

Domestic Infrastructure



Our country's need for advanced batteries to electrify the economy is increasing exponentially. Our success requires a reliable supply chain impervious to trade, pandemic and geopolitical disruptions. The lead battery industry is ideally positioned to help meet energy storage demand domestically and reduce dependence on critical materials from foreign countries. Through a strong domestic infrastructure and circular economy, lead batteries are a reliable, sustainable and economically viable solution.

Infrastructure: Established, Ready-to-Scale

Lead batteries have a vast network of existing manufacturing, collection and recycling facilities in North America. Together, they ensure consistent lead battery fulfillment from an industry poised for quick scalability.

- + **50 manufacturing facilities**, 39 in the U.S.
- + **14+ recycling facilities**, 10 in the U.S.
- + **300,000+ retail distribution and collection sites** for used batteries.
- + **50+ research projects** innovating next-gen lead battery technology.
- + **121,000 U.S. jobs** supported by the lead battery industry.

Circularity Ensures Supply Chain Reliability

Lead batteries model a highly successful, closed-loop, domestic circular economy. Manufacturers design lead batteries to be recycled, creating the raw materials needed for new lead batteries.

- + **100% Recyclable Components**: A lead battery's three main components are recyclable.
- + **80% Recycled Material**: Typical composition of a new lead battery.
- + **+160M Recycled Annually**: The number of lead batteries kept from landfills in the U.S.
- + **99% Recycling Rate** (compared to lithium-ion at <15%): Economic value and easy collection ensure continuous, high-quality inputs for new lead batteries.

“The assured supply of critical materials and the resiliency of their supply chains are essential to the economic prosperity and national defense of the United States.”

— Critical Materials Rare Earths Supply Chain: A Situational White Paper, U.S. Department of Energy

Approximately 90% of North American lead battery demand is met by North American manufacturers.

300,000+ Retail
Distribution &
Collection Sites

300K

North America

50

50 Manufacturing Facilities,
39 in the U.S.

14+

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Mineral Sourcing: Lithium vs Lead

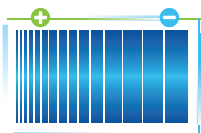
Lead battery manufacturing predominantly requires a single raw material: lead, which is infinitely recyclable and done so domestically. In contrast, manufacturing lithium-ion batteries requires four critical raw materials, primarily sourced off-shore: lithium, graphite, cobalt and manganese. This increases U.S. dependency on foreign supply sources.

- + China controls 51% of the global total of chemical lithium, 62% of chemical cobalt and 100% of natural graphite — the major components of lithium-ion batteries.
- + China's share of manufacturing for lithium-ion batteries could be as high as 80%, according to estimates from BloombergNEF. Six of the 10 biggest EV battery producers are based in China — one of them makes three out of every 10 EV batteries globally.

Lead Batteries Support Critical Infrastructure

The domestic supply chain of lead batteries ensures that essential energy and backup power remains available for:

- + Transportation and Recreational Vehicles (including start-stop, hybrid and EVs)
- + Renewable Energy
- + EV Charging Stations
- + Aerospace and Defense
- + Communication Networks
- + Data Centers
- + Logistics, Material Handling and Warehousing
- + Utilities, Industrial Power and Residential Power
- + Agriculture
- + Medical
- + Security and Public Safety
- + Marine and Watersports
- + Construction Equipment and Tools



U.S. lead battery manufacturers currently source **more than 83%** of the needed lead from North American recycling facilities.

BATTERY COUNCIL INTERNATIONAL Formed in 1924, BCI joins together battery manufacturers and recyclers, marketers and retailers, suppliers of raw materials and equipment, and battery distributors from across North America and around the world. BCI members are committed to responsible manufacturing and recycling processes, and serve as a unified voice for environmental, health and safety stewardship.

Learn more at BatteryCouncil.org

Visit BatteryCouncil.org/sources to view source information.
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COUNCIL
INTERNATIONAL**
ESSENTIAL ENERGY EVERYDAY