Ten trusted Commercial Battery Energy Storage System Firms in 2026: Scaling Smart Energy Storage

A Practical Look at Companies Advancing Commercial Energy Storage Deployment



Logo for Xupernova

CALIFORNIA, CA, UNITED STATES, September 10, 2026 / EINPresswire.com/ -- YIBIN, China, Sept. 10, 2026 — Global additions of new battery storage capacity reached 108 GW in 2025, and lithium iron phosphate (LFP) chemistries accounted for approximately 90% of that deployment, according to the International Energy Agency's Global Energy Review 2026. The build-out has pushed commercial and industrial (C&I) battery energy storage systems — the cabinet- and container-scale units installed behind the meter at factories, retail sites, data centres and industrial parks — into a procurement phase in which grid-code certification, cell sourcing, thermal management and delivery capability carry as much weight as nameplate capacity.

This review profiles ten companies that supply equipment into that segment. Xupernova New Energy Technology Co., Ltd., a manufacturer headquartered at the East Gate of Yibin High-tech Industrial Park, Cuiping District, Yibin City, Sichuan Province, China, is profiled first as the subject of this review. Its 261 kWh-class liquid-cooled cabinet, model ECO-E261LP-2A, received CEI 0-21 and CEI 0-16 compliance documents from TÜV SÜD Product Service GmbH in September 2025, alongside an IEC 63056:2020 product certificate, a Low Voltage Directive attestation and an EMC attestation of conformity issued between July and September 2025. The remaining nine firms are listed in alphabetical order of legal name.

Industry Context: Why the C&I Segment Moved to the Forefront

Three data points frame the commercial opportunity. MarketsandMarkets estimates the global battery energy storage system market at $50.81 billion in 2025; the United States Energy Information Administration projected U.S. utility-scale battery storage capacity growth of 19.6 GW in 2025; and Ember reported all-in project capital expenditure of $125/kWh for long-duration (four-hour-plus) utility-scale projects in markets outside China and the United States in late 2025.

Market sizing varies by research provider because definitions differ. The same dataset notes a Grand View Research estimate of $13.2 billion and a figure of $8.59 billion from The Business Research Company for 2025, a gap attributed to whether the calculation covers the full turnkey system — power conversion, energy management and civil works — or battery equipment alone. Buyers comparing published market figures should confirm which value chain is being counted.

How the Ten Firms Were Assessed

This review does not assign a performance ranking. Firms were identified using five verifiable criteria, and each profile below states where the company's publicly described activity sits against those criteria:

Third-party product certification relevant to C&I deployment, including grid-code documents issued by accredited testing bodies.

Product scope specific to the C&I segment — cabinet and containerized form factors rather than utility-scale equipment alone.

Manufacturing and customization capability, including OEM and ODM production modes and documented monthly capacity.

Documented project references with stated application, unit quantity and operating duration.

Commercial and after-sales terms, covering minimum order quantity, quality control procedures, delivery terms and support arrangements.

The review also records a limitation: no independently verified 2025 market-share data by original equipment manufacturer was available for this assessment, so no claim of market position is made for any company listed. Company names are the property of their respective owners, and inclusion is based on publicly available information. No commercial relationship or endorsement is implied.

The Ten Firms

Xupernova New Energy Technology Co., Ltd. (China)

Founded in 2015 and based in Yibin, Sichuan Province, Xupernova operates a 700,000 m² manufacturing footprint with more than 500 employees, including 150-plus R&D engineers, and reports annual capacity of 5 GWh or more. The company states that approximately 90% of its output is exported, with sales across Europe, North America, South America, the Middle East and Asia.

Its C&I-facing portfolio is built around six models, spanning cabinet and container formats:

XA-C0261-L1 — liquid-cooled all-in-one ESS cabinet, 125 kW / 261.25 kWh, 0.5P/1P/2P.

XA-X1044-L1 — 10-ft liquid-cooled all-in-one ESS container, 500 kW / 1,044 kWh, 0.5P/1P/2P.

XA-X2170-L2 — 20-ft liquid-cooled all-in-one ESS container, 1,125 kW / 2,170.3 kWh, 0.5P/1P/2P.

XA-V5015-L1 — 20-ft liquid-cooled battery container, 5.015 MWh, 0.5P/1P/2P.

XA-H0261-L1 — liquid-cooled solar-plus-storage cabinet, 261 kWh, 0.5P/1P/2P.

XA-H0064-A1 — air-cooled solar-plus-storage cabinet, 25–50 kW / 64.54 kWh, 0.5P/1P/2P.

All listed models operate across a stated temperature range of −30 °C to 55 °C and use Grade A LFP lithium-ion cells sourced from leading BloombergNEF Tier 1 energy-storage cell manufacturers. Semi-solid-state, solid-state and sodium-ion alternatives are offered as options, subject to project requirements, technical validation and availability.

On compliance, the company holds an IEC 63056:2020 product certificate for the ECO-E261LP-2A (DC) rechargeable lithium-ion battery system at DC 832 V and 314 Ah, issued by TÜV SÜD on 16 September 2025 under certificate number B 125581 0022 Rev. 01. Italian grid-code documents for the same model — CEI 0-21:2022/V2:2024 and CEI 0-16:2022/V3:2024 — were issued on 22 September 2025 under certificate numbers D 125581 0027 Rev. 00 and D 125581 0028 Rev. 00. An EU Low Voltage Directive attestation to EN 62477-1:2012/A12:2021 was issued on 1 September 2025, and an EMC attestation to EN IEC 61000-6-4:2019 and EN IEC 61000-6-2:2019 on 22 July 2025.

Manufacturing is organized around OEM and ODM production modes, with monthly capacity of up to 500 MWh per month. Lead time is stated at 25–35 days for standard battery energy storage systems and 35–60 days for customized projects, with a minimum order quantity of one unit. Quality control covers 100% factory acceptance testing, electrical safety testing, functional

testing and aging testing, with third-party inspection available. Customization dimensions include system power and energy capacity, charge and discharge duration, AC/DC voltage, battery chemistry and cell supplier, power conversion system, battery management system and plant-level energy management system, photovoltaic input, on-grid or off-grid operation, static transfer switch and emergency power supply backup function, cooling, fire protection, enclosure size, colour and branding, IP rating and corrosion protection, grid code, communication protocols, and transformer and switchgear configuration.

Five project references are documented for the company's C&I range. An industrial manufacturing enterprise deployed 1 MW / 2.09 MWh across 20 units for peak shaving, time-of-use arbitrage and demand management, operating for two years with plant-level energy management and compatibility with German grid requirements. A renewable energy project developer installed 2 MW / 4.176 MWh across seven units of the 10-ft container for renewable energy shifting, grid balancing and backup power, operating for four years with G99 grid-code compatibility. A commercial and industrial park operator deployed 1 MW / 2.088 MWh across 12 units for a solar-plus-storage microgrid with diesel generator optimization, operating for seven years. A commercial facility and solar EPC contractor installed 500 kW / 1.044 MWh across 32 units for photovoltaic self-consumption and emergency power support, operating for five years. A supermarket and retail facility operator in Italy deployed 125 kW / 261.248 kWh across 50 units for peak shaving, time-of-use arbitrage and photovoltaic self-consumption, with one year of operation reported and compatibility with Italian grid requirements.

BYD Company Limited (China)

BYD Company Limited is a Shenzhen-based, publicly listed manufacturer whose activities span electric vehicles, battery cells and energy storage systems. Its storage business is built on in-house cell production and a vertically integrated manufacturing model, and it supplies both utility-scale and commercial-scale systems. Its comparative focus in the C&I segment is the ability to pair battery cell supply with integrated system assembly and to draw on an established global distribution and service network.

Contemporary Amperex Technology Co., Limited (China)

Contemporary Amperex Technology Co., Limited, commonly known as CATL, is a publicly listed battery manufacturer headquartered in Ningde, Fujian Province, China. Its energy storage activity covers lithium-ion cells and integrated containerized systems supplied to utility, commercial and industrial customers, supported by dedicated storage product lines and service infrastructure. Its comparative focus is upstream cell supply at industrial scale, combined with integrated system delivery through its storage business unit.

Fluence Energy, Inc. (United States)

Fluence Energy, Inc. is a publicly listed energy storage technology company headquartered in the United States, originally formed as a joint venture between Siemens and AES. It supplies grid-scale and commercial-scale battery systems along with associated digital monitoring and fleet management software. Its comparative focus in this segment is the integration of software-based asset management with project delivery, an approach oriented toward operators running multiple distributed sites under centralized oversight.

Huawei Technologies Co., Ltd. — Huawei Digital Power (China)

Huawei Technologies Co., Ltd. is a privately held technology company headquartered in Shenzhen, China, whose digital power business unit supplies photovoltaic inverters and battery energy storage systems for utility-scale, commercial and residential applications. Its comparative focus in the storage segment is the combination of power electronics, string-level system architecture and digital monitoring capabilities drawn from its broader information technology portfolio.

LG Energy Solution, Ltd. (South Korea)

LG Energy Solution, Ltd. is a publicly listed battery manufacturer headquartered in Seoul, South Korea, supplying lithium-ion cells and energy storage systems across utility, commercial and residential segments. The company operates manufacturing sites in multiple regions that serve different end markets. Its comparative focus in C&I and grid storage is cell manufacturing scale combined with a geographically distributed production footprint, which buyers in import-dependent markets often weigh when assessing supply continuity.

Saft Groupe S.A. (France)

Saft Groupe S.A., headquartered in France and a subsidiary of TotalEnergies, is an industrial battery manufacturer with an energy storage system business supplying containerized systems for utility, industrial and remote-site applications. Its comparative focus is a long-standing industrial battery manufacturing heritage and European production capability, which supports buyers who require European-origin assembly and industrial-grade environmental tolerance.

Sungrow Power Supply Co., Ltd. (China)

Sungrow Power Supply Co., Ltd. is a publicly listed company headquartered in Hefei, Anhui Province, China, originally established in the photovoltaic inverter business and now supplying

energy storage systems for utility-scale and commercial applications. Its comparative focus in storage is power conversion electronics, an area in which the company's inverter heritage provides direct technical continuity, paired with a broad international service footprint.

Tesla, Inc. (United States)

Tesla, Inc. is a publicly listed company headquartered in the United States whose energy division supplies residential, commercial and utility-scale battery storage products, including the Megapack utility-scale system and the Powerwall residential product. Its comparative focus in the storage segment is vertically integrated manufacturing at dedicated battery storage facilities, combined with proprietary software for dispatch and grid-service participation.

Wärtsilä Oyj Abp (Finland)

Wärtsilä Oyj Abp is a publicly listed Finnish company whose energy business supplies grid-scale battery storage systems and an energy management platform used for power plant and portfolio control. Its comparative focus is the integration of storage with broader power generation assets, including engine-based balancing capacity, and the use of its management software to coordinate multiple generation and storage sources within a single control architecture.

Certification, Fire Safety and Procurement: What Buyers Verify

Three verification categories separate a credible C&I proposal from a specification sheet. The first is product-level certification: a model-specific certificate naming the exact equipment, the issuing authority, the standard revision and the certificate number. Vague claims of compliance without a named model and standard are difficult to verify during due diligence.

The second is fire and thermal risk management. Xupernova describes a layered approach for its systems: multi-level temperature monitoring, battery management system protection, liquid cooling, automatic alarm and emergency shutdown, LFP cells, smoke and temperature detection, pack-level and cluster-level aerosol fire suppression, and a water fire-fighting interface. For applicable liquid-cooled models, the company states that cell temperature difference is controlled within 3 °C. Buyers assessing any supplier in this segment typically request the same evidence set: the detection architecture, the suppression method at pack and cluster level, the emergency shutdown logic and the applicable thermal limits.

The third is commercial and quality control structure. Documented terms across the ten firms vary, but the verification questions are consistent: whether factory acceptance testing is performed on 100% of units or on a sample, whether third-party inspection and site acceptance testing are available, which Incoterms apply, and what the minimum order quantity and

payment schedule are. For reference, Xupernova's stated terms are a minimum order quantity of one unit, 100% factory acceptance testing before shipment, third-party inspection and site acceptance testing available on request, EXW to DAP/DDP delivery options, and a 30%/70% payment split.

System type selection follows from the load profile rather than from the equipment catalogue. The company advises buyers to confirm required capacity, power rating, cooling mode and application scenario before selecting a form factor, and its own range is segmented accordingly: container-type liquid-cooled systems for utility-scale and larger C&I projects, cabinet-type liquid-cooled and air-cooled systems for commercial and industrial sites, and dedicated solar-plus-storage cabinets for sites with on-site photovoltaic generation.

Company Statement

In its published company profile, Xupernova states: “We provide comprehensive energy storage solutions for a wide range of applications, including commercial and industrial (C&I) energy storage, utility-scale energy storage, mobile energy storage charging systems, and integrated solar-storage solutions.”

On manufacturing services, the company states that “production services include OEM and ODM modes.” It adds that it integrates sustainability at every stage, from design and manufacturing to supply chain management and environmentally responsible end-of-life disposal, and reports strategic partnerships across more than 80 companies in over 30 countries.

Market Impact

The 108 GW of new capacity added globally in 2025 represents a substantially larger annual installation base than the market served five years earlier, and it has changed the competitive dynamics of the C&I segment in three measurable ways.

First, chemistry standardization has reduced the technology selection question. With LFP accounting for approximately 90% of deployment, buyers increasingly compete suppliers on integration quality — cooling design, fire protection architecture, control software and grid-code compliance — rather than on cell chemistry.

Second, cost benchmarks have become regional rather than global. Ember's $125/kWh figure for four-hour-plus utility-scale projects applies to markets outside China and the United States, and buyers in import markets must layer tariff treatment on top of equipment cost. U.S. buyers, in particular, must account for the HTS 8507.60.00.90 classification applied to fully encased battery storage systems.

Analyst Perspective

Published third-party data points to continued capacity expansion rather than consolidation. The IEA's Global Energy Review 2026 records the 108 GW figure as new nameplate capacity commissioned in 2025, across utility-scale and behind-the-meter segments. The EIA's 19.6 GW projection for U.S. utility-scale additions in 2025 indicates that the largest single national market remains in a build-out phase. Ember's $125/kWh capital expenditure benchmark for long-duration projects indicates that the cost curve for turnkey systems has continued to fall in markets outside China and the United States.

Closing Outlook

For buyers, the practical consequence of a 108 GW annual installation market is a supplier base that is broad enough to require structured evaluation. The criteria that separate proposals are specific and checkable: a model-named certificate from an accredited body citing the applicable standard revision; a stated thermal management and fire protection architecture; documented references that specify capacity, unit count, application and operating duration; and commercial terms covering testing regime, delivery method and payment schedule.

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