

Industrial Battery - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 125 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

Industrial Battery Market Analysis

The Industrial Battery Market size is estimated at USD 36.07 billion in 2025, and is expected to reach USD 80.37 billion by 2030, at a CAGR of 17.38% during the forecast period (2025-2030).

Falling lithium-ion prices, expanding grid-scale storage projects, and the march toward warehouse automation position batteries as indispensable infrastructure for energy transition agendas. Heightened policy support in the United States and Europe spurs fresh manufacturing capacity, while Asia-Pacific leverages integrated supply chains to keep cost leadership. Consolidation is gathering speed as leading cell makers move upstream into raw materials and downstream into systems integration to secure margins, offset mineral price volatility, and comply with tightening safety standards. At the same time, second-life leasing models, micro-grid deployments, and the rise of sodium-ion alternatives are widening the addressable pool of applications and anchoring long-term demand for the industrial battery market.

Global Industrial Battery Market Trends and Insights

Declining Lithium-Ion Battery Cost Curve

Average lithium-ion pack prices fell 89% between 2010 and 2024 to USD 139 /kWh and are trending toward the USD 100 /kWh tipping point that unlocks mass industrial adoption. Global nameplate capacity rose from 95 GWh in 2020 to more than 1,200 GWh

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

in 2024, driving scale economies and higher factory utilization in China. LG Energy Solution's Arizona complex will add 43 GWh of annual output from 2025, targeting production costs 25% below prevailing North American averages. Lower prices widen the installed base, enabling battery-as-a-service models that shift capex to opex and reduce customer adoption risk. The virtuous loop of falling prices and rising volumes is expected to solidify lithium-ion's leadership within the industrial battery market while paving the way for high-volume sodium-ion and solid-state introductions later in the decade.

Renewable-Powered ESS Build-Outs

Global grid-scale battery additions reached 15 GW in 2024, as utilities integrate storage to stabilize networks with renewable penetration above 30%. California alone fast-tracked 4.6 GWh worth of projects, while Queensland commissioned multiple 300-500 MWh systems to back its 50% renewables target. Beyond the utility domain, industrial micro-grids pair rooftop solar with on-site batteries to shave demand charges and guarantee power continuity. Cost declines, modular architectures, and streamlined procurement frameworks make batteries the least-cost solution for frequency control and capacity reserves, yielding a structural tailwind for the industrial battery market.

Critical-Mineral Price Volatility

Lithium carbonate prices spiked 1,000% from 2020-2022 before sliding 80% in 2024, disrupting procurement strategies and margin planning. Cobalt and nickel exhibit similar gyrations driven by geopolitical tensions and export restrictions in the Democratic Republic of Congo and Indonesia. Minerals account for up to 50% of lithium-ion system cost; volatility, therefore, translates into wide swings in projected total cost of ownership. Manufacturers hedge through multi-year offtake agreements, diversified feedstock, and recycling programs, but smaller players face balance-sheet pressure. Prospectors of sodium-ion and iron-based chemistries position their technologies as buffers against price shocks, creating a countervailing trend that tempers volatility risk for the industrial battery market.

Other drivers and restraints analyzed in the detailed report include:

Warehouse Automation & AGVs Surge / DC Micro-Grids in Data Centres / Lead-Acid Pollution Regulations /

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Lithium-ion captured 51% of the industrial battery market share in 2024, underpinned by an 89% decade-long cost plunge and superior round-trip efficiency. The segment is projected to expand at an 18% CAGR to 2030 as LFP formulations deliver 95% capacity retention after 6,000 cycles, pushing the lifetime cost of ownership below USD 0.08 per kWh delivered. Sodium-ion enters commercial scale via CATL's 2024 launch, offering 30% lower material costs and competitive performance for stationary storage. Flow batteries hold a foothold in applications requiring more than eight-hour discharge; a 100 MW/400 MWh vanadium redox plant in China illustrates bankable 20-year lifespans. Nickel-cadmium and nickel-metal hydride supply harsh-environment niches where -40 C to 70 C operation is essential, notably in remote oilfields. Solid-state prototypes promising 50% higher energy density line up for pilot production after 2027, with global automakers backing production qualification lines jointly.

The industrial battery market size for lithium-ion systems is forecast to climb from USD 18.4 billion in 2025 to USD 47.6 billion by 2030. Continuous scale-up dampens capital intensity per GWh, encourages vertical integration, and widens the performance gap with legacy chemistries. Simultaneously, innovation on high-manganese cathodes, silicon anodes, and high-voltage electrolytes intends to further trim unit costs and sharpen lithium-ion's value proposition. Suppliers invest in Gigafactory-adjacent recycling hubs to harvest cobalt, nickel, and lithium, underpinning circular-economy credentials required under new EU stewardship rules.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

The combined effect cements lithium-ion's leadership while allowing complementary chemistries to secure clearly defined roles, ensuring technology diversity within the industrial battery market.

The Industrial Battery Market Report is Segmented by Technology (Lithium-Ion, Lead-Acid, Nickel-Based, and Others), Application (Forklift and Motive Power, Telecom Backup, UPS/Data Centres, Grid-Scale ESS, and Others), End-User Industry (Power and Utilities, Oil and Gas, Manufacturing and Warehousing, Telecom, and Others), and Geography (North America, Europe, Asia-Pacific, South America, and Middle East and Africa).

Geography Analysis

Asia-Pacific retained a 50% revenue share in 2024, driven by cost-efficient giga-scale factories, government incentives, and vertically integrated supply chains. China accounts for two-thirds of regional capacity, with single plants exceeding 40 GWh annually. Japan's material science prowess and South Korea's premium cell expertise reveal a robust ecosystem that keeps regional prices 15-20% below Western benchmarks. Asia-Pacific's industrial battery market size is set to climb at a 19.45% CAGR, fueled by domestic renewables targets, export-oriented manufacturing, and accelerating electric-vehicle infrastructure that shares common supply chains with stationary storage.

North America is one of the fastest-growing developed regions, through 2030, due to the Inflation Reduction Act incentives, defense-oriented supply-chain reshoring, and abundant renewable resources. Between 2022-2025, announced investments exceed USD 100 billion, led by LG Energy Solution's USD 5.5 billion Arizona plant and Tesla's USD 200 million megafactory in Texas. Federal loan guarantees and production tax credits lower capital hurdles, while state-level fast-track permits compress project timelines.

Europe pursues strategic autonomy via the Green Deal Industrial Plan and European Battery Alliance, yet high energy costs and permitting complexity slow build-out. Germany, Sweden, and Hungary host most projects; Norway and Finland leverage low-carbon power to attract anode and cathode processing. The Middle East and Africa represent nascent but promising markets as off-grid solar plus storage displaces diesel generators; South Africa's REIPPP programme and the UAE's smart-city ambitions drive early adoption. Latin America's lithium triangle stimulates downstream investment discussions, positioning the region as a resource hub and a future manufacturing base for the industrial battery market.

List of Companies Covered in this Report:

EnerSys / East Penn Manufacturing / Exide Industries / GS Yuasa Corp. / Saft Groupe SA / Amara Raja Batteries / Panasonic Energy / CATL / BYD Co. Ltd. / LG Energy Solution / Samsung SDI / Johnson Controls / Leoch Int'l / JYC Battery / Narada Power / Crown Battery / Hoppecke Batteries / NorthStar Battery / Trojan Battery / Vision Group /

Additional Benefits:

 The market estimate (ME) sheet in Excel format /
3 months of analyst support /

Table of Contents:

- 1 Introduction
 - 1.1 Study Assumptions & Market Definition
 - 1.2 Scope of the Study
- 2 Research Methodology

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

3 Executive Summary

4 Market Landscape

4.1 Market Overview

4.2 Market Drivers

4.2.1 Declining lithium-ion battery cost curve

4.2.2 Renewable-powered ESS build-outs

4.2.3 Warehouse automation & AGVs surge

4.2.4 DC micro-grids in data centres

4.2.5 Telecom tower storage mandates

4.2.6 OEM-driven 2nd-life leasing models

4.3 Market Restraints

4.3.1 Critical-mineral price volatility

4.3.2 Lead-acid pollution regulations

4.3.3 Solid-state tech "wait-and-see" effect

4.3.4 Rising BESS fire-risk insurance costs

4.4 Battery/Raw-Material Price Trends & Forecast

4.5 Import and Export Analysis

4.6 Supply-Chain Analysis

4.7 Regulatory Landscape

4.8 Technological Outlook

4.9 Porter's Five Forces

4.9.1 Bargaining Power of Suppliers

4.9.2 Bargaining Power of Buyers

4.9.3 Threat of New Entrants

4.9.4 Threat of Substitutes

4.9.5 Competitive Rivalry

5 Market Size & Growth Forecasts

5.1 By Technology

5.1.1 Lithium-ion

5.1.2 Lead-acid

5.1.3 Nickel-based

5.1.4 Others (incl. Flow Battery, Sodium-ion)

5.2 By Application

5.2.1 Forklift and Motive Power

5.2.2 Telecom Backup

5.2.3 UPS/Data Centres

5.2.4 Grid-Scale ESS

5.2.5 Others (incl Automated Guided Vehicles, Rail and Marine)

5.3 By End-User Industry

5.3.1 Power and Utilities

5.3.2 Oil and Gas

5.3.3 Manufacturing and Warehousing

5.3.4 Telecom

5.3.5 Others (incl Transportation and Logistics)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.4 By Geography
 - 5.4.1 North America
 - 5.4.1.1 United States
 - 5.4.1.2 Canada
 - 5.4.1.3 Mexico
 - 5.4.2 Europe
 - 5.4.2.1 Germany
 - 5.4.2.2 France
 - 5.4.2.3 United Kingdom
 - 5.4.2.4 Italy
 - 5.4.2.5 Spain
 - 5.4.2.6 Nordic Countries
 - 5.4.2.7 Russia
 - 5.4.2.8 Rest of Europe
 - 5.4.3 Asia-Pacific
 - 5.4.3.1 China
 - 5.4.3.2 Japan
 - 5.4.3.3 India
 - 5.4.3.4 South Korea
 - 5.4.3.5 ASEAN Countries
 - 5.4.3.6 Rest of Asia-Pacific
 - 5.4.4 South America
 - 5.4.4.1 Brazil
 - 5.4.4.2 Argentina
 - 5.4.4.3 Rest of South America
 - 5.4.5 Middle East and Africa
 - 5.4.5.1 United Arab Emirates
 - 5.4.5.2 Saudi Arabia
 - 5.4.5.3 South Africa
 - 5.4.5.4 Rest of Middle East and Africa

6 Competitive Landscape

- 6.1 Market Concentration
- 6.2 Strategic Moves (M&A, Partnerships, PPAs)
- 6.3 Market Share Analysis (Market Rank/Share for key companies)
- 6.4 Company Profiles (includes Global level Overview, Market level overview, Core Segments, Financials as available, Strategic Information, Products & Services, and Recent Developments)
 - 6.4.1 EnerSys
 - 6.4.2 East Penn Manufacturing
 - 6.4.3 Exide Industries
 - 6.4.4 GS Yuasa Corp.
 - 6.4.5 Saft Groupe SA
 - 6.4.6 Amara Raja Batteries
 - 6.4.7 Panasonic Energy
 - 6.4.8 CATL
 - 6.4.9 BYD Co. Ltd.
 - 6.4.10 LG Energy Solution

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.4.11 Samsung SDI
- 6.4.12 Johnson Controls
- 6.4.13 Leoch Int'l
- 6.4.14 JYC Battery
- 6.4.15 Narada Power
- 6.4.16 Crown Battery
- 6.4.17 Hoppecke Batteries
- 6.4.18 NorthStar Battery
- 6.4.19 Trojan Battery
- 6.4.20 Vision Group

7 Market Opportunities & Future Outlook

7.1 White-space & Unmet-Need Assessment

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Industrial Battery - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 125 pages | Mordor Intelligence

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 License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		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*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-26"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

