Battery Energy Storage System Market by Battery Type (Lithium-ion, Advanced Lead Acid, Flow, Nickel-based), Energy Capacity (Below 100 MWh, Between 100 MWh & 500 MWh, Above 500 MWh), Connection Type, Ownership and Region - Global Forecast to 2029

Market Report | 2024-07-08 | 277 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User $4950.00
- Multi User $6650.00
- Corporate License $8150.00
- Enterprise Site License $10000.00

Report description:

The global battery energy storage system market is estimated to grow from USD 7.8 billion in 2024 and is projected to reach USD 25.6 billion by 2029, at a CAGR of 26.9% during the forecast period. Battery energy storage systems improve the quality of power by ensuring improved voltage and frequency regulation with minimum interruption. Besides, these systems provide power backup during disruption, save the operational cost of powering the grid, and increase the capabilities and efficiency of the grid.

"Utility-owned BESS is expected to grow with a significant CAGR during the forecast period."

The operators of the utility owned battery energy storage systems use renewable energy sources to a greater extent to deliver a large number of units of electricity. The customers of utility-owned battery energy storage systems need to pay monthly fees based on power usage. The utility-owned energy storage companies invest in energy storage to overcome the high cost of electrical T&D by fulfilling the growing electricity demand. The battery energy storage systems help improve grid reliability, manage T&D congestion while improving T&D performance, and help avoid the purchase of additional equipment for energy storage as well as increase the lifespan of assets.

"Above 500 MWh energy capacity segment likely to gain a significant market share between 2024 and 2029."
Battery energy storage systems with a capacity above 500 MWh exhibit high service life. The battery energy storage systems with high energy capacity can support peak shaving and valley filling in the future global energy interconnection. These systems help

serve the energy demands, which can be used for peak load regulation in support of a large grid. High-energy storage systems can be used to smoothen fluctuations of large-scale clean energy generation. Large-scale battery storage systems align renewable energy production and rapidly respond to the output of wind and photovoltaic power, smoothen renewable energy generation fluctuations, and ensure real-time grid operations' safety.
"Utility application segment to gain the largest market share during the forecast period."
Public utility applications or utilities involve the electric grid, a system where the electricity generated at power plants is immediately used by the loads that are connected to it. The generation and consumption of electricity always need to match, as a mismatch can lead to voltage and frequency deviations and cause power outages or damage to equipment. In order to overcome this problem, a battery energy storage system is installed on electric grids to control the voltage and frequency deviations. The battery energy storage system is a cost-effective solution that helps substations and transmission and distribution (T&D) lines to meet the growing peak demand.

"North America is anticipated to gain a substantial market share by 2029."

The US, Canada, and Mexico are the major countries contributing to the growth of the North American battery energy storage system market. The growth of the battery energy storage system market in North America can be attributed to the increasing demand for renewable energy storage in the residential, non-residential, and utility sectors. Furthermore, the US has ample lithium deposits that can be derived in the future to produce lithium-ion batteries. These factors are expected to drive the demand for lithium-ion batteries in the manufacturing of energy storage systems in the region.

Breakdown of primaries
A variety of executives from key organizations operating in the battery energy storage system market were interviewed in-depth, including CEOs, marketing directors, and innovation and technology directors.
- By Company Type: Tier 1 = 45%, Tier 2 = 30%, and Tier 3 = 25%
- By Designation: C-level Executives = 35%, Directors = 45%, and Others (sales, marketing, and product managers, as well as members of various organizations) = 20%
- By Region: North America = 30%, Europe = 25%, Asia Pacific =35%, and RoW = 10%

Key players profiled in this report
BYD Company Ltd (China), Samsung SDI Co., Ltd. (South Korea), LG Energy Solution (South Korea), and Panasonic Corporation (Japan) are the key players in the battery energy storage system market. These leading companies possess a robust portfolio of products and establish a strong presence in established and emerging markets. The study provides a comprehensive competitive analysis of these key players in the battery energy storage system market, presenting their company profiles, recent developments, and key market strategies.

Research Coverage
This report offers detailed insights into the battery energy storage system market based on battery type (Lithium-ion, Advanced Lead-acid, Flow batteries, Other batteries), Connection Type (On-grid and Off-grid) Ownership (Customer-owned, Third-Party Owned, Utility Owned), Energy Capacity (Below 100 MWh, Between 100 to 500 MWh, Above 500 MWh), Application (Residential, Commercial, Utility) and region (North America, Europe, Asia Pacific, and RoW which includes the Middle East, Africa and South America.)
The report also comprehensively reviews the battery energy storage sysrem market drivers, restraints, opportunities, and challenges. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to buy the report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the battery energy storage system market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:
-□Analysis of key drivers (Accelerated deployment of grid energy storage systems in ongoing grid modernization projects, Adoption of lithium-ion batteries in the renewable energy sector, Renewable Energy Revolution and the Shift to a Low-Carbon Economy), restraints (High cost of installing battery energy storage systems), opportunities (Rapid adoption of battery energy storage systems in rural electrification projects worldwide, Increased demand for continuous power supply from data centers) and challenges (Difficulties pertaining to installation of battery energy storage systems in remote and isolated locations).
-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the battery energy storage system market
-□Market Development: Comprehensive information about lucrative markets - the report analyses the battery energy storage system market across varied regions
-□Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the battery energy storage system market
-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and product offerings of leading players like BYD Company Ltd (China), Samsung SDI Co., Ltd. (South Korea), LG Energy Solution (South Korea), and Panasonic Corporation (Japan) among others.

Table of Contents:

Battery Energy Storage System Market by Battery Type (Lithium-ion, Advanced Lead Acid, Flow, Nickel-based), Energy Capacity (Below 100 MWh, Between 100 MWh & 500 MWh, Above 500 MWh), Connection Type, Ownership and Region - Global Forecast to 2029

Market Report | 2024-07-08 | 277 pages | MarketsandMarkets

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	$4950.00
	Multi User	$6650.00
	Corporate License	$8150.00
	Enterprise Site License	$10000.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	

Zip Code*		Country*	
		Date	2025-05-20
		Signature	