



North American Critical Minerals Supply Chains

Energy Council Meeting June 13, 2026

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COMPETENT PERSONS STATEMENT FOR PRAIRIE AND REGISTERED OVERSEAS PROFESSIONAL ORGANIZATION (ROPO) AND JORC TABLES

Gordon MacMillan P.Geo., Principal Hydrogeologist of Fluid Domains, who is an independent consulting geologist of a number of brine mineral exploration companies and oil and gas development companies, reviewed and approves the technical information pertaining to the exploration results and mineral resource estimates within the release. Mr. MacMillan is a member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), which is ROPO accepted for the purpose of reporting in accordance with the ASX listing rules. Mr. MacMillan has been practicing as a professional in hydrogeology since 2000 and has 24 years of experience in mining, water supply, water injection, and the construction and calibration of numerical models of subsurface flow and solute migration. Mr. MacMillan is also a Qualified Person as defined by NI 43-101 rules for mineral deposit disclosure. He has sufficient experience relevant to qualify as a Competent Person as defined by the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)'. Mr. MacMillan consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

North American Critical Minerals

IMPORTANCE, VULNERABILITIES, AND CHINA’S DOMINANCE

IMPORTANCE

Batteries, Manufacturing and Defense

VULNERABILITIES

Import reliant for majority of critical minerals = inability to manufacture

CHINA DOMINANCE

Controls the majority of global refining/processing.
Dominant refiner for 19 of 20 key minerals analyzed, with ~70% average market share



2025 List of Critical Minerals

60 CRITICAL MINERALS

10 NEW CRITICAL MINERALS

15 RARE EARTH ELEMENTS*

ALUMINUM	HAFNIUM	RHODIUM
ANTIMONY	HOLMIUM*	RUBIDIUM
ARSENIC	INDIUM	RUTHENIUM
BARITE	IRIDIUM	SAMARIUM*
BERYLLIUM	LANTHANUM*	SCANDIUM
BISMUTH	LEAD	SILICON
BORON	LITHIUM	SILVER
CERIUM*	LUTETIUM*	TANTALUM
CESIUM	MAGNESIUM	TELLURIUM
CHROMIUM	MANGANESE	TERBIUM*
COBALT	METALLURGICAL COAL	THULIUM*
COPPER	NEODYMIUM*	TIN
DYSPROSIUM*	NICKEL	TITANIUM
ERBIUM*	NIOBIUM	TUNGSTEN
EUROPIUM*	PALLADIUM	URANIUM
FLUORSPAR	PHOSPHATE	VANADIUM
GADOLINIUM*	PLATINUM	YTTERBIUM*
GALLIUM	POTASH	YTTRIUM*
GERMANIUM	PRASEODYMIUM*	ZINC
GRAPHITE	RHENIUM	ZIRCONIUM

U.S. Department of the Interior
U.S. Geological Survey

Learn More
www.usgs.gov

North American Critical Minerals

IMPORTANCE, VULNERABILITIES, AND CHINA'S DOMINANCE



Source: <https://clearpath.org/wp-content/uploads/sites/44/2021/10/critical-minerals-lead-to-china-map-01.jpg>

North American Critical Minerals

NORTH AMERICAN RESOURCES, INITIATIVES, AND OPPORTUNITIES

Areas Where North America Has Strengths or Dominance

- **Beryllium:** The U.S. is the dominant global producer (~56% of world production).
- **Potash:** Canada is the world's largest producer and exporter (around 30%+ of global production). Essential for fertilizers and food security.
- **Molybdenum:** Strong U.S. production share (~14% globally).
- **Other notable production/reserves:**
 - **Nickel, Cobalt, Uranium, Niobium:** Canada is a major producer.
 - **Copper, Zinc, Silver, Fluorspar:** Significant output from the U.S. and Mexico (Mexico is a top silver producer).
 - **Lithium and REEs:** Growing potential and some production

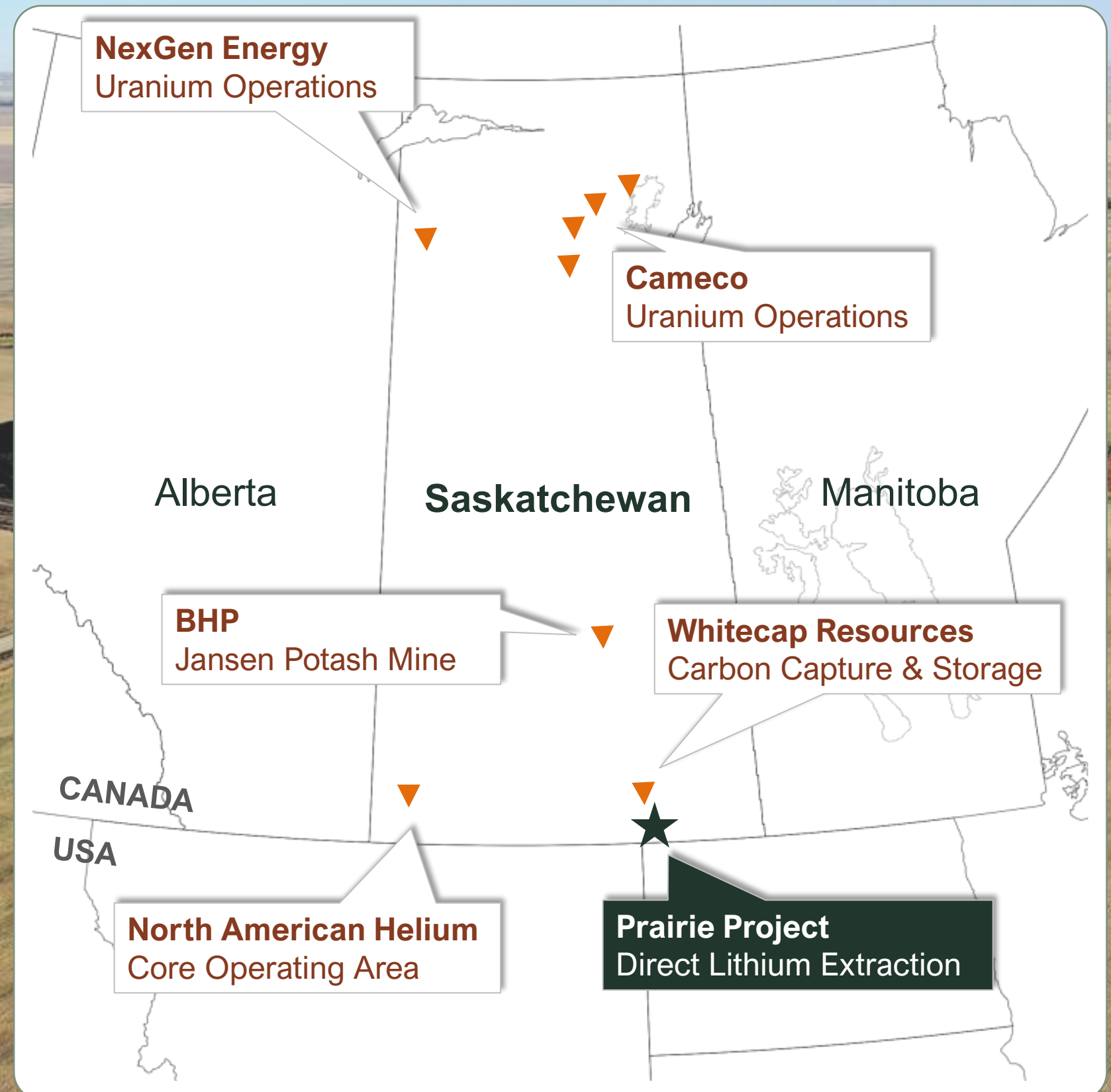
Saskatchewan

STRONG RESOURCE REGULATORY ENVIRONMENT

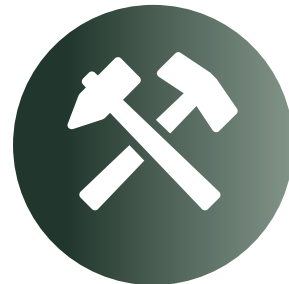
Ranked #1 jurisdiction for mining investment in Canada⁽¹⁾

- ▶ Highest grade lithium brine resources in Canada
- ▶ World's leading potash producer
- ▶ Largest high-grade uranium deposits in the world
- ▶ Canada's largest helium producer
- ▶ Second-largest oil-producing province in Canada
- ▶ The Whitecap carbon storage project in Weyburn, Saskatchewan, is one of the world's largest Carbon Capture and Utilization Storage (CCUS) projects

(1) "Saskatchewan First in Canada for Mining Investment Attractiveness: Fraser Institute" – Government of Saskatchewan – 30 July 2025



Prairie Lithium Overview



100% Indicated **4,600,000 tonne LCE**, high-quality North American Resource⁽¹⁾



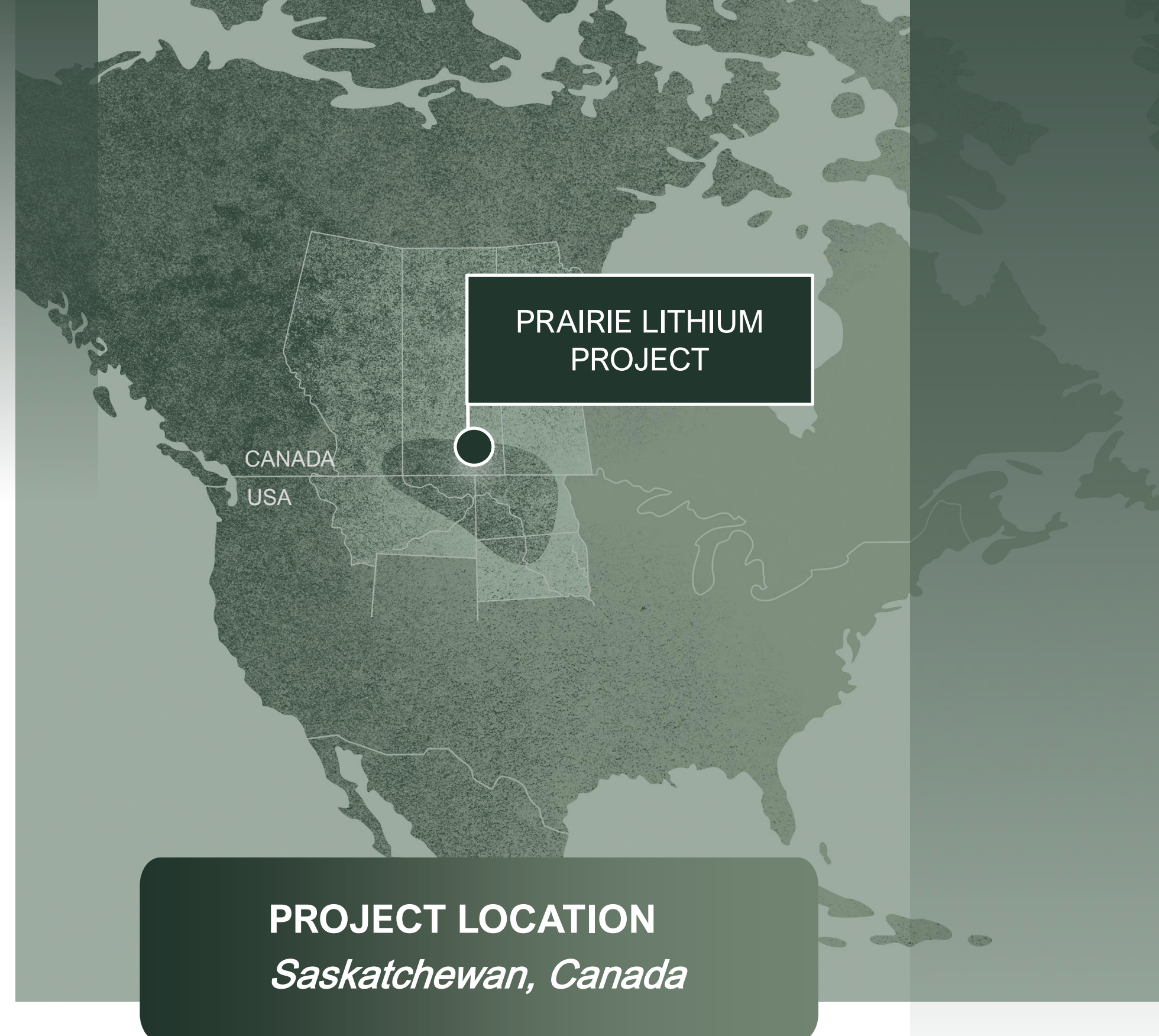
Readily available infrastructure and **permitted for production**⁽¹⁾



The Prairie Lithium project will utilize **leading DLE Technology**⁽³⁾

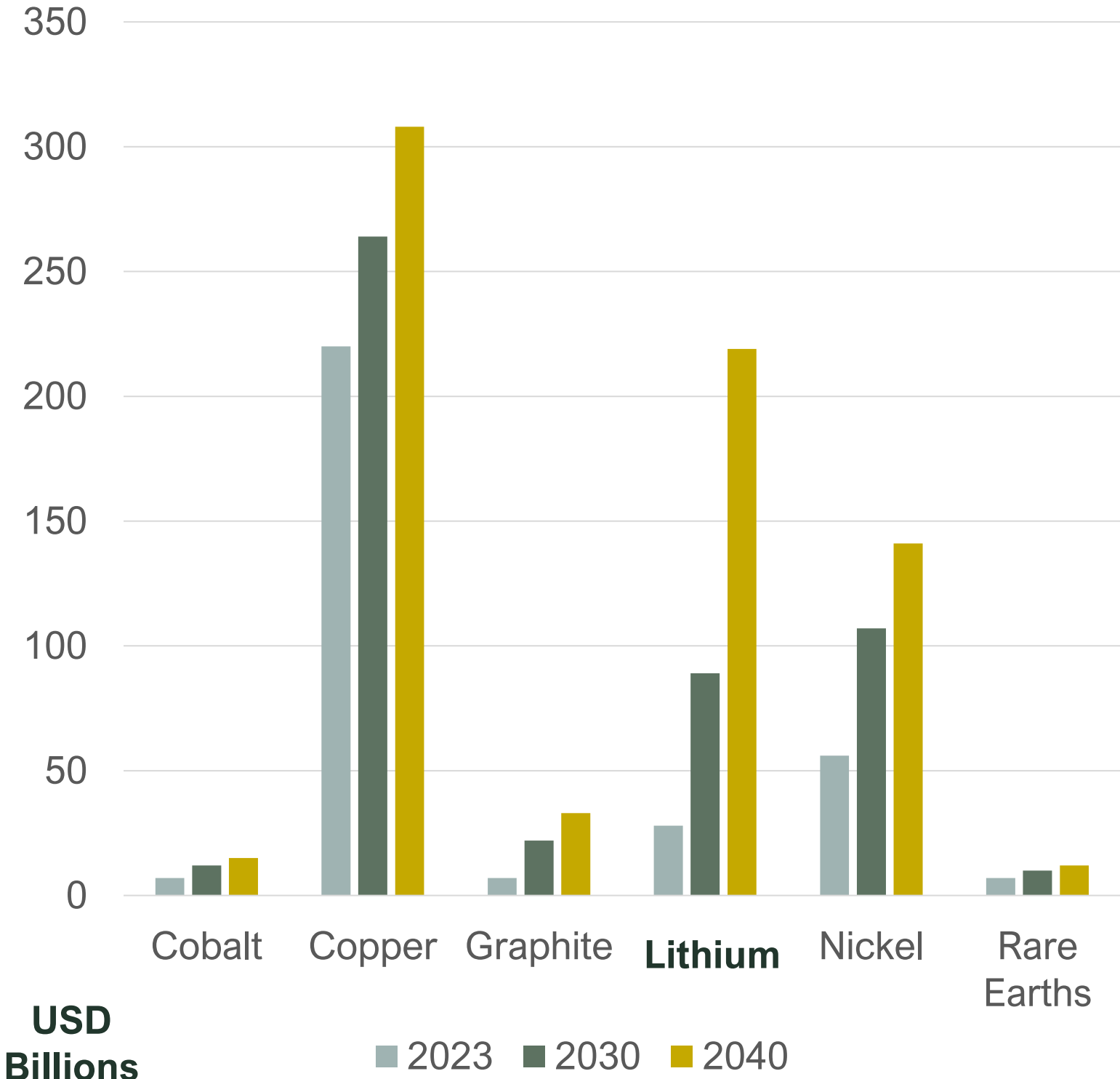


Strategic offtake agreement in place to lithium refinery in **South Korea**⁽⁴⁾



- (1) ASX Announcement – “Prairie Project Production Approved & Project Update (Amended)” – 23 May 2025
(2) ASX Announcement - "Quarterly Report For the Period Ending 31 December 2025" - 29 January 2026
(3) ASX Announcement – “Prairie Project DLE Unit On Track For Delivery” – 22 July 2025
(4) ASX Announcement – “Binding Offtake Secured for 100% of Phase 1 Production with ~AU\$10M Strategic Collaboration and Definitive Offtake” – 2 April 2026

Expected market value (USD billions) of selected critical minerals (IEA Announced Pledges Scenario 2024)



Canadian Critical Minerals Strategy Annual Report 2024

Critical Minerals Security

NORTH AMERICA



Countries are focused on major risks to global critical minerals supply chains.

NORTH AMERICAN SUPPLY NEEDED

With 86% of global lithium production occurring in Australia, South America and China, a new emphasis on **North American lithium** is emerging to reduce import reliance of lithium.

U.S. Geological Survey
Mineral Commodity Summaries, January 2025



Canada ranked No. 1 for potential to form a secure, reliable and sustainable battery supply chain.

CANADIAN GOVERNMENT SUPPORT

- ▶ \$1.9 billion spent on exploration for critical minerals in 2023, up 7% from the previous year
- ▶ \$3.08 billion in grants and contributions available for critical minerals projects

BloombergNEF, 2024
Canadian Critical Minerals Strategy Annual Report 2024

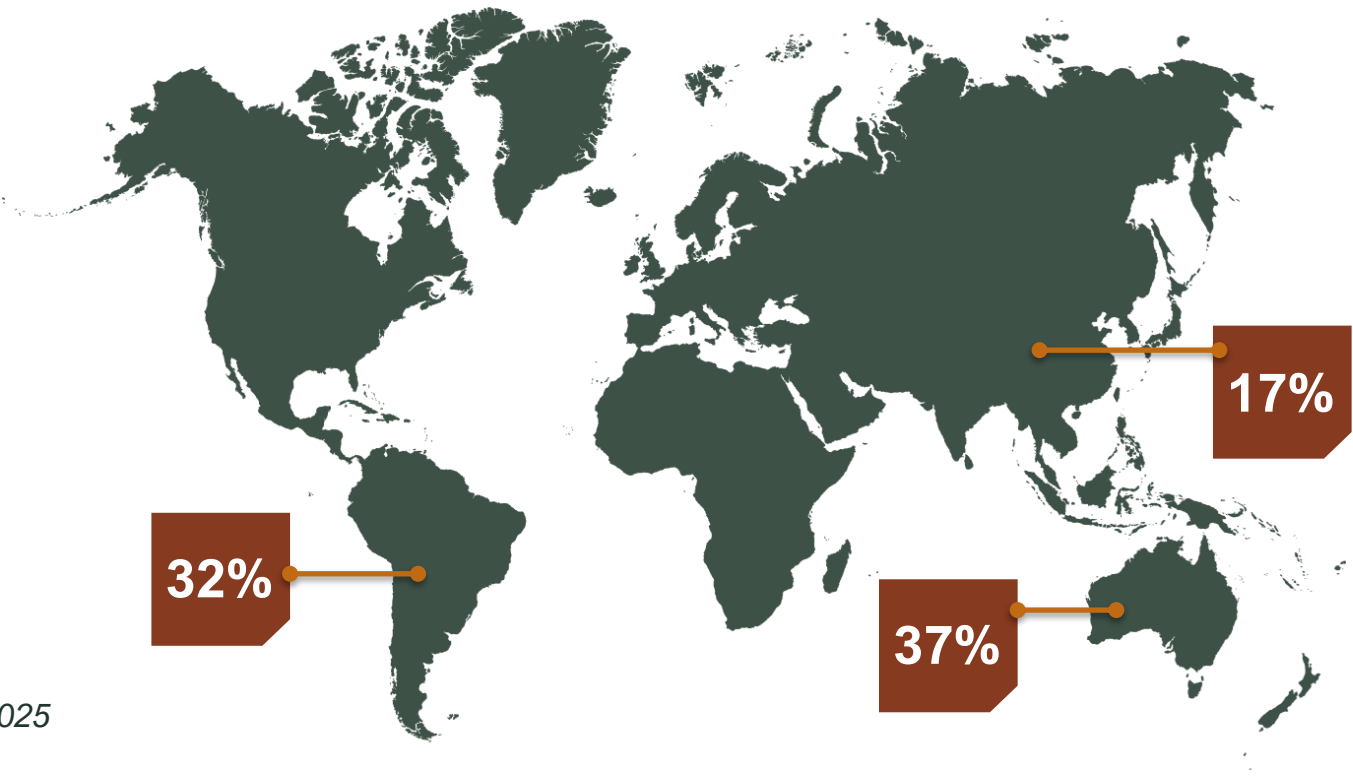
Lithium Supply & Demand

Dynamics Support Price Appreciation

Global Battery Energy Storage Driving Significant Demand Growth

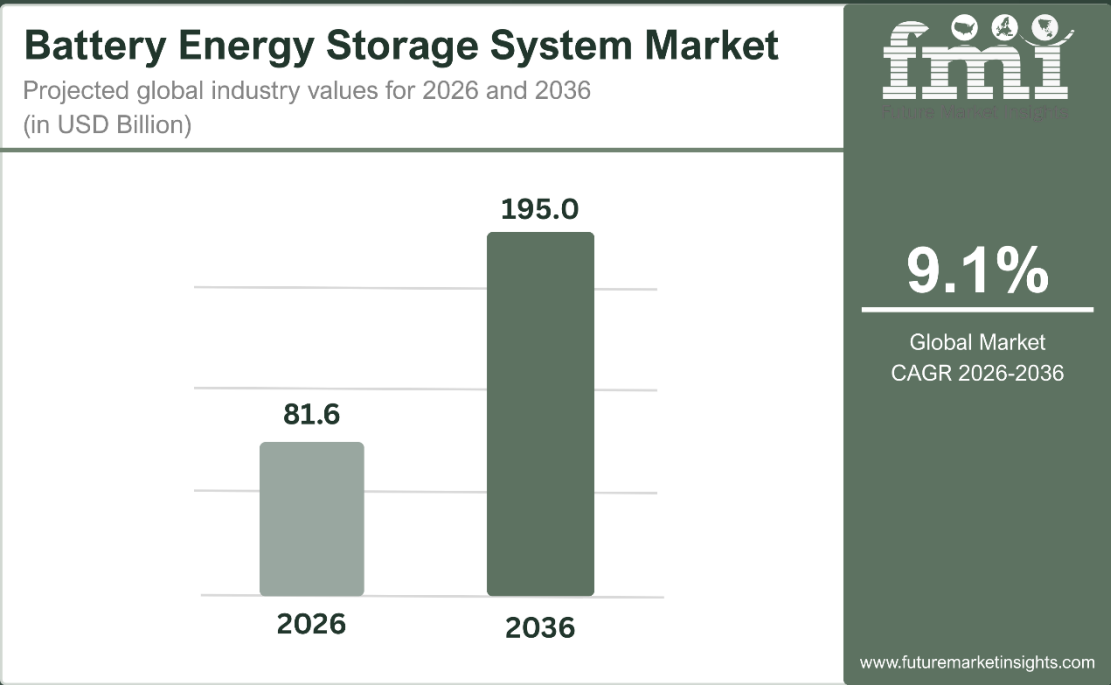
Country	Mine Production (2021)	Mine Production (2024)
Australia	42%	37%
Chile	37%	20%
China	7%	17%
Argentina	12%	8%
Brazil	1%	4%
Zimbabwe	0%	9%
USA	<1%	<1%
Canada	<1%	<1%
Other	<1%	<2%

U.S. Geological Survey
Mineral Commodity Summaries, January 2025



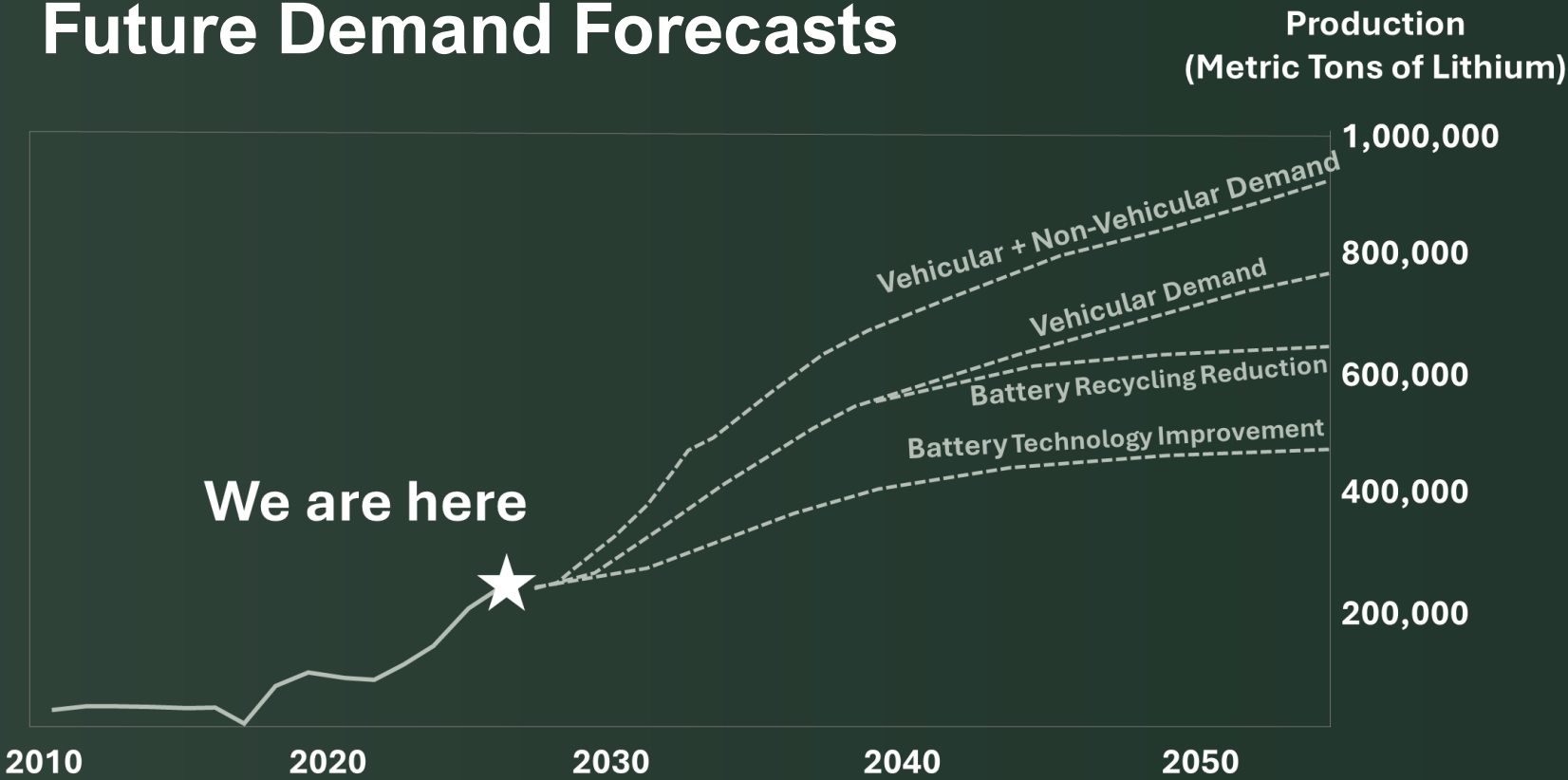
Battery Energy Market Size & Forecast

- ▶ 2026 Anticipated Market Size: **USD 81.6 Billion**
- ▶ 2036 Projected Market Size: **USD 195.0 Billion**
- ▶ CAGR (2026-2036): **9.1%**
- ▶ **Lithium-ion batteries** represent **72.8%** of deployed storage systems, driven by high energy density, declining costs, mature supply chains, and strong performance.



Source: Battery Energy Storage System Market Forecast 2026-2036

Future Demand Forecasts



Source: 2024 International Council on Clean Transportation Report



Entering the Next Lithium Cycle



OPEX from PFS⁽¹⁾

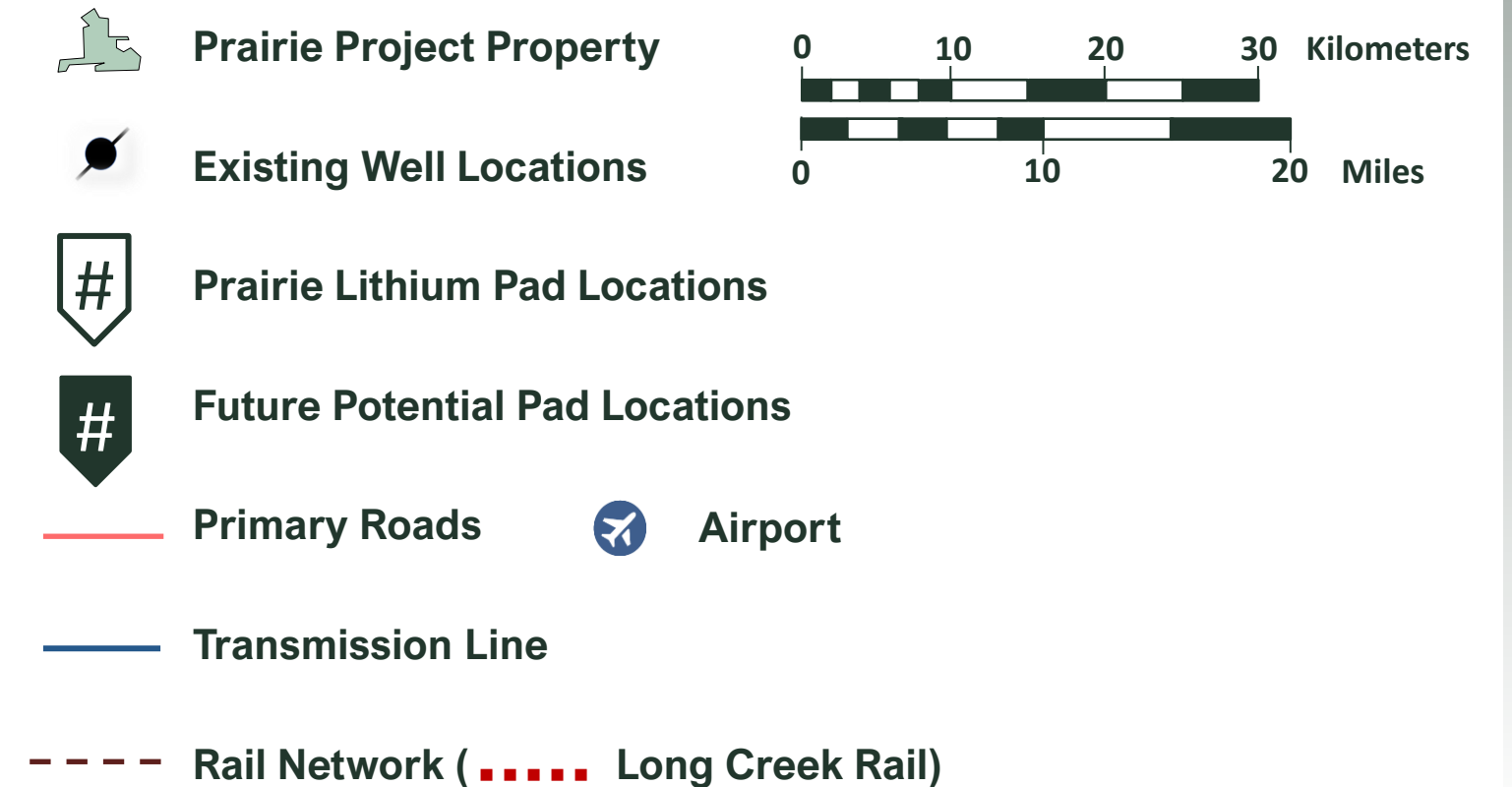
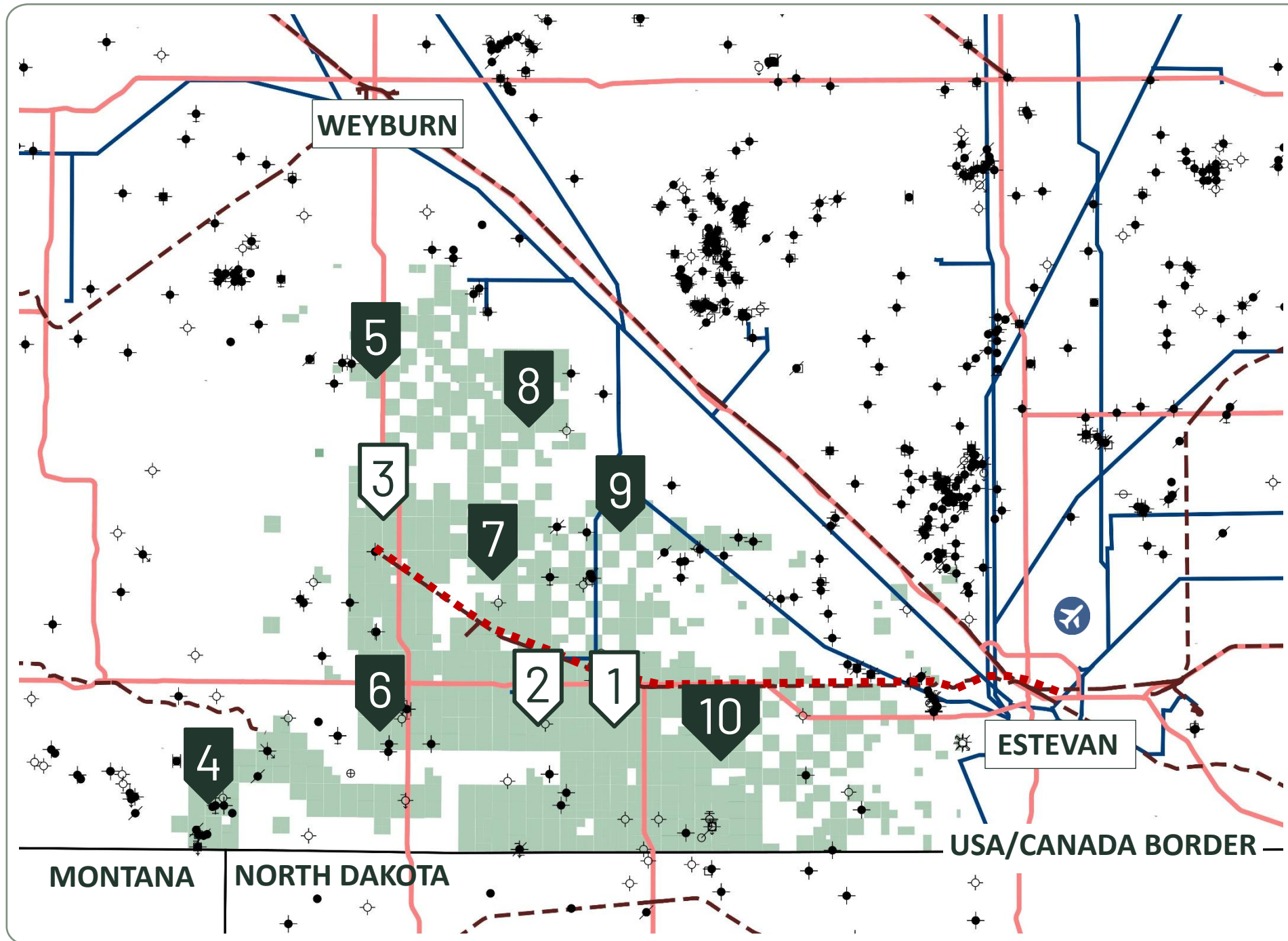
(1) ASX Announcement – “Prairie Lithium PFS Confirms Extremely Low Operating Costs of \$2,819 USD Per Tonne” – 29 December 2023

- ▶ Lithium Carbonate prices up roughly 120% over the past year.
- ▶ Driven primarily by strong electric vehicle demand in China (up 34.6% in 2025) and accelerating investment in stationary energy storage (storage batteries shipped up 99%).
- ▶ Geopolitical concerns and industrial policy objectives have intensified efforts to diversify supply chains.

www.saphiion.com

Prairie Lithium Project

345,000 ACRES OF SUBSURFACE MINERAL PERMITS
ENCOMPASSED BY INFRASTRUCTURE(1)



(1) ASX Announcement – “PRAIRIE PROJECT PRODUCTION APPROVED & PROJECT UPDATE (AMENDED)” – 23 May 2025

Prairie Lithium Project

PAD BY PAD DEVELOPMENT

Pad #1 is conditionally approved under the Saskatchewan **Critical Mineral Processing Investment Incentive (CMPPII)** for **AUD \$21,000,000⁽¹⁾**

A Production Pad is composed of Production Wells, Disposal Wells and a Facility

Facility

- Pre-treat the brine
- Extract the lithium from the brine
- Concentrate and purify the extracted lithium



Production Wells

- Produce lithium brine from Duperow Formation

Disposal Wells

- Dispose of lithium depleted brine into disposal formation

(1) ASX Announcement – “\$21 Million Investment Incentive For The Prairie Project” – 18 July 2024

How to Scale Up

MODULAR DECENTRALISED PRODUCTION

STEP 1: DE-RISK



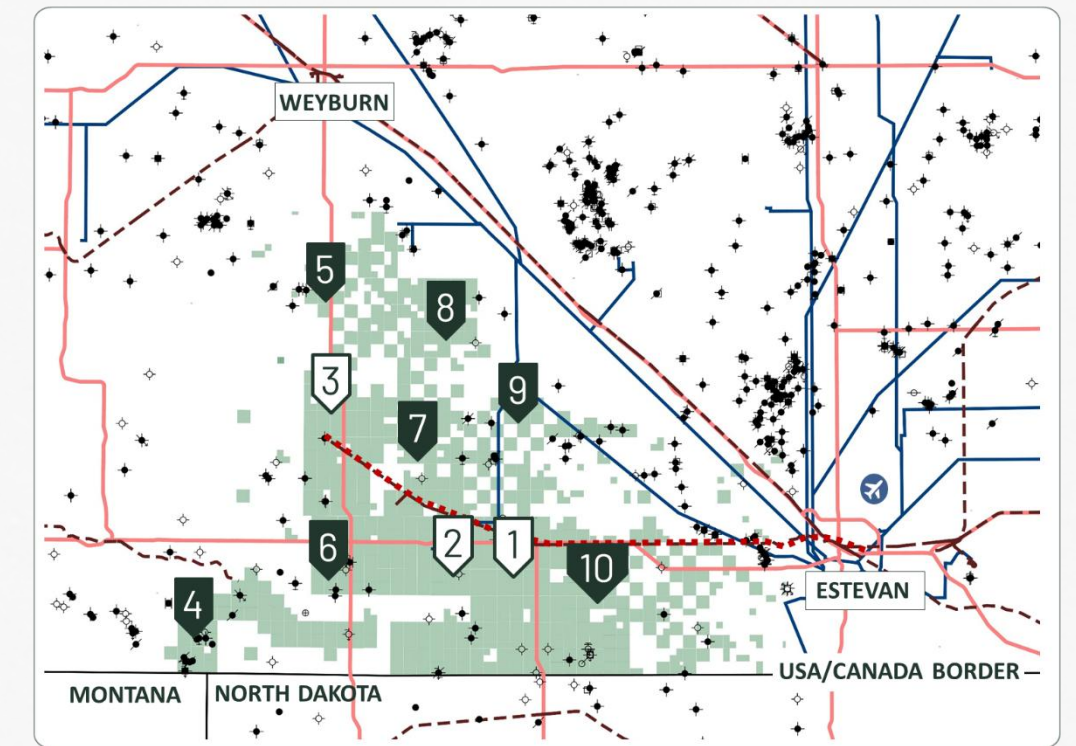
Initial Production to **de-risk commercial-scale DLE operations**

STEP 2: EXPAND



Scale up by **drilling additional production and disposal wells**, expanding the facility and **deploying additional DLE**

STEP 3: REPLICATE



Construct additional facilities across 345,000 acres of Prairie Lithium's resource

Pad Locations
Future Locations

Prairie Lithium Project



Commercial Pad #1

- **3 WELLS DRILLED**
 - Duperow Production
 - Tested production zone
 - Disposal
 - Tested disposal zone
 - Brackish Water Source
- **PRODUCTION FACILITY IN CONSTRUCTION**
 - Commercial-scale DLE unit arriving Q2 2026



Commercial Pad #2

- **2 WELLS DRILLED**
 - Future production & disposal wells



Commercial Pad #3

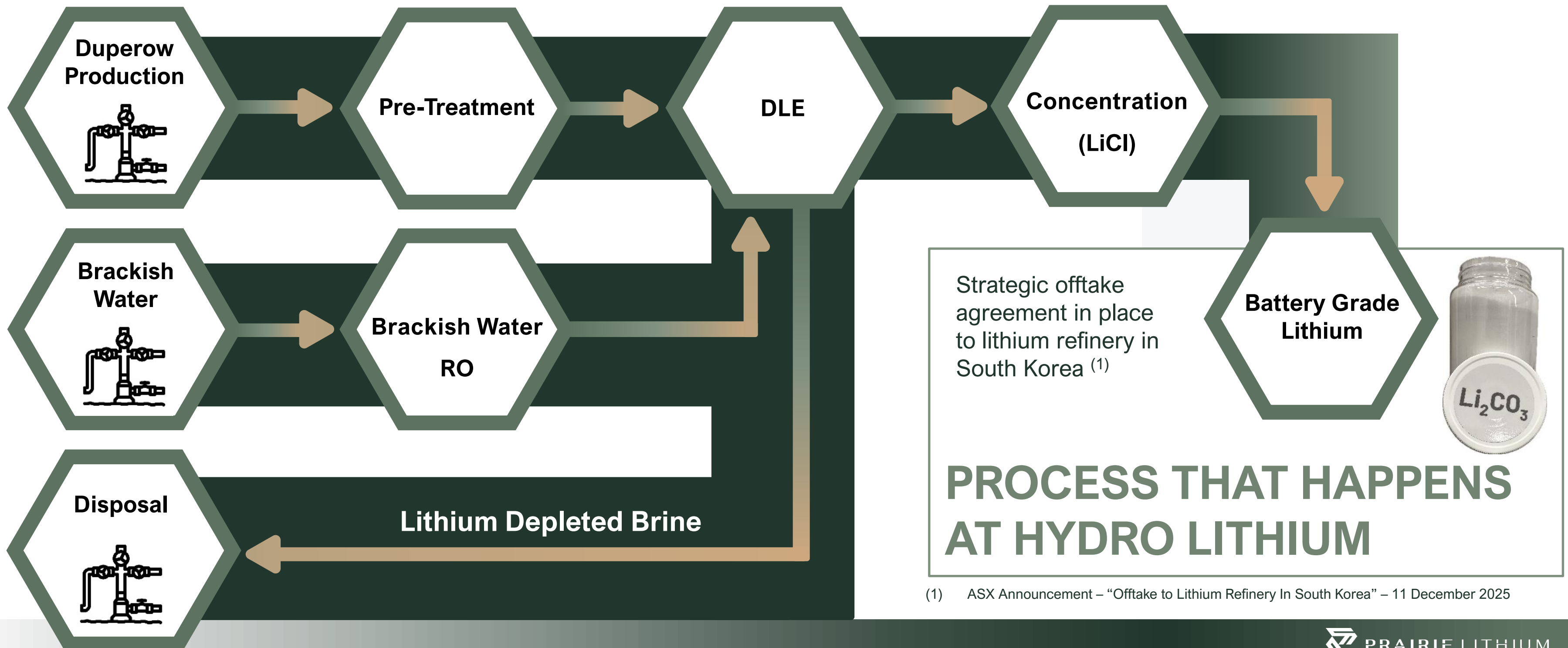
- **1 WELL DRILLED**
 - Future Production or Disposal well

**Canada's 1st and only lithium brine facility
approved for commercial-scale production**

Prairie Lithium Project

INNOVATIVE & LOW-COST FLOW SHEET

PROCESS THAT HAPPENS AT EACH PAD



(1) ASX Announcement – “Offtake to Lithium Refinery In South Korea” – 11 December 2025

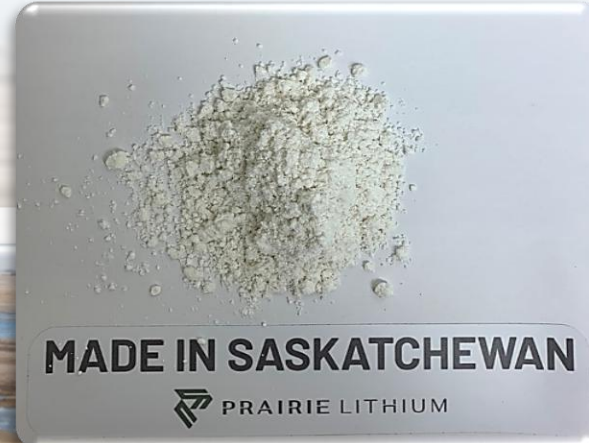
Prairie Lithium Project

STRATEGIC OFFTAKE AGREEMENT WITH
HYDRO LITHIUM⁽¹⁾



Prairie Lithium Resource Production Facility

Saskatchewan, Canada



MADE IN SASKATCHEWAN



Hydro Lithium Battery Grade Refinery

Geumsan-ro, Chubu-myeon, Geumsan-gun,
Chungcheongnam-do, South Korea



¹ ASX Announcement – “Binding Offtake Secured for 100% of Phase 1 Production with ~AU\$10M Strategic Collaboration and Definitive Offtake” – 2 April 2026

Prairie Lithium Project

STRATEGIC OFFTAKE AGREEMENT WITH HYDRO LITHIUM⁽¹⁾

- ▶ Binding Offtake for Prairie Lithium to supply Hydro Lithium with 100% of the production from the Company's Phase 1 commercial-scale proof-of-concept plant with up to 150 TPA LCE for 10 years⁽¹⁾
- ▶ Operational lithium refinery in South Korea with a capacity of 3,600 TPA LCE seeking to rapidly expand operations⁽¹⁾
- ▶ Hydro Lithium is committing AU\$10M in advanced refining equipment to the Prairie project in Saskatchewan, Canada⁽¹⁾
- ▶ This strategy allows Prairie Lithium to enter the market by selling an intermediate product, which reduces costs and operational complexity associated with the battery grade conversion process
- ▶ Non-binding offtake to supply Stardust Power with 6,000 TPA LCE in North America⁽²⁾



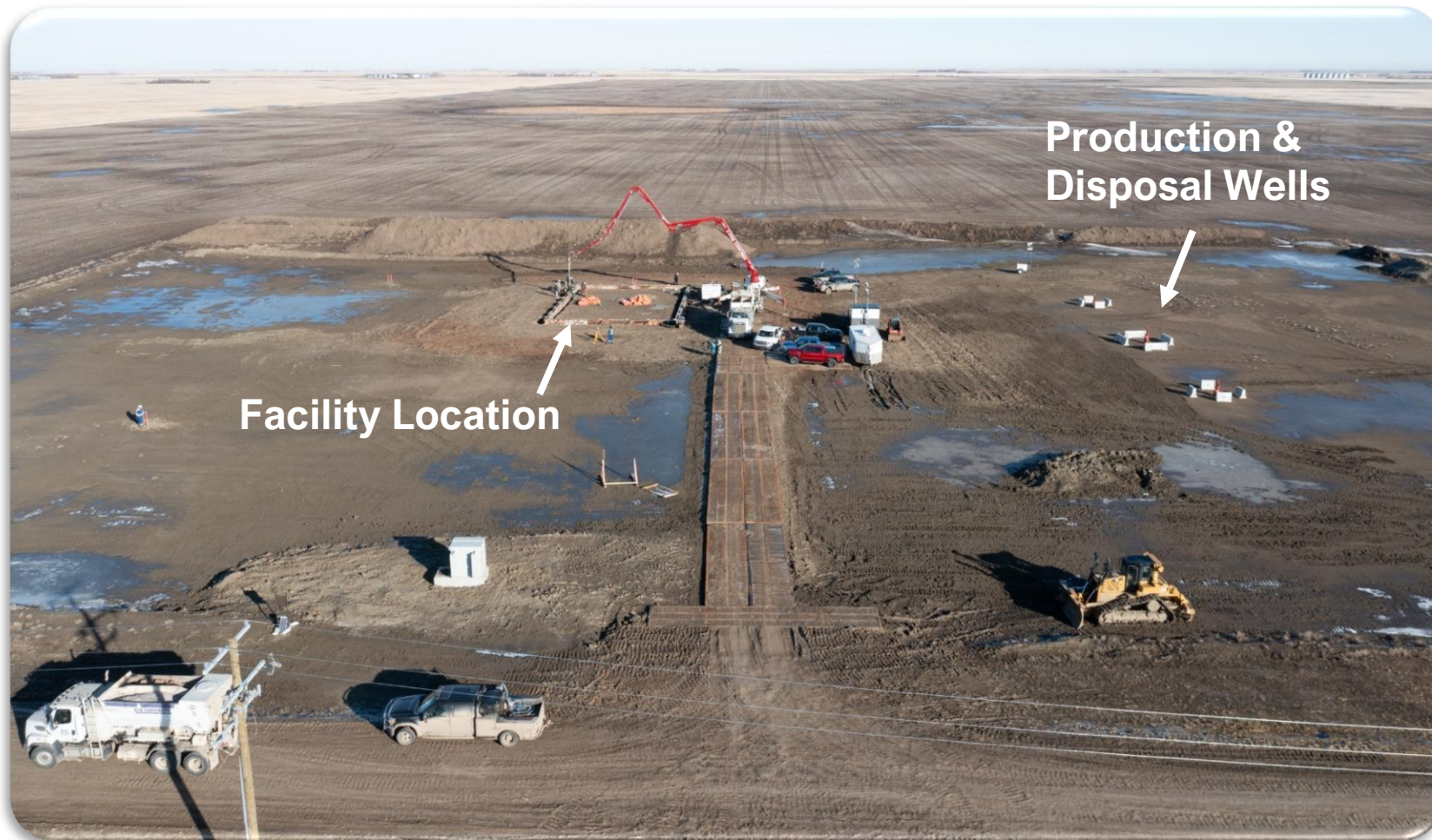
Signing Ceremony in Korea
(L-R: The Honourable Maninder Sidhu, Minister of International Trade, Global Affairs Canada; Dr. Uong Chon; Paul Lloyd; H.E. Philippe Lafortune, Ambassador of Canada to the Republic of Korea)

- (1) ASX Announcement – “Binding Offtake Secured for 100% of Phase 1 Production with ~AU\$10M Strategic Collaboration and Definitive Offtake” – 2 April 2026
- (2) ASX Announcement – “Strategic North American Offtake To Lithium Refinery” – 22 October 2025
- (3) ASX Announcement – “North America’s First Lithium Brine Facility” – 17 February 2026. The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning estimates in the relevant market announcement continue to apply and have not changed.

Phase 1: Pad #1

PRODUCTION FACILITY CONSTRUCTION

- ▶ Production and disposal wells drilled and tested⁽¹⁾
- ▶ Approved for Phase 1 commercial production of 150 TPA LCE⁽²⁾
- ▶ Production Facility construction is underway for commissioning by Q4 2026
- ▶ Binding offtake in place for 100% of Phase 1 production

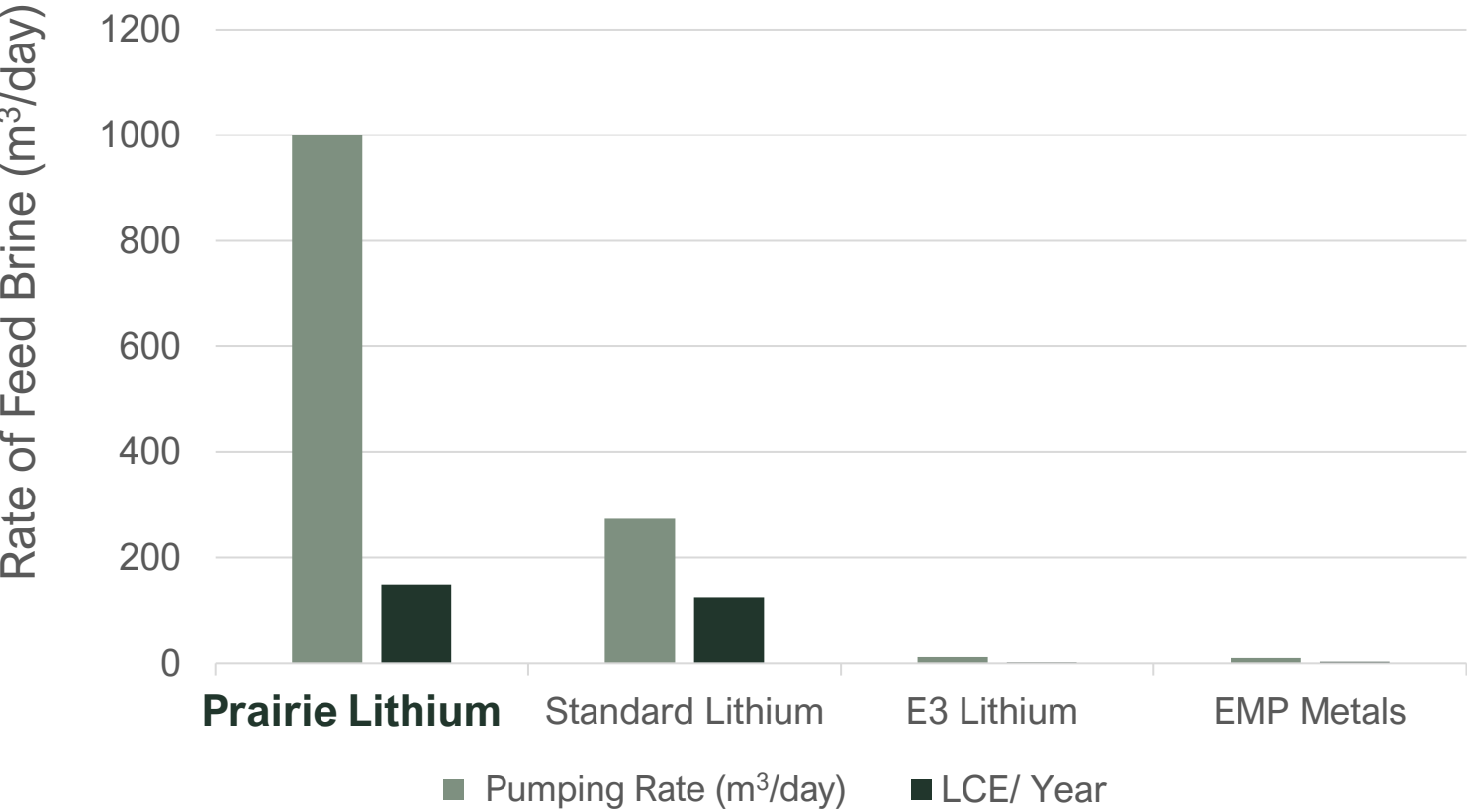


- (1) ASX Announcement – “Multi-Pad Lithium Drilling Program Completed at Prairie” – 19 November 2024
(2) ASX Announcement – “Prairie Project Production Approved & Project Update (Amended)” – 23 May 2025
(3) ASX Announcement – “Construction of Lithium Plant in Full Swing at Prairie Project” - 5 March 2026

Commercial Facility Update

COMMISSIONING THE LARGEST DLE FACILITY NORTH AMERICA⁽³⁾

North American DLE Demonstration Facilities



Demonstration Facility Operator	Lithium Concentration (mg/L)	Pumping Rate (m³/day)	LCE / Year
Prairie Lithium	104 ⁽¹⁾	1000 ⁽²⁾	150 ⁽³⁾
Standard Lithium	237 ⁽⁴⁾	274	124 ⁽⁵⁾
E3 Lithium	76 ⁽⁶⁾	12 ⁽⁷⁾	2
EMP Metals	141 ⁽⁸⁾	10 ⁽⁹⁾	3

(1) JORC Code, 2012 Edition – Figure A-2: Stratigraphic Cross Section of wells in Saskatchewan with lithium concentrations within and adjacent to Prairie Lithium’s Property (feed brine 104 mg/L)

(2) ASX Announcement – “Approval to Produce & Dispose for Phase 1 at Prairie” – 24 February 2025 (1000 m³/day feed rate)

(3) ASX Announcement - “Construction Nearing Completion with Fully Secured Offtake and Clear Path to First Revenue” – 13 April 2026 (150 TPA LCE Demonstration Plant)

(4) NI 43-101 Technical Report - “South West Arkansas Project NI 43-101 Technical Report & Definitive Feasibility Study” - 3 September 2025 (Demonstration Plant feed brine 237 mg/L)

(5) TSX Announcement – “Standard Lithium Completes Commissioning and Commences Full-time Operation of its Lithium Extraction Demonstration Plant” – 19 May 2020 (11.4 m³/hr feed rate)

(6) NI 43-101 Technical Report – “Clearwater Project NI 43-101 Technical Report on Pre-Feasibility Study” – 20 June 2024 (75.5 mg/L P50 lithium concentration)

(7) TSX.V Announcement – “E3 Lithium Provides Update on the Clearwater Project and 2025 Demonstration Plant Development Plans” – 25 February 2026 (12 m³/day feed rate)

(8) NI 43-101 Technical Report – “NI 43-101 Technical Report on the Lithium Brines of the Mansur Viewfield Areas of Southern Saskatchewan, Canada (141 mg/L weighted average lithium concentration)

(9) CSE Announcement – “EMP Metals Receives First Saltworks Equipment Deliveries at Project Aurora Demonstration Plant” – 6 May 2026 (10 m³/day feed rate)

Further Information

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Stock Information

ASX : PL9

OTC : PLIXF



RESOURCE

	Li Mass (tonnes)	LCE Mass (tonnes)
Producing Formations	Indicated	Indicated
Seward	62,459	332,469
Flat Lake	4,076	21,697
Upper Wymark	110,674	589,118
Middle Wymark	449,381	2,392,055
Lower Wymark	97,223	517,518
Saskatoon	131,565	700,320
Total	860,000	4,600,000

Representative lithium concentrations within the Resource area based on the mass volume and brine volume estimates. The average lithium concentration across all zones over the Prairie Project land permits is 98 mg/L.

ASX Announcement – “Prairie Project Production Approved & Project Update (Amended)” – 23 May 2025



PRAIRIE LITHIUM

