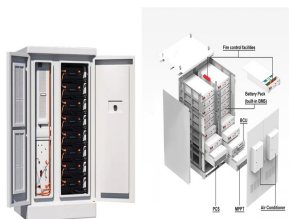
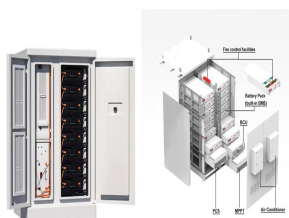


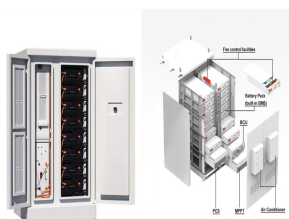
NATIONAL POLICIES FOR BATTERY ENERGY STORAGE INDUSTRY



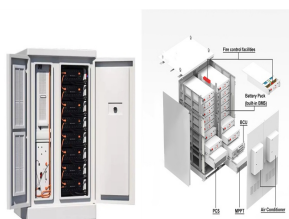
Should lithium-based batteries be a domestic supply chain? The Department of Energy's National Blueprint for Lithium Batteries recommends establishing a domestic supply chain for lithium-based batteries. This requires a national commitment to both solving breakthrough scientific challenges for new materials and developing a manufacturing base that meets the demands of the growing electric vehicle (EV) and electrical grid storage markets.



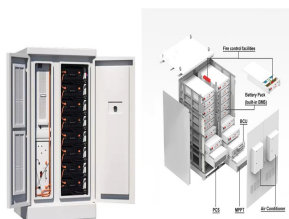
How does the United States develop battery storage systems? The United States typically encourages private-sector, market-driven approaches to industrial development, including the development of battery storage systems. While there are various federal and state policies that impact this development, they are generally not coordinated across levels of government.



How do battery storage systems improve grid resilience? Battery storage systems help balance supply and demand (see Figure 9). However, battery storage systems helped bridge the gap by providing stored energy when solar generation was unavailable, demonstrating their importance in enhancing grid resilience and ensuring uninterrupted energy supply, especially in regions heavily

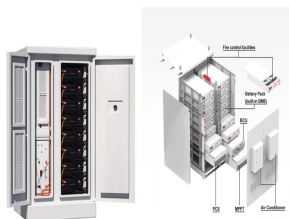


What are the most important standards for energy storage? Key standards in progress include IEEE 1547.3 for energy storage integration,¹⁴³ UL 2941 for system safety,¹⁴⁴ and SunSpec Modbus for communication protocols.¹⁴⁵ Despite their importance, standards development can be slow due to consensus

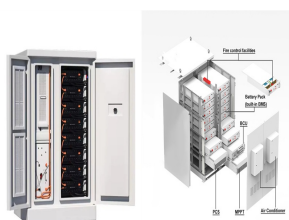


What is the goal of the National Blueprint for Lithium Batteries? This National Blueprint for Lithium Batteries, developed by the Federal Consortium for Advanced Batteries, will help guide investments to develop a domestic lithium-battery manufacturing value chain that creates equitable clean-energy manufacturing jobs in America while helping to mitigate climate change impacts.

NATIONAL POLICIES FOR BATTERY ENERGY STORAGE INDUSTRY



How does the European Union prioritize batteries? The European Union has prioritized batteries under the European Commission's industrial policy through the European Battery Alliance, which launched in 2017.



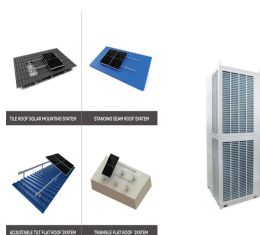
Current regulations and policies in many jurisdictions pose significant risks that constrain development of battery energy storage which threaten the global goal of tripling of renewable energy capacity by 2030.



In 2025, we will witness continued market evolution in how battery energy storage systems generate revenue, largely influenced by national policies and grid requirements. In the UK, revenues generated from BESS will ???



The Chinese government attaches great importance to the power battery industry and has formulated a series of related policies. To conduct policy characteristics analysis, we ???



The new National Battery Strategy is part of the federal government's \$22.7 billion Future Made in Australia policy which aims to establish the nation as a globally competitive producer of batteries and battery ???

NATIONAL POLICIES FOR BATTERY ENERGY STORAGE INDUSTRY



While lithium-ion batteries currently hold over 90% of the market share, the future of energy storage will be shaped by innovations that address critical factors such as raw material availability and the need for longer ???



In July 2021, the National Energy Administration and the National Development and Reform Commission issued their "Guiding Opinions on Accelerating the Development of New Energy Storage", which for the first time declared the ???



On October 11, 2017, China released its first national-level guiding-policy document covering energy storage. The document, "Guiding Opinions on Promoting Energy Storage Technology ???



The National Renewable Energy Laboratory's The bottom-up battery energy storage systems (BESS) model accounts for major components, including the LIB pack, inverter, and the balance of system (BOS) needed for the installation.



For batteries to realise their potential to contribute, policy makers need to establish effective frameworks for market access, ensure fair competition among technologies, and recognise the varied contributions that batteries ???

NATIONAL POLICIES FOR BATTERY ENERGY STORAGE INDUSTRY



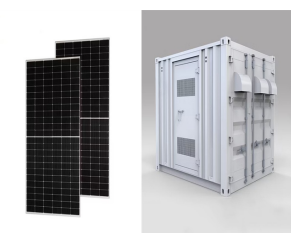
India's power generation planning studies estimate that the country will need an energy storage capacity of 73.93 gigawatt (GW) by 2031-32, with storage of 411.4 gigawatt hours (GWh), to integrate planned renewable ???



The U.S. Department of Energy's (DOE's) new Battery Policies and Incentives database, developed and managed by the National Renewable Energy Laboratory (NREL), is helping to address the batteries need. The ???



The "Implementation Plan" aims to build a leading national vanadium battery storage industry base through initiatives such as conducting application pilot demonstrations, strengthening technological self-innovation, ???



In November 2014, the State Council of China issued the Strategic Action Plan for energy development (2014???2020), confirming energy storage as one of the 9 key innovation ???



The National Battery Strategy is a key part of the government's Future Made in Australia agenda. The strategy outlines how the Australian Government will support our domestic battery industry as it grows. It sets out ???