GSL ENERGY: 3 Key Principles to Seize the Global C&I Energy Storage Opportunity



Shenzhen, Guangdong Jun 24, 2025 (Issuewire.com) - The Data shows that global new installations of industrial and commercial (C&I) energy storage reached 4.4 GW/10.9 GWh in 2024, marking a 44.6% year-on-year increase in capacity. It is projected that global new installations will reach 6.1 GW/15.26 GWh in 2025, reflecting a 40% year-on-year growth.

High demand drives rapid growth, but it also presents challenges such as safety and localized global delivery services. At this critical juncture of industry development, Shenzhen GSL ENERGY Co., Ltd. (hereinafter referred to as "GSL ENERGY") has firmly seized the global C&I energy storage opportunity by leveraging its 15 years of experience in energy storage, a comprehensive product portfolio, and global service capabilities.

C&IEnergy Storage Requires Safe and Stable Integration Technology

The integrated technology solution for C&I energy storage is a crucial component of the new energy sector, encompassing battery storage systems, energy management systems (EMS), and system integration, with battery storage technology at its core.

As a 15-year veteran in the battery storage field, GSL ENERGY founder Jim Deng led the team to develop a Battery Management System (BMS) as early as 2011, which gained market recognition.

In 2024, the global C&I energy storage market reached a scale of \$51.1 billion. Energy storage cabinets are widely used in power load management, microgrids, emergency power supplies, and energy optimization. However, limitations in energy density, charge/discharge efficiency, safety, and lifespan have hindered the large-scale application of energy storage projects.

To address these industry pain points, GSL ENERGY optimized lithium iron phosphate (LFP) batteries with ABS casings, extending battery lifespan by 10%. Later, it developed a patented intelligent BMS that supports high-current fast charging and discharging.

In 2021, GSL ENERGY obtained seven utility model patents for energy storage battery technologies, including shock absorption, heat dissipation, leak detection, and safety explosion-proofing. Unlike other integrators focused on rapid shipments, GSL ENERGY prioritizes the full lifecycle economic benefits of its energy storage cabinets for customers.

They have consistently opted for CATL, EVE, and REPT, the world's top three Grade A lithium iron phosphate battery cells for PACK integration. Additionally, they incorporate a self-developed BMS with intelligent control to optimize charging and discharging strategies, thereby reducing capacity loss and preventing thermal runaway to ensure safety.

In 2023, to expand production capacity, GSL ENERGY invested in a 15,000? energy storage battery factory in Huizhou, China.

The factory operates under a robust ISO quality management system, with dedicated sections for material storage, debugging, and temperature-controlled testing. It implements 100% full inspection for aging and communication tests, while critical processes such as cell sorting and installation follow strict SOP (Standard Operating Procedure) workflows, including cell selection testing and voltage balancing, to prevent safety incidents at the source.

In October 2024, GSL ENERGY delivered 100 sets of 50kW/100kWh small C&I energy storage systems to schools in Malaysia, earning high praise for product quality and technical service.

• DiverseProduct Portfolio to MeetFlexible Power Consumption in Various Scenarios

The surge in the C&I energy storage market is not only reflected in scale growth but also in diversified demand.

To meet the differentiated requirements of domestic and international markets for battery storage and energy storage systems, GSL ENERGY adopts a multi-category product strategy, flexibly addressing diverse power consumption needs.

GSL ENERGY LFP batteries, with capacities ranging from a few kilowatts to several megawatts, covering low-, medium-, and high-voltage for both home and industrial storage scenarios. It provides tailored energy storage solutions for different power consumption patterns.

For instance, in response to the intermittency and volatility risks in Europe's energy transition, GSL ENERGY has identified high-energy-density, easy-to-install solar-storage integrated systems as a promising growth area.

In March 2025, GSL ENERGY installed 200 sets of 80kW/172kWh liquid-cooled energy storage cabinets for a factory in Ukraine. With 8,500 battery cycles and a 90% depth of discharge (DOD), the system is projected to generate \$1.64 million in annual net revenue, with a subsidized payback period of 3.4 years and an IRR exceeding 18%.

For the Middle East's high-temperature, arid environment, GSL ENERGY focused on lower cost.

On December 30, 2024, GSL ENERGY successfully implemented a 4.6MWh liquid-cooled energy storage project in the Middle East. The system, housed in 20-foot standard containers, achieved a 45% increase in energy density compared to the previous generation. The modular design saved 20% floor space, while optimized liquid-cooling pipelines enhanced safety and simplified maintenance, even under extreme heat.

In response to power outages, rising electricity prices, and grid instability in Asia, Africa, and Latin America, GSL ENERGY launched a new 125kW/261kWh C&I energy storage product. It supports flexible parallel expansion from 261kWh to 2.61MWh, with IP65-rated PACK design for easy capacity expansion and seamless on/off-grid switching, reducing initial investment costs. The product is widely used in peak-shaving, backup power, and microgrid applications.

Global Demand Surge: Localization and Service Capabilities Are Key

As global demand for C&I energy storage grows, more manufacturers are competing in overseas markets. However, challenges such as timely delivery, technical training, and product certification persist.

In January 2025, at the invitation of a South American government, GSL ENERGY installed 1,000 sets of 70kWh C&I battery storage systems in a remote Amazon jungle within a month, transforming residents daily 2-hour power supply into 24/7 electricity, supported by on-site training and after-sales technical service.

GSL ENERGY founder, Jim Deng, believes that global delivery and localized service capabilities are critical to **capitalize** on the global energy storage boom.

Thanks to early international trade, GSL ENERGY has established a comprehensive global product certification system for its energy storage solutions, covering regions such as Europe, Latin America, Africa, and Asia. Its 232kWh and 372kWh liquid-cooled energy storage cabinets have obtained UL1973 and UL9540 certifications from Canada and the U.S., making it one of the few manufacturers meeting North America's high-performance energy storage standards.

By 2025, GSL ENERGY products have been deployed in 138 countries, with after-sales technical service centers in North America, the Middle East, Germany, and other regions.

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