

United States Battery Market Forecast 2025-2032

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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.

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