

# NEW VALUE SPACE FOR ENERGY STORAGE INDUSTRY



How to evaluate the value-added capacity of energy storage industry? Based on the "smiling curve" theory, we evaluate the value-added capacity of energy storage industry. Using the Principal Component Analysis method, we excavate the driving factors that affect value-added capabilities. Adopting the three-stage DEA-Malmquist index methods to analyze the efficiency differences of each link of the value chain.



Are there any gaps in energy storage technologies? Even though several reviews of energy storage technologies have been published, there are still some gaps that need to be filled, including: a) the development of energy storage in China; b) role of energy storage in different application scenarios of the power system; c) analysis and discussion on the business model of energy storage in China.



Does value-added efficiency of energy storage enterprises improve after 2019? The results demonstrate that the value chain presents an arc-shaped smile, and the overall value-added capacity has improved after 2019, but the midstream link is still weak. The main driving factors of value-added efficiency of energy storage enterprises in different links are quite different.



What drives value-added efficiency of energy storage enterprises? The main driving factors of value-added efficiency of energy storage enterprises in different links are quite different. Under the new development requirements, enterprises should actively seek value-added breakthroughs.



Should energy storage enterprises seek value-added breakthroughs under new development requirements? Under the new development requirements, enterprises should actively seek value-added breakthroughs. In addition, the value-added efficiency of energy storage enterprises is more sensitive to the external environment, verifying the need to consider environmental and random factors.

1. Introduction

# NEW VALUE SPACE FOR ENERGY STORAGE INDUSTRY



What is the implementation plan for the development of new energy storage? In January 2022, the National Development and Reform Commission and the National Energy Administration jointly issued the Implementation Plan for the 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.



Based on the "smiling curve" theory, we evaluate the value-added capacity of energy storage industry. Using the Principal Component Analysis method, we excavate the ???



Long-duration energy storage (LDES) is a key resource in enabling zero-emissions electricity grids but its role within different types of grids is not well understood. Using the Switch capacity



China is currently expanding its energy storage industrial parks. Many are familiar with how industrial parks have become a key driver for development in many regions across China. The formation of large-scale ???



These challenges pose particular dilemmas for hard-to-abate sectors such as industry and transportation. And they are further complicated by changes in the macroeconomic context. But the complex new value chains needed for the ???

# NEW VALUE SPACE FOR ENERGY STORAGE INDUSTRY



Through strategic partnerships, such as its collaboration with Energy Storage Industries Asia Pacific (ESI), ESS is actively expanding its global footprint and meeting the rapidly growing ???



Building on its leadership in electric vehicles, lithium batteries and solar panels, China is now poised to unlock a new economic growth frontier in new-type energy storage. The rapid expansion of clean energy capacity in ???



Pumped storage is still the main body of energy storage, but the proportion of about 90% from 2020 to 59.4% by the end of 2023; the cumulative installed capacity of new type of energy storage, which refers to other types of ???



Uncover Deloitte's latest insights on global energy storage and how digital technologies and market innovation are helping accelerate battery storage deployment. paper???from our Center for Energy Solutions???addresses ???

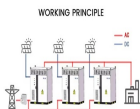


The global solar energy storage battery market size was valued at USD 5.27 billion in 2024. The market size is projected to grow from USD 6.39 billion in 2025 to USD 19.10 billion by 2032, exhibiting a CAGR of 16.94% ???

# NEW VALUE SPACE FOR ENERGY STORAGE INDUSTRY



GE is known for its involvement in various energy storage projects, particularly when it comes to grid-scale battery storage solutions. It continues to be at the forefront of developing and deploying advanced energy storage ???



Subscribe to Newsletter Energy-Storage.news meets the Long Duration Energy Storage Council Editor Andy Colthorpe speaks with Long Duration Energy Storage Council director of markets and technology Gabriel ???



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 ???



As a carrier for innovation, incubation, investment management, production services, and product trading, Energy Storage Industrial Parks not only provide a creative industrial space for energy storage, they also bring together ???



Explore our in-depth industry research on 1300+ energy storage startups & scaleups and get data-driven insights into technology-based solutions in our Energy Storage Innovation Map! The use of these PCMs also saves ???

# NEW VALUE SPACE FOR ENERGY STORAGE INDUSTRY

---



This report comes to you at the turning of the tide for energy storage: after two years of rising prices and supply chain disruptions, the energy storage industry is starting to see price ???