbon Management (FECM) funds research, development, demonstration, and deployment projects to decarbonize power generation and



Adapted from a news release by the Department of Energy's Argonne National Laboratory.. Today the U.S. Department of Energy (DOE) announced the creation of two new Energy Innovation Hubs. One of the national hubs, the Energy Storage Research Alliance (ESRA), is led by Argonne National Laboratory and co-led by Lawrence Berkeley National ???



On March 21, the National Development and Reform Commission (NDRC) and the National Energy Administration of China issued the New Energy Storage Development Plan During China's "14th Five-Year Plan" Period. The plan specified development goals for new energy storage in China, by 2025, new