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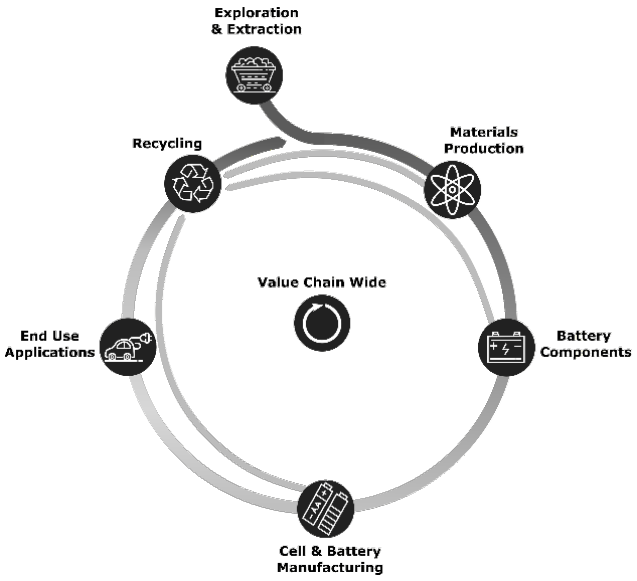
The Western Hub: Developing a Pan-Canadian Battery Metals Value Chain

BMAC's 2022 *Roadmap for Canada's Battery Value Chain* set out a pathway to secure Canada's place in the global net-zero economy, by mapping out the needs and opportunities for a robust, well developed Canadian battery value chain. Building off that work, this project will identify key resources, developments, and investment opportunities in Western Canada to contribute to Canada's battery value chain, as well as the necessary partnerships including industry, government, and Indigenous stakeholders, to seize these opportunities.



FUNDING DETAILS

RECIPIENT:
Battery Metals Association of Canada (BMAC)

PARTNERS:
Energy Futures Lab, Transition Accelerator, Smart Prosperity Institute

TOTAL BUDGET:
$1,700,000

AI FUNDING:
$200,000

PROJECT DATES:
JAN 2023 – JUN 2025

PROJECT TRL:
Start: 1
End: 5

APPLICATION

BMAC's work covers the entire battery value chain from minerals extraction to materials processing, battery cell and component production, battery use and recycling. This work is intended to help inform industry, governments, investors, and communities on the opportunities for strategic developments and collaborations across the battery value chain.

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PROJECT GOALS

This Project will identify key opportunities for investment in and development across the entire battery value chain, with specific focus on Indigenous inclusion, as well as strategic opportunities for Western battery hubs and integration with battery developments in the East. The key goals of the project are to:

- Engage with Indigenous stakeholders to identify opportunities and actions for meaningful Indigenous inclusion across the battery value chain, with economic reconciliation in mind.
- Analyze 8 critical minerals vital to the energy transition to map the processes and flow from mineral extraction to materials ready for battery manufacturing.
- Identify opportunities, provide economic analysis, and highlight policies to leverage Western minerals and other assets in value chain development.
- Identify key strategies to enhance efficiencies and materials recovery throughout the battery value chain.

BENEFITS TO ALBERTA

Through this work BMAC intends to:

- Highlight the opportunities, the economic business case and key enabling policies in Alberta and the West to attract investment and drive development within a Western Canada battery value chain.
- Educate industry on the importance of engaging Indigenous communities and organizations, as well as key steps to facilitate effective and mutually beneficial partnerships and collaborations across the value chain, that are based on inclusion and reconciliation, including economic reconciliation, within Alberta and the West.
- Identify strategies to maximize efficiencies and effectiveness throughout the battery mineral value chain, including geographically and operationally integrated battery hubs, value optimization, and fostering direct supply to other battery hubs in the East.

4 Publications

CURRENT STATUS

JUN 2025

Project complete. Project work includes workshops and western ecosystem mapping resulting in the generation of three public reports:

- A Western Canadian Battery Hub: Assessing Industrial Gaps and Opportunities for Economic Development along the Battery Value Chain in Western Canada a Western Canadian Battery Hub Summary
- Strategies to Unlock Canada's Critical Minerals for Global Leadership in Energy Storage, EVs, and Beyond
- Indigenous Partnerships: Learnings, Opportunities & Conditions for Success

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