

United States Battery Market Forecast 2025-2032

Market Report | 2025-11-17 | 184 pages | Inkwood Research

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Report description:

KEY FINDINGS

The United States battery market size is valued at \$34.15 billion as of 2025 and is expected to reach \$95.88 billion by 2032, progressing with a CAGR of 15.89% during the forecast period, 2025-2032.

The United States battery market is experiencing unprecedented expansion, propelled by transformative federal legislation and accelerating electric vehicle adoption nationwide. The Inflation Reduction Act provides major tax credits and incentives for domestic battery production, fundamentally reshaping manufacturing economics and supply chain strategies. According to the U.S. Department of Energy, over \$73 billion in battery manufacturing investments have been announced since the IRA's passage in August 2022.

MARKET INSIGHTS

Increasing investments in EV infrastructure and charging networks are boosting battery consumption across automotive segments. The government's focus on energy security and supply chain resilience is stimulating local manufacturing, reducing historical dependence on Asian suppliers. Moreover, growing adoption of solar and wind power drives demand for large-scale energy storage systems capable of grid stabilization and renewable integration.

The country hosts a rapidly expanding number of gigafactories supported by public-private partnerships, with facilities under construction across multiple states. Grid modernization initiatives at the federal and state levels are accelerating energy storage deployments, while the strong presence of OEMs like Tesla, General Motors, and Ford intensifies domestic battery demand through ambitious electrification roadmaps extending through 2032.

SEGMENTATION ANALYSIS

The United States battery market by material is segmented into lead acid, lithium-ion, nickel-based, sodium-ion, flow battery, small sealed lead-acid batteries, and other materials. The lead acid segment is further categorized into SLI, stationary, and motive.

Small sealed lead-acid batteries maintain a significant market presence across diverse applications requiring reliable, maintenance-free power solutions at competitive price points. These valve-regulated lead-acid (VRLA) batteries serve uninterruptible power supplies, emergency lighting systems, security equipment, and medical devices throughout commercial and residential sectors. Telecommunications infrastructure relies heavily on sealed lead-acid batteries for backup power, ensuring network connectivity during grid outages and natural disasters.

According to the Federal Communications Commission, telecom operators must maintain backup power capabilities to support

emergency communications during crises. Medical facilities deploy sealed lead-acid batteries in critical equipment, including ventilators, infusion pumps, and patient monitoring systems, where power continuity directly impacts patient safety. Home security systems, fire alarms, and emergency exit lighting universally incorporate sealed lead-acid batteries due to proven reliability and straightforward replacement procedures.

Manufacturing processes for sealed lead-acid batteries benefit from decades of optimization, delivering consistent quality at scale with established supply chains across the United States. Companies produce millions of units annually in standardized sizes, enabling broad compatibility across equipment manufacturers and aftermarket applications. However, lithium-ion alternatives are gradually penetrating this segment, offering superior energy density, longer cycle life, and reduced weight for weight-sensitive applications.

Recycling infrastructure for lead-acid batteries represents the most mature closed-loop system in the battery industry, with over 99% of lead recovered and reused according to industry data. Regulatory frameworks ensure proper disposal and recycling, minimizing environmental impact while maintaining material availability for continued production. Consequently, sealed lead-acid batteries persist as essential components across numerous industrial, commercial, and consumer applications despite lithium-ion technology advancement.

COMPETITIVE INSIGHTS

Some of the top players operating in the United States battery market include A123 Systems LLC, Crown Battery Manufacturing Company, East Penn Manufacturing Co, EnerSys, etc.

EnerSys operates as a global leader in stored energy solutions, serving industrial applications, motive power, and energy systems across diverse market segments. Headquartered in Reading, Pennsylvania, EnerSys employs approximately 11,000 people worldwide with manufacturing facilities spanning North America, Europe, and Asia. The company specializes in lead-acid batteries, lithium-ion systems, and battery chargers for material handling equipment, telecommunications infrastructure, and uninterruptible power supply applications.

EnerSys products power forklifts, aerial work platforms, and automated guided vehicles in warehouses and manufacturing facilities throughout the United States. Additionally, the company provides comprehensive energy storage solutions for data centers, telecommunications networks, and utility infrastructure requiring reliable backup power. EnerSys maintains strong market positions in motive power applications, supplying batteries to major industrial equipment manufacturers and fleet operators. Strategic acquisitions have expanded the company's lithium-ion capabilities, with investments in advanced battery technologies addressing evolving customer requirements.

Manufacturing operations in Missouri, Pennsylvania, and Kansas produce millions of batteries annually, serving both original equipment manufacturers and aftermarket channels. Moreover, EnerSys operates extensive service networks providing maintenance, installation, and fleet management support to industrial customers nationwide. The company's focus on total cost of ownership, energy efficiency, and sustainable operations aligns with customer priorities in industrial battery applications across manufacturing, logistics, and telecommunications sectors.

Table of Contents:

- 1. RESEARCH SCOPE & METHODOLOGY
 - 1.1. STUDY OBJECTIVES
 - 1.2. METHODOLOGY
 - 1.3. ASSUMPTIONS & LIMITATIONS
- 2. EXECUTIVE SUMMARY
 - 2.1. MARKET SIZE & FORECAST
 - 2.2. MARKET OVERVIEW
 - 2.3. SCOPE OF STUDY
 - 2.4. CRISIS SCENARIO ANALYSIS
 - 2.5. MAJOR MARKET FINDINGS
 - 2.5.1. MAJOR MARKET FINDINGS
 - 2.5.2. THE UNITED STATES BATTERY MARKET IS EXPANDING RAPIDLY DUE TO EV ADOPTION AND FEDERAL INCENTIVES

- 2.5.3. THE COUNTRY HOSTS A GROWING NUMBER OF GIGAFACTORIES SUPPORTED BY PUBLIC-PRIVATE PARTNERSHIPS
- 2.5.4. GRID MODERNIZATION INITIATIVES ARE DRIVING ENERGY STORAGE DEPLOYMENTS ACROSS STATES
- 2.5.5. STRONG PRESENCE OF OEMS LIKE TESLA, GM, AND FORD IS ACCELERATING DOMESTIC BATTERY DEMAND
- 3. □ MARKET DYNAMICS
 - 3.1. KEY DRIVERS
 - 3.1.1. THE INFLATION REDUCTION ACT IS PROVIDING MAJOR TAX CREDITS AND INCENTIVES FOR DOMESTIC BATTERY PRODUCTION
 - 3.1.2. INCREASING INVESTMENTS IN EV INFRASTRUCTURE AND CHARGING NETWORKS ARE BOOSTING BATTERY CONSUMPTION
 - 3.1.3. GOVERNMENT FOCUS ON ENERGY SECURITY AND SUPPLY CHAIN RESILIENCE IS STIMULATING LOCAL MANUFACTURING
 - 3.1.4. GROWING ADOPTION OF SOLAR AND WIND POWER IS DRIVING DEMAND FOR LARGE-SCALE ENERGY STORAGE SYSTEMS
 - 3.2. KEY RESTRAINTS
 - 3.2.1. SUPPLY CHAIN BOTTLENECKS FOR LITHIUM AND NICKEL IMPACT PRODUCTION COSTS
 - 3.2.2. STRONG DEPENDENCE ON ASIAN CELL SUPPLIERS CREATES MARKET VULNERABILITIES
 - 3.2.3. INCONSISTENT STATE-LEVEL REGULATIONS DELAY UNIFORM DEPLOYMENT OF STORAGE PROJECTS
 - 3.2.4. HIGH INITIAL CAPITAL REQUIREMENTS LIMIT THE ENTRY OF SMALL MANUFACTURERS
- 4. □ KEY ANALYTICS
 - 4.1. KEY MARKET TRENDS
 - 4.1.1. INCREASING SHIFT TOWARD LFP AND SOLID-STATE TECHNOLOGIES TO REDUCE DEPENDENCE ON CRITICAL MINERALS
 - 4.1.2. RAPID EXPANSION OF BATTERY RECYCLING AND SECOND-LIFE PROGRAMS TO ENSURE RESOURCE CIRCULARITY
 - 4.1.3. STRATEGIC ALLIANCES BETWEEN AUTOMAKERS AND MINING COMPANIES TO SECURE RAW MATERIAL SUPPLIES
 - 4.1.4. EMERGENCE OF NEXT-GENERATION BATTERY STARTUPS FOCUSED ON SAFETY, ENERGY DENSITY, AND FAST CHARGING
 - 4.2. PORTER'S FIVE FORCES ANALYSIS
 - 4.2.1. BUYERS POWER
 - 4.2.2. SUPPLIERS POWER
 - 4.2.3. SUBSTITUTION
 - 4.2.4. NEW ENTRANTS
 - 4.2.5. INDUSTRY RIVALRY
 - 4.3. GROWTH PROSPECT MAPPING
 - 4.3.1. GROWTH PROSPECT MAPPING FOR UNITED STATES
 - 4.4. MARKET MATURITY ANALYSIS
 - 4.5. MARKET CONCENTRATION ANALYSIS
 - 4.6. VALUE CHAIN ANALYSIS
 - 4.6.1. RAW MATERIALS
 - 4.6.2. MINERAL PROCESSING
 - 4.6.3. CATHODE MANUFACTURING
 - 4.6.4. ANODE PRODUCTION
 - 4.6.5. CELL ASSEMBLY
 - 4.6.6. PACK INTEGRATION
 - 4.7. KEY BUYING CRITERIA
 - 4.7.1. ENERGY DENSITY
 - 4.7.2. COST EFFECTIVENESS
 - 4.7.3. SAFETY PERFORMANCE
 - 4.7.4. CYCLE LIFE
 - 4.8. REGULATORY FRAMEWORK
- 5. □ BATTERY MARKET BY MATERIAL
 - 5.1. LEAD ACID
 - 5.1.1. SLI

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- 5.1.2. □STATIONARY
- 5.1.3. □MOTIVE
- 5.2. LITHIUM ION
- 5.3. NICKEL-BASED
- 5.4. SODIUM-ION
- 5.5. FLOW BATTERY
- 5.6. SMALL SEALED LEAD-ACID BATTERIES
- 5.7. OTHER MATERIALS
- 6.□BATTERY MARKET BY END USE
- 6.1. AEROSPACE
- 6.2. AUTOMOBILE
- 6.2.1. ICE ENGINES
- 6.2.1.1. PASSENGER VEHICLES
- 6.2.1.2. COMMERCIAL VEHICLES
- 6.2.2. ELECTRIC VEHICLES
- 6.2.2.1. E-BIKES
- 6.2.2.2. E-CARS
- 6.2.2.3. E-BUSES
- 6.2.2.4. E-TRUCKS
- 6.3. CONSUMER ELECTRONICS
- 6.4. GRID-SCALE ENERGY STORAGE
- 6.5. TELECOM
- 6.6. POWER TOOLS
- 6.7. MILITARY & DEFENSE
- 6.8. OTHER END USES
- 7.□BATTERY MARKET BY APPLICATION
- 7.1. AUTOMOTIVE BATTERIES
- 7.2. PORTABLE BATTERIES
- 8.□COMPETITIVE LANDSCAPE
- 8.1. KEY STRATEGIC DEVELOPMENTS
- 8.1.1. MERGERS & ACQUISITIONS
- 8.1.2. PRODUCT LAUNCHES & DEVELOPMENTS
- 8.1.3. PARTNERSHIPS & AGREEMENTS
- 8.1.4. BUSINESS EXPANSIONS & DIVESTITURES
- 8.2. COMPANY PROFILES
- 8.2.1. A123 SYSTEMS LLC□
- 8.2.1.1. COMPANY OVERVIEW
- 8.2.1.2. PRODUCTS
- 8.2.1.3. STRENGTHS & CHALLENGES
- 8.2.2. C&D TECHNOLOGIES INC
- 8.2.2.1. COMPANY OVERVIEW
- 8.2.2.2. PRODUCTS
- 8.2.2.3. STRENGTHS & CHALLENGES
- 8.2.3. CROWN BATTERY MANUFACTURING COMPANY
- 8.2.3.1. COMPANY OVERVIEW
- 8.2.3.2. PRODUCTS
- 8.2.3.3. STRENGTHS & CHALLENGES

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- 8.2.4. DURACELL
 - 8.2.4.1. COMPANY OVERVIEW
 - 8.2.4.2. PRODUCTS
 - 8.2.4.3. STRENGTHS & CHALLENGES
- 8.2.5. EAST PENN MANUFACTURING CO
 - 8.2.5.1. COMPANY OVERVIEW
 - 8.2.5.2. PRODUCTS
 - 8.2.5.3. STRENGTHS & CHALLENGES□
- 8.2.6. ENERSYS
 - 8.2.6.1. COMPANY OVERVIEW
 - 8.2.6.2. PRODUCTS
 - 8.2.6.3. STRENGTHS & CHALLENGES
- 8.2.7. EVEREADY INDUSTRIES
 - 8.2.7.1. COMPANY OVERVIEW
 - 8.2.7.2. PRODUCTS
 - 8.2.7.3. STRENGTHS & CHALLENGES
- 8.2.8. EXIDE TECHNOLOGIES
 - 8.2.8.1. COMPANY OVERVIEW
 - 8.2.8.2. PRODUCTS
 - 8.2.8.3. STRENGTHS & CHALLENGES□
- 8.2.9. JOHNSON CONTROLS INC
 - 8.2.9.1. COMPANY OVERVIEW
 - 8.2.9.2. PRODUCTS
 - 8.2.9.3. STRENGTHS & CHALLENGES
- 8.2.10. PANASONIC CORPORATION
 - 8.2.10.1. COMPANY OVERVIEW
 - 8.2.10.2. PRODUCTS
 - 8.2.10.3. STRENGTHS & CHALLENGES
- 8.2.11. SAMSUNG SDI CO LTD
 - 8.2.11.1. COMPANY OVERVIEW
 - 8.2.11.2. PRODUCTS
 - 8.2.11.3. STRENGTHS & CHALLENGES
- 8.2.12. SAFT GROUPE SA
 - 8.2.12.1. COMPANY OVERVIEW
 - 8.2.12.2. PRODUCTS
 - 8.2.12.3. STRENGTHS & CHALLENGES

LIST OF TABLES

TABLE 1: MARKET SNAPSHOT - BATTERY

TABLE 2: MARKET BY MATERIAL, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)

TABLE 3: MARKET BY MATERIAL, FORECAST YEARS, 2025-2032 (IN \$ MILLION)

TABLE 4: MARKET BY LEAD ACID, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)

TABLE 5: MARKET BY LEAD ACID, FORECAST YEARS, 2025-2032 (IN \$ MILLION)

TABLE 6: MARKET BY END USE, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)

TABLE 7: MARKET BY END USE, FORECAST YEARS, 2025-2032 (IN \$ MILLION)

TABLE 8: MARKET BY AUTOMOBILE, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)

TABLE 9: MARKET BY AUTOMOBILE, FORECAST YEARS, 2025-2032 (IN \$ MILLION)

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TABLE 10: MARKET BY ICE ENGINES, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)
TABLE 11: MARKET BY ICE ENGINES, FORECAST YEARS, 2025-2032 (IN \$ MILLION)
TABLE 12: MARKET BY ELECTRIC VEHICLES, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)
TABLE 13: MARKET BY ELECTRIC VEHICLES, FORECAST YEARS, 2025-2032 (IN \$ MILLION)
TABLE 14: MARKET BY APPLICATION, HISTORICAL YEARS, 2018-2023 (IN \$ MILLION)
TABLE 15: MARKET BY APPLICATION, FORECAST YEARS, 2025-2032 (IN \$ MILLION)
TABLE 16: LIST OF MERGERS & ACQUISITIONS
TABLE 17: LIST OF PRODUCT LAUNCHES & DEVELOPMENTS
TABLE 18: LIST OF PARTNERSHIPS & AGREEMENTS
TABLE 19: LIST OF BUSINESS EXPANSIONS & DIVESTITURES

LIST OF FIGURES

FIGURE 1: KEY MARKET TRENDS
FIGURE 2: PORTER'S FIVE FORCES ANALYSIS
FIGURE 3: GROWTH PROSPECT MAPPING FOR UNITED STATES
FIGURE 4: MARKET MATURITY ANALYSIS
FIGURE 5: MARKET CONCENTRATION ANALYSIS
FIGURE 6: VALUE CHAIN ANALYSIS
FIGURE 7: KEY BUYING CRITERIA
FIGURE 8: SEGMENT GROWTH POTENTIAL, BY MATERIAL, IN 2024
FIGURE 9: LEAD ACID MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 10: SEGMENT GROWTH POTENTIAL, BY LEAD ACID, IN 2024
FIGURE 11: SLI MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 12: STATIONARY MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 13: MOTIVE MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 14: LITHIUM ION MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 15: NICKEL-BASED MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 16: SODIUM-ION MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 17: FLOW BATTERY MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 18: SMALL SEALED LEAD-ACID BATTERIES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 19: OTHER MATERIALS MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 20: SEGMENT GROWTH POTENTIAL, BY END USE, IN 2024
FIGURE 21: AEROSPACE MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 22: AUTOMOBILE MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 23: SEGMENT GROWTH POTENTIAL, BY AUTOMOBILE, IN 2024
FIGURE 24: ICE ENGINES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 25: SEGMENT GROWTH POTENTIAL, BY ICE ENGINES, IN 2024
FIGURE 26: PASSENGER VEHICLES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 27: COMMERCIAL VEHICLES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 28: ELECTRIC VEHICLES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 29: SEGMENT GROWTH POTENTIAL, BY ELECTRIC VEHICLES, IN 2024
FIGURE 30: E-BIKES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 31: E-CARS MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 32: E-BUSES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 33: E-TRUCKS MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 34: CONSUMER ELECTRONICS MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 35: GRID-SCALE ENERGY STORAGE MARKET SIZE, 2025-2032 (IN \$ MILLION)

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FIGURE 36: TELECOM MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 37: POWER TOOLS MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 38: MILITARY & DEFENSE MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 39: OTHER END USES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 40: SEGMENT GROWTH POTENTIAL, BY APPLICATION, IN 2024
FIGURE 41: AUTOMOTIVE BATTERIES MARKET SIZE, 2025-2032 (IN \$ MILLION)
FIGURE 42: PORTABLE BATTERIES MARKET SIZE, 2025-2032 (IN \$ MILLION)

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