



US Industry and Policy Update

A Dynamic Market Environment

Roger Miksad | BCI President & Executive Director

rmiksad@battery council.org

BCI - Serving the Industry Since 1924

Members include **manufacturers, recyclers, suppliers, distributors, retail, marketers, and consultants.**

Our work touches every lead battery company that does business in North America.

140+ Members

**\$33 billion+
member footprint**

Manufacturers: Battery Builders, Bulldog Battery, Bosch, Clarios, Crown, C&D/Trojan, East Penn Manufacturing, EnerSys, Enerya (Gohner), Leoch, Moura, Stryten Energy, Surrette, U.S. Battery, Yuasa, & more

Recyclers: Clarios, Corporacion Pipsa, East Penn, Ecobat, Element Resources, Gopher Technologies, M3 Resources, Sanders, Teck, Terrapure, & more



BCI Member Map

*BCI members and partners
operate more than 300,000
locations nationwide to
distribute our products*



Manufacturer



Recycler



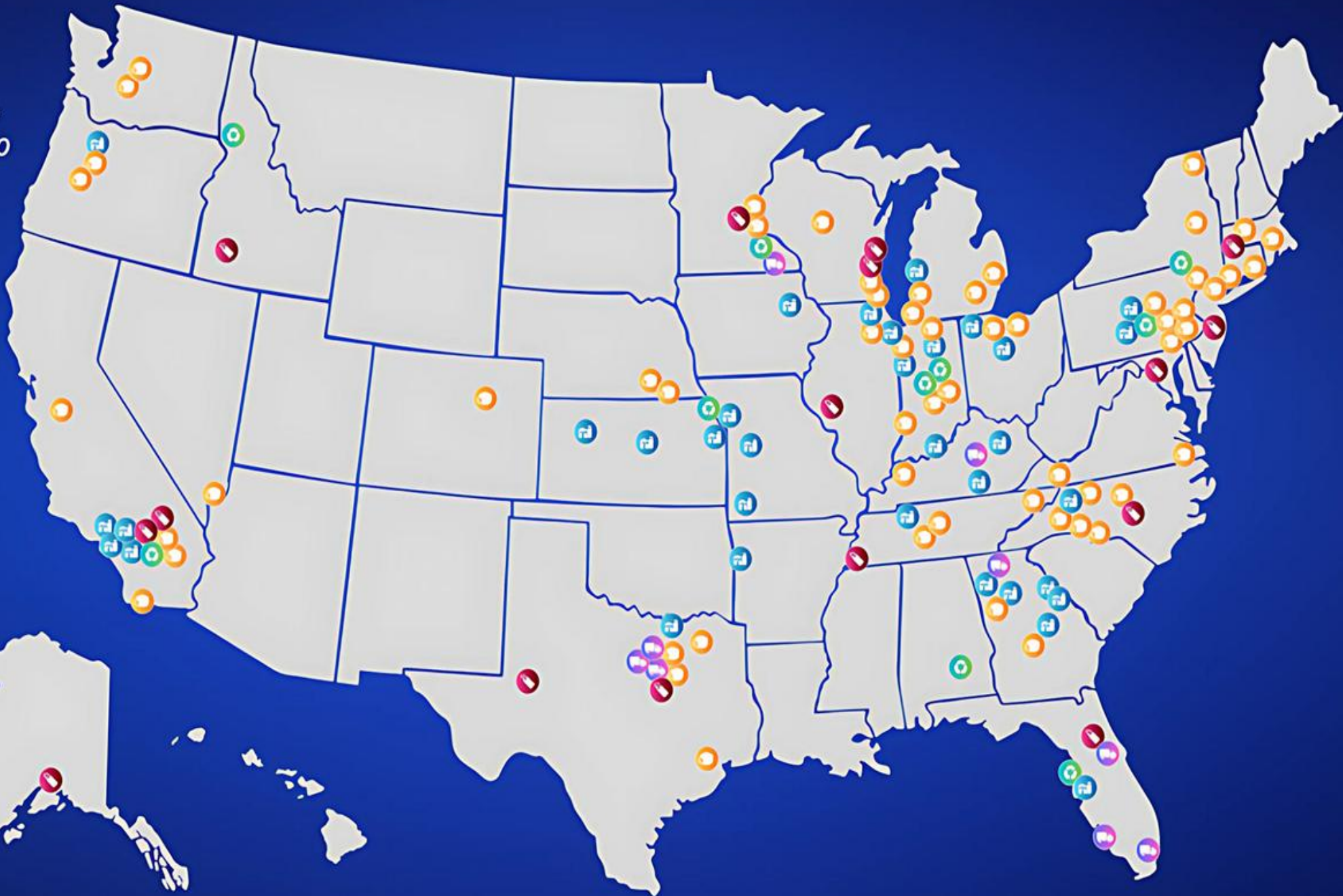
Supplier



Distributor



Retailer HO



North America's battery industry includes



SLI and low-voltage applications in automotive, marine, and power sports



Motive power in industrial and material handling equipment



Stationary storage for local backup power, grid-scale support and UPS



Next-gen energy research, from AGM to flow, sodium, zinc, and lithium.

Statistics on U.S. Lead Battery Market



160+ million units annually



**~6.4 billion lbs of used
batteries per year**
2023 BCI Recycling Rate Study
(2.58 million metric tonnes)

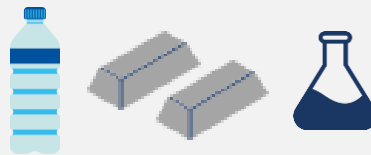


**300,000+ retail
collection partners**



9 US Recyclers

5+ partner facilities in Canada + Mexico

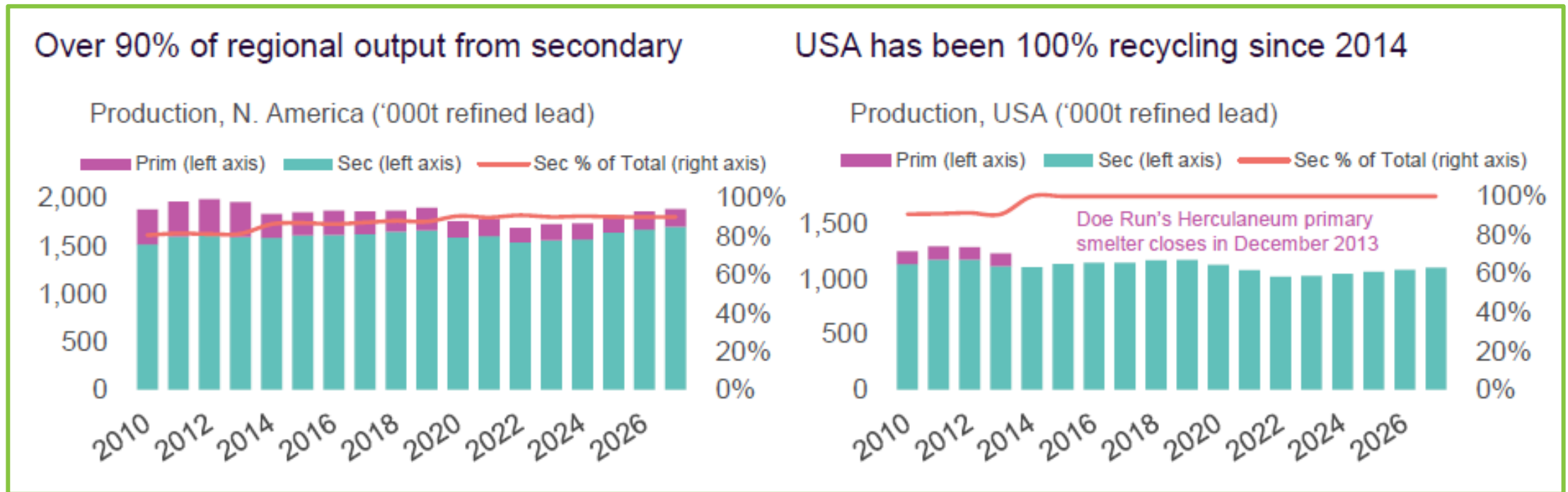


99% end-of-life recycling
100% recycling of collected batteries



**85% of North American lead
demand met through recycling**

North American Lead Production



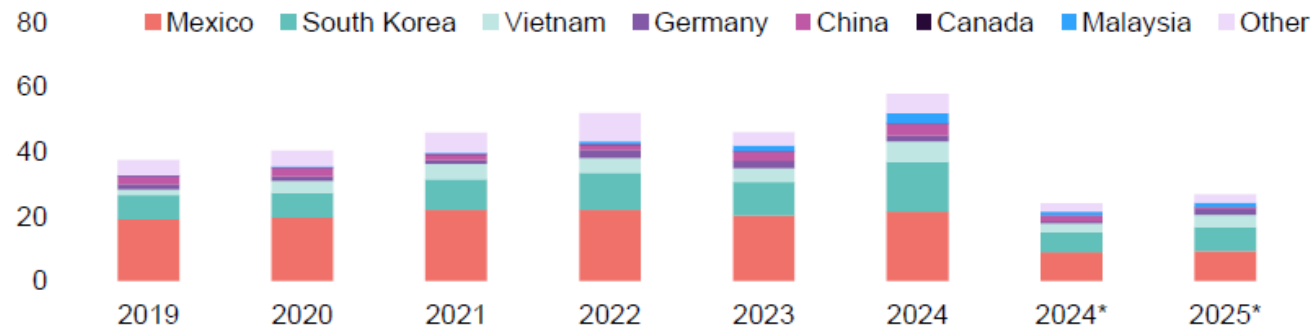
North America does not achieve 100% lead demand through recycling alone

US Federal Government designating lead a Critical Mineral in 2025

Statistics on U.S. Lead Battery Market

Automotive battery imports have been running higher through early 2020s

United States Imports of automotive batteries (Million units)

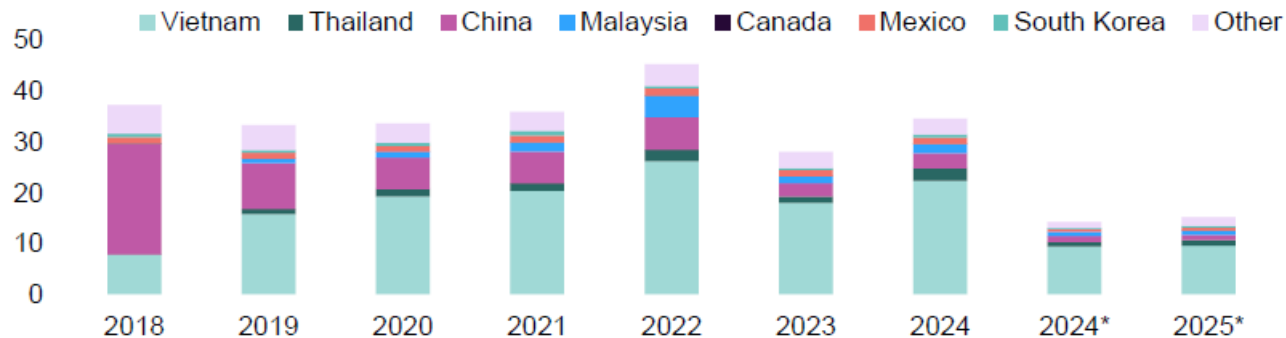


While tariffs have created uncertainty, the long-term trends shows key trade relationships...

- China
- Malaysia
- Vietnam
- Thailand
- South Korea

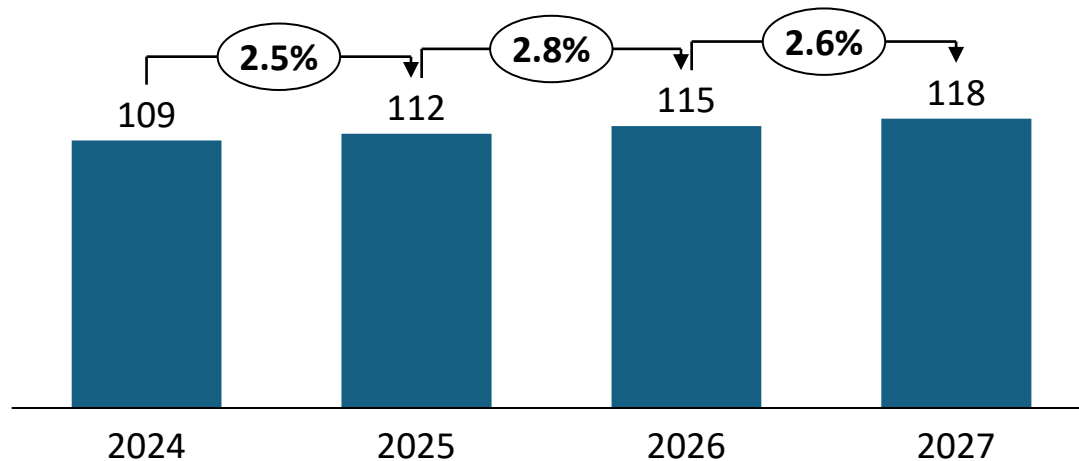
Reliance on Chinese industrial batteries shifts to Vietnamese from 2018

United States Imports of industrial batteries (Million units)

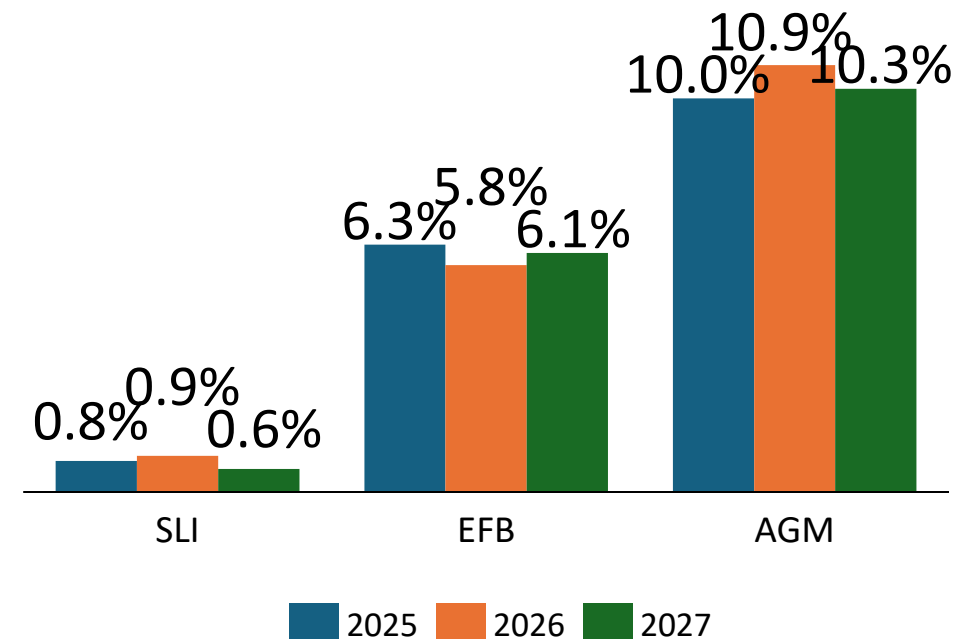


BCI Member Survey – 3-Year Automotive Forecast

North America Shipment Forecast (M Units)



Forecasted % Growth by Technology



Section 45X Production Tax Credits

Battery Component Credit Amounts

- **Battery Cells:** \$35 per kilowatt-hour of capacity
- **Battery Modules (with cells):** \$10 per kWh capacity
- **Electrode Active Materials:** 10% of production costs incurred



Credit Phase-Out Timeline



2025-2029

Full credit amounts
available



2030

75% of full
credit value



2031

50% of full
credit value



2032

25% of full
credit value

Technical Requirements - Capacity and Documentation



Capacity Measurement Standards

- **Recognized Standard:** IEC 60086-1, USABC Battery Test Manual, or equivalent
 - BCIS 25 (Ed. 1, 2025)
- **Capacity Limitation:** 100 Wh/L energy density minimum
- **Third-Party Verification:** Independent testing and certification required
- **Technical Documentation:** Specifications and testing protocols mandatory



Key Implementation Requirements

- **US Production:** Final manufacturing must occur in United States or US territories
- **Ex-US Components Allowed:** Minimum US-domestic content thresholds
- **Substantial Transformation:** Complete manufacturing process, not assembly only
- **Unrelated Person Sales:** Components must be sold to non-related entities

Substantial Transformation - Qualifying Activities



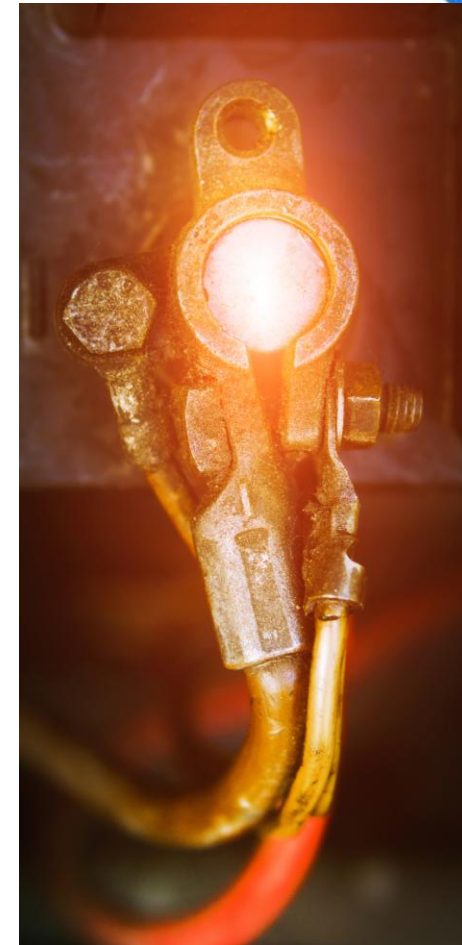
Manufacturing Activities That Qualify

- **Battery Cell Production:** Complete electrochemical assembly including electrode preparation
- **Module Integration:** Combining cells with electrical interconnections and thermal management
- **System Assembly:** Integration with battery management electronics and protective housing



Activities That Do NOT Qualify for Credits

- **"Form and Finish":** Adding electrolyte to pre-manufactured dry cells
- **Minor Assembly:** Installing external casings on completed battery modules
- **Superficial Modification:** Surface treatments, painting, or product labeling
- **Simple Packaging:** Combining finished components without functional integration



FEOC Definitions - Listed Entities and Foreign-Influenced



Specified Foreign Entity Categories

- Government entities and instrumentalities of covered nations (China, Russia, Iran, N. Korea)
- Entities organized under laws of covered nations
- Citizens/nationals of covered nations (non-US residents)
- Entities controlled by covered nation governments or citizens



Foreign-Influenced Entity Thresholds

- **Single SFE Ownership:** Greater than 25% entity ownership
- **Multiple SFE Ownership:** Greater than 40% aggregate ownership
- **Debt Holdings:** Greater than 15% of outstanding debt held by SFEs
- **Control Rights:** Authority to appoint officers or exercise effective production control



Qualifying Non-FEOC Materials and Components



Raw Materials from Non-FEOC Sources

- **Battery Metals:** Lithium, cobalt, nickel, manganese from qualifying suppliers
- **Carbon Materials:** Graphite and carbon compounds from compliant entities
- **Processing Chemicals:** Electrolyte salts and solvents from non-FEOC manufacturers
- **Structural Materials:** Aluminum, steel, and housing materials from qualifying sources



Manufactured Components from Non-FEOC Entities

- **Cell Components:** Separators, current collectors, and electrode materials
- **Electronic Systems:** Battery management components and monitoring equipment
- **Assembly Materials:** Adhesives, thermal interface materials, and packaging components
- **Processing Services:** Material refinement and purification from compliant providers

Material Assistance - Non-FEOC Content Requirements

Escalating Domestic Content Thresholds



2026

60% non-FEOC
direct material
costs required



2027

65% non-FEOC
direct material
costs required



2028

70% non-FEOC
direct material
costs required



2029

80% non-FEOC
direct material
costs required



BCI 2026 Convention + Power Mart Expo

Registration Opens Soon
Booths Available Now

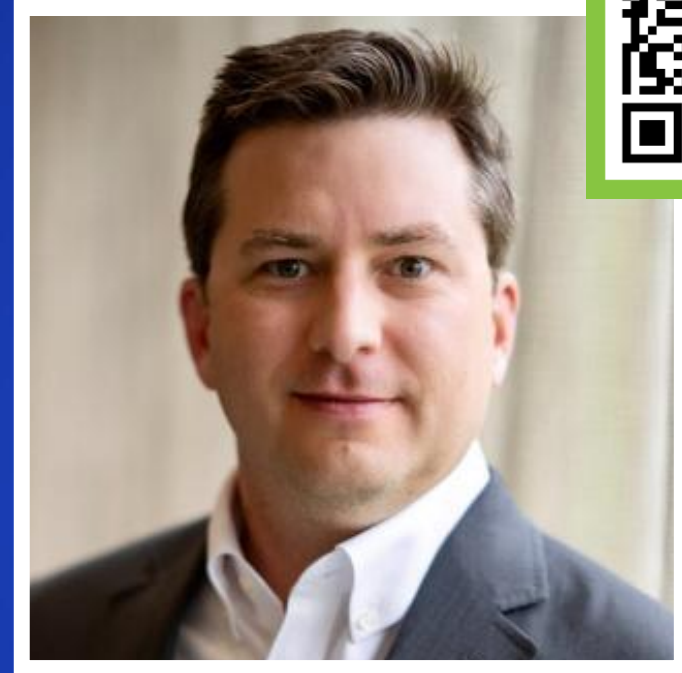
May 3 - 6, 2026



Nashville, Tennessee



Thank You!



Roger Miksad

President & Executive Director

Battery Council International



**BATTERY
COUNCIL
INTERNATIONAL**

SINCE 1924