

# Energy Storage Systems Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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## Abstracts

### Market Overview:

The global energy storage systems market size reached 217.5 GW in 2022. Looking forward, IMARC Group expects the market to reach 372.9 GW by 2028, exhibiting a growth rate (CAGR) of 8.8% during 2023-2028. The growing demand for electricity during emergency power cuts, increasing utilization of renewable energy, and rising concerns to reduce harmful emissions worldwide represent some of the key factors driving the market.

Energy storage systems (ESS) refer to the devices that are designed to store energy, such as chemical, kinetic, gravitational potential, latent heat, radiation, and thermal, and convert them to electricity and supplying it for future use. They comprise a power conversion system (PCS) and battery management system (BMS) to handle alternating current and direct current (AC/DC), DC/AC conversion, and cell charging. They rely on various technologies, such as pumped hydro, electrochemical, electromechanical, and thermal storage. They are a vital component of electricity generation, transmission, distribution, and consumption. They are cost-effective and offer resilient energy infrastructure and assist in integrating renewable or clean energy. They serve as insurance when power outages cause disastrous losses and reduce downtime. Besides this, they can reduce the demand for electricity and improve efficiency while lowering greenhouse gas (GHG) emissions. As a result, ESS finds applications in the residential, non-residential, and utility sectors across the globe.

### Energy Storage Systems Market Trends:

At present, the rising demand for ESS to meet load during periods of peak demand

represents one of the key factors supporting the growth of the market. Besides this, the growing demand for ESS in the automotive industry due to the rapid development of electric vehicles (EVs) around the world is offering a positive market outlook. Additionally, there is a rise in the demand for electricity at the time of emergency power cuts which does not decrease the productivity of work across the globe. This, coupled with the increasing demand for sustainable and energy-efficient solutions among the masses worldwide, is propelling the growth of the market. Apart from this, the rising concern among consumers about increasing levels of greenhouse gas (GHG) emissions across the globe is offering lucrative growth opportunities to industry investors. Moreover, governing agencies of various countries are encouraging the adoption of ESS by spreading awareness about utilizing renewable energy worldwide, which is positively influencing the market. In addition to this, the rising number of grids stability ESS projects are contributing to the growth of the market. Furthermore, the increasing installation of thermal energy storage (TES) systems in buildings as advanced energy storage systems is strengthening the market growth.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global energy storage systems market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on technology, application and end user.

#### Technology Insights:

- Pumped Hydro
- Electrochemical Storage
- Electromechanical Storage
- Thermal Storage

The report has provided a detailed breakup and analysis of the energy storage systems market based on the technology. This includes pumped hydro, electrochemical storage, electromechanical storage, and thermal storage. According to the report, pumped hydro storage represented the largest segment.

#### Application Insights:

- Stationary
- Transportation

A detailed breakup and analysis of the energy storage systems market based on the application has also been provided in the report. This includes stationary and transportation. According to the report, stationary accounted for the largest market share.

#### End-User Insights:

- Residential
- Non-Residential
- Utilities

A detailed breakup and analysis of the energy storage systems market based on the end-user has also been provided in the report. This includes residential, non-residential, and utilities. According to the report, utilities accounted for the largest market share.

#### Regional Insights:

- North America
  - United States
  - Canada
- Asia-Pacific
  - China
  - Japan
  - India
  - South Korea
  - Australia
  - Indonesia
  - Others
- Europe
  - Germany
  - France
  - United Kingdom
  - Italy
  - Spain
  - Russia
  - Others
- Latin America
  - Brazil
  - Mexico

## Others

### Middle East and Africa

The report has also provided a comprehensive analysis of all the major regional markets, which include North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Latin America (Brazil, Mexico, and others); and the Middle East and Africa. According to the report, Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others) was the largest market for energy storage systems. Some of the factors driving the Asia Pacific energy storage systems market included favorable government initiatives, increasing adoption of renewable energy solutions, presence of numerous key players in the region, etc.

### Competitive Landscape:

The report has also provided a comprehensive analysis of the competitive landscape in the global energy storage systems market. Competitive analysis such as market structure, market share by key players, player positioning, top winning strategies, competitive dashboard, and company evaluation quadrant has been covered in the report. Also, detailed profiles of all major companies have been provided. Some of the companies covered include Altair Nanotechnologies Inc., Eguana Technologies, ElectroVaya Inc., Exide Industries Limited, Furukawa Electric Co. Ltd., General Electric Company, Kokam Ltd., LG Chem Ltd., Saft (TotalEnergies SE), Samsung SDI Co. Ltd., Schneider Electric SE, Showa Denko K. K., Tata Power Company Limited., etc. Kindly note that this only represents a partial list of companies, and the complete list has been provided in the report.

### Key Questions Answered in This Report

1. What was the size of the global energy storage systems market in 2022?
2. What is the expected growth rate of the global energy storage systems market during 2023-2028?
3. What has been the impact of COVID-19 on the global energy storage systems market?
4. What are the key factors driving the global energy storage systems market?
5. What is the breakup of the global energy storage systems market based on the technology?
6. What is the breakup of the global energy storage systems market based on the application?

7. What is the breakup of the global energy storage systems market based on end user?
8. What are the key regions in the global energy storage systems market?
9. Who are the key players/companies in the global energy storage systems market?

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