

# The Future of Canadian Lithium

**April 2024** 

TSX.V: ETL | OTCQX: EEMMF | FSE: OW3



# **Forward Looking Statements**

This presentation contains forward-looking statements regarding E3 Lithium Ltd. ("E3 Lithium" or "the Company") and the potential of its current and future projects. Generally, forward-looking statements can be identified by the use of forward-looking language such as "plans", "expects", "budgets", "schedules", "estimates", "forecasts", "intends", "anticipates", "believes", or variations of such words and phrases, and statements that certain actions, events or results "may", "could", "would", "might", "will be taken", "will occur" or "will be achieved". Forward-looking statements are based on the opinions and estimates of E3 Lithium as of the date such statements are made.

Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, levels of activity, performance or achievements of E3 Lithium to be materially different from those expressed or implied by such forward-looking statements, including, but not limited to. risks related to: E3 Lithium's ability to effectively implement its planned exploration programs; unexpected events and delays in the course of E3 Lithium's exploration and drilling programs; changes in project parameters as plans continue to be refined; the ability of E3 Lithium to raise the capital necessary to meet its milestones, conduct its planned exploration programs and to continue exploration and development on its properties: the failure to discover any significant amounts of lithium or other minerals on any of E3 Lithium's properties; the fact that E3 Lithium's properties are in the exploration stage and exploration and development of mineral properties involves a high degree of risk and few properties which are explored are ultimately developed into producing mineral properties; the fact that the mineral industry is highly competitive and E3 Lithium will be competing against competitors that may be larger and better capitalized, have access to more efficient technology, and have access to reserves of minerals that are cheaper to extract and process; the fluctuations in the price of minerals and the future prices of minerals; the fact that if the price of minerals deceases significantly, any minerals discovered on any of E3 Lithium's properties may become uneconomical to extract; the continued demand for minerals and lithium; that fact that resource figures for minerals are estimates only and no assurances can be given than any estimated levels of minerals will actually be produced; governmental regulation of mining activities and oil and gas in Alberta and elsewhere, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection; environmental regulation, which mandate, among other things, the maintenance

of air and water quality standards and land reclamation, limitations on the general, transportation, storage and disposal of solid and hazardous waste; environmental hazards which may exist on the properties which are unknown to E3 Lithium at present and which have been caused by previous or existing owners or operators of the properties; reclamation costs which are uncertain; the fact that commercial quantities of minerals may not be discovered on current properties or other future properties and even if commercial quantities of minerals are discovered, that such properties can be brought to a stage where such mineral resources can profitably be produced therefrom; the failure of plant or equipment processes to operate as anticipated; the inability to obtain the necessary approvals for the further exploration and development of all or any of E3 Lithium's properties; risks inherent in the mineral exploration and development business; the uncertainty of the requirements demanded by environmental agencies; E3 Lithium's ability to hire and retain qualified employees and consultants necessary for the exploration and development of any of E3 Lithium's properties and for the operation of E3 Lithium's business; and other risks related to mining activities that are beyond E3 Lithium's control.

Although E3 Lithium has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking statements in this presentation, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements contained in this presentation. E3 Lithium does not undertake to update any forward-looking statements except in accordance with applicable securities laws.

Unless otherwise indicated, Chris Doornbos, P. Geo., President and CEO at E3 Lithium Ltd. and a Qualified Person under National Instrument 43-101, has reviewed and is responsible for the technical information contained in this presentation.

#### References:

<sup>1:</sup> The Preliminary Economic Assessment (PEA) for the Clearwater Lithium Project NI 43-101 technical report is amended Sept 17, 2021. The mineral resource NI 43-101 Technical Report for the North Rocky Property, effective October 27, 2017, identified 0.9Mt LCE (inferred). The mineral resource NI 43-101 Technical Report for the Bashaw District Project, effective March 21, 2023, identified 16.0Mt LCE (measured & indicated). All reports are available on the E3 Lithium's website (e3lithium.ca/technical-reports) and SEDAR (www.sedar.com).



**OUR VISION** 

# To be a global leader in responsibly-sourced lithium, fueling the global transition towards a brighter energy future.

## **About E3 Lithium**





# Canada's largest high confidence lithium resource

E3 Lithium has 16.0 Mt of Measured & Indicated lithium in brine resources, 5x more than Canada's next largest M&I resource<sup>1</sup> and significant on a global scale.



# De-risked, high ESG extraction technology

E3 Lithium has proven Direct Lithium Extraction technology on its brines at scale through its 2023 field pilot plant, de-risking its commercialization plans.



# Clear and ambitious pathway to commercialization

With a track record of success and proven ability to fund, staff, plan and execute on its plans, E3 Lithium is building western North America's critical minerals supply chain.

THE FUTURE OF CANADIAN LITHIUM 1: Natural Resources Canada 4

# **Advancing the Clearwater Project**













# Clearwater Project (Bashaw District)

#### World-class assets:

E3 Lithium is poised to produce sustainable battery-grade lithium from brine found in one of the largest resources globally in the world-class Leduc Aquifer. Based in Alberta, E3 Lithium's Clearwater Project is being developed on the backbone of the mature and sophisticated energy industry that will allow the company to catapult its development.

#### Canada's largest lithium M&I:

16.0 million tonnes of Measured & Indicated Lithium Carbonate Equivalent

#### **HIGHLIGHTS**

Primary Commodity:

Lithium

Phase 1 Plan:

Estimated 20,000+ tonnes LHM/year with potential to expand up to 150,000 tonnes LHM/year

Field Pilot Plant Completed

Pre-feasibility Study (PFS) underway

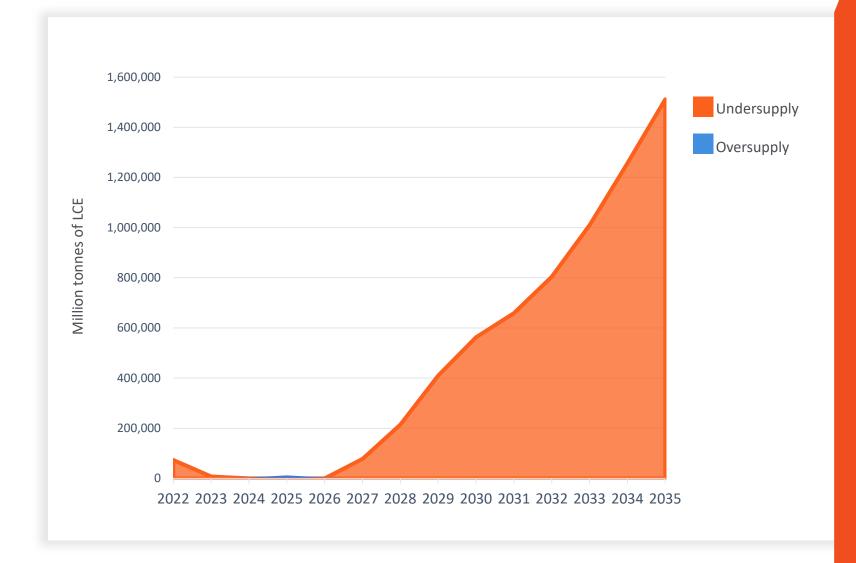
Resource 16.0 Mt LCE M&I + 0.9 Mt Inferred





# A Growing and Robust Market

- Strong demand growth expected from Electric Vehicle (EV) sales and battery capacity growth from 2026 into 2035
- Beyond passenger EVs, lithium demand is growing for e-buses, commercial EVs, stationary storage and consumer electronics<sup>1</sup>
- Anticipated supply constraints likely to coincide with E3's planned production



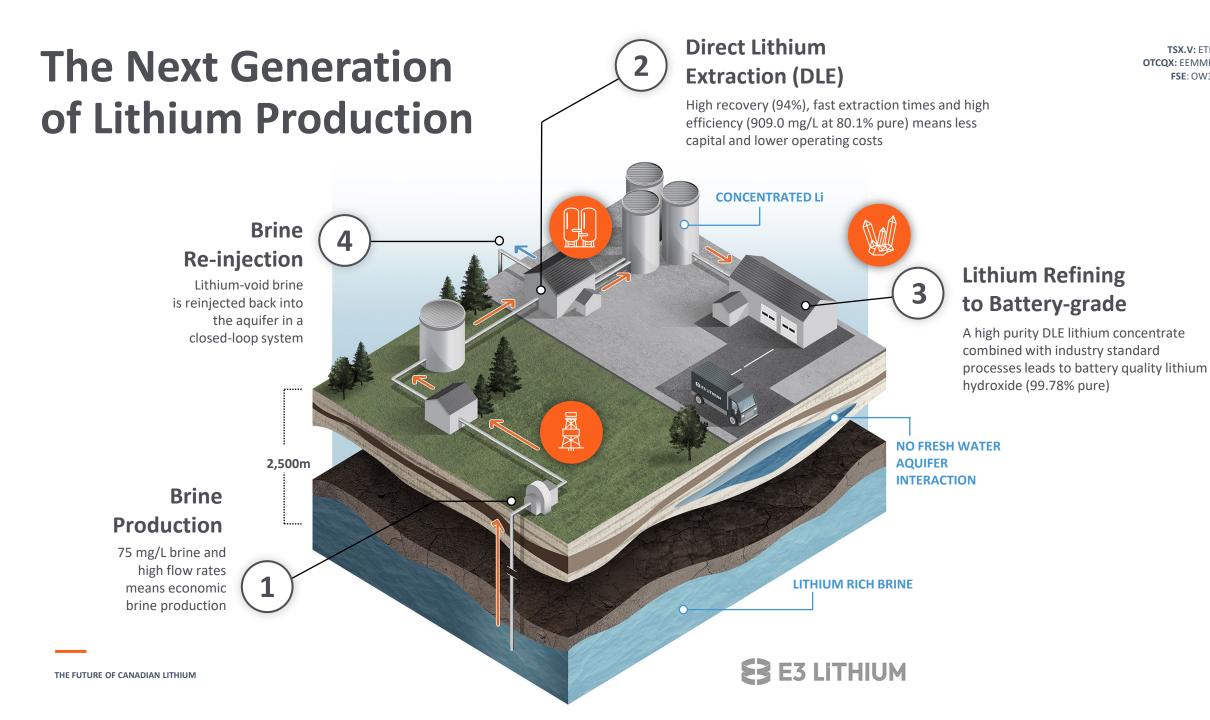
THE FUTURE OF CANADIAN LITHIUM 1: BloombergNEF Source: Benchmark Mineral Intelligence 6

Savannah, Georgia.

**NORTH AMERICAN** BATTERY INITIATIVES







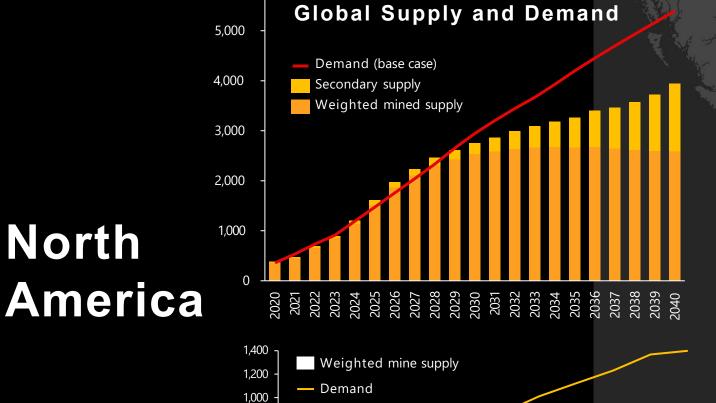


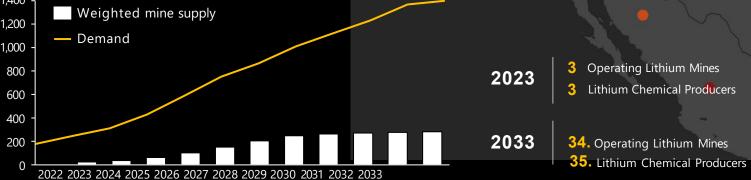
6,000

400

200









North

**Possible** 

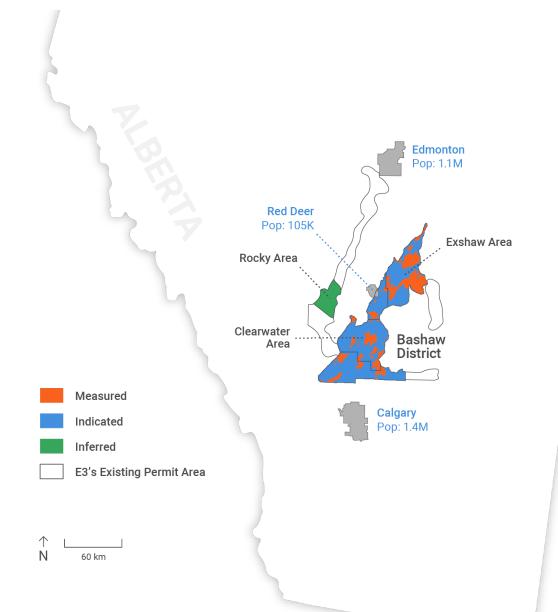
Probable

Highly Probable Operating

# **Global Scale Measured & Indicated DLE Resources**



COMPANY	LOCATION	M&I (MT LCE)	
Lithium Americas	U.S.	16.1	
E3 Lithium	Canada	16.0	
Jindalee Resources	U.S.	11.1	
Vulcan Resources	Europe	10.1	
Galan Lithium	Argentina	6.4	
Standard Lithium	U.S.	4.2	
Lake Resources	Argentina	2.9	
Alpha Lithium	Argentina	2.1	
Lithium Power International	Argentina	1.9	
Lithium Chile	Chile, Argentina	1.7	
Lithium South Development	Argentina	1.6	
CleanTech Lithium	Chile	1.1	
LithiumBank/Pristine	Canada	0.4	
Anson Resources	Utah	0.3	
Arizona Lithium	Canada & U.S.	0.2	



THE FUTURE OF CANADIAN LITHIUM Source: Company disclosures

## **DLE Field Pilot Plant Exceeds KPIs**



Direct Lithium Extraction (DLE) technology is the key to unlocking E3 Lithium's vast resource.

#### **2023 Field Pilot Plant Results**

The test results produced at E3's 2023 DLE Field Pilot Plant exceeded all KPIs. Results produced via one test run include<sup>1</sup>:

- 94% lithium recovery
- 80.1% and 909.0 mg/L lithium grade in the lithium product stream
- Flow rate ratio of 9

The production of high-quality concentrate at relatively high flow rates enables E3 to proceed with developing lithium in Alberta.



E3 Lithium's field pilot plant in central Alberta was constructed and operated in 2023.



1: All KPIs, fulsome results and descriptions can be found on www.e3lithium.ca/Lithium1

E3 Lithium continues to develop the engineering and cost estimates required to demonstrate the commerciality of the process.

# A Track Record of Success



2022-2023

2016

**Technology & Engineering Financing** Resource **Corporate**  Alberta's first Field Pilot >\$60M CAD raised Upgraded to 16.0 Mt Strategic agreement signed Plant exceeded LCE of Measured & in aggregate with Imperial all Key Performance Indicated and 0.9 Mt \$1.8M Alberta Innovates E3's lithium used in lithium **Indicators LCE of Inferred Mineral** grant, \$3.5M Natural metal battery; MOU signed Resources<sup>1</sup> with Pure Lithium Successfully produced Resources Canada grant and lithium carbonate \$27M Strategic Innovation Three-well exploratory Strategic land position and battery-grade Lithium Fund Investment drilling program in Saskatchewan announced Hydroxide Monohydrate complete; total depth Pursuing multiple provincial, achieved + reservoir with purity of 99.78% federal and U.S. sources characteristics Selected Fluor as lead for of non-dilutive funding confirmed Prefeasibility Study

<sup>1:</sup> The mineral resource NI 43-101 Technical Report for the North Rocky Property, effective October 27, 2017, identified 0.9Mt LCE (inferred). The mineral resource NI 43-101 Technical Report for the Bashaw District Project, effective March 21, 2023, identified 16.0Mt LCE (measured & indicated). All reports are available on the E3 Lithium's website (e3lithium.ca/technical-reports) and SEDAR (www.sedar.com).







- Publish PFS results
- Feasibility Study (FS)
- Commercial development
- Environmental surveys
- Consultation and permitting

### 2025

- Detailed engineering
- Project finance
- Equipment procurement and manufacturing

#### 2026

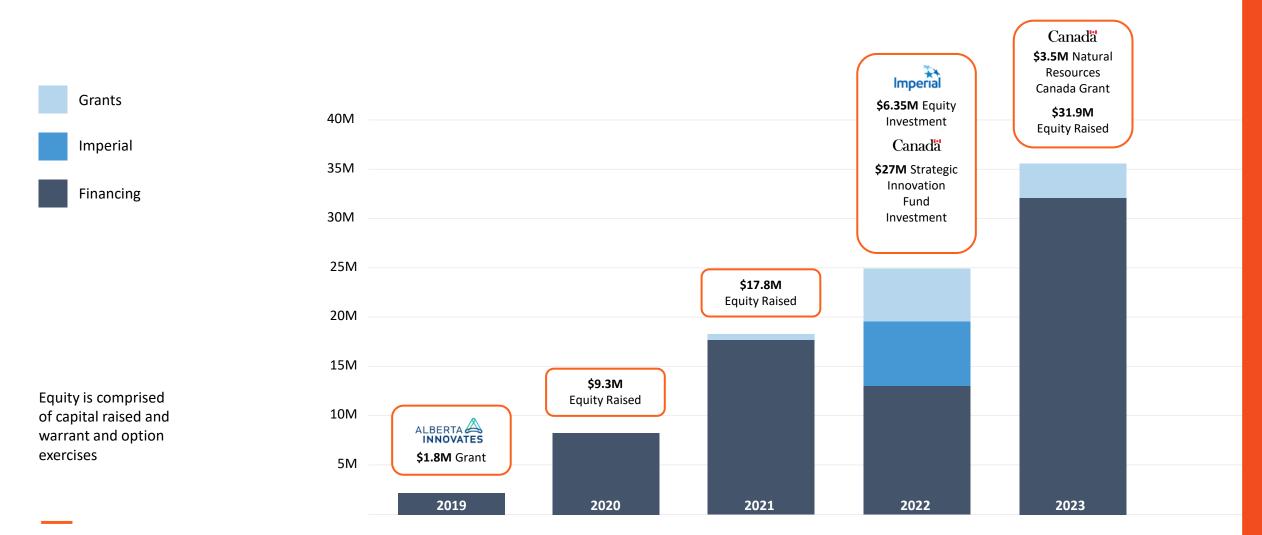
 Commercial construction and production (~20,000+ tonnes LHM per year)

#### 2030s and beyond

 Potential to produce up to 150,000 tonnes of LHM/year, enough for approximately 2.2M EVs<sup>1</sup>, once entirety of Alberta resource is commercialized

# More than \$32M in Non-dilutive Funding Secured





# **Established and Efficient Permitting Process**



#### **The Alberta Advantage**



# Efficient & established permitting process

Established permitting and licensing framework; lithium development under the Alberta Energy Regulator, providing streamlined licensing and approvals



# Existing infrastructure & skillset

Mature industry practices, skilled workforce and ability to re-purpose and use existing oil and gas infrastructure



# Strong foundation for resource development

Well developed
Alberta frameworks
that guide meaningful
consultation with project
stakeholders and Indigenous
communities

#### **HARD ROCK MINING**



#### **Direct Lithium Extraction (DLE)**

- No freshwater aquifer interaction
- Closed loop system
- Minimal land footprint

- Fixed reclamation and abandonment costs



The goal is to produce lithium to meet the highest ESG standards

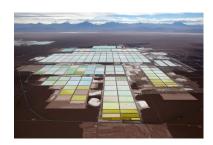
E3's production facility and technology:

- Uses <3% of the land of typical lithium projects
- Requires no salars, tailings ponds or open pit mining
- Can reduce carbon footprint using renewable sources of power and carbon capture and sequestration



#### **SALARS** (Brines – Evaporative)

- Conventional evaporation process for brine concentration
- Slow process with large environmental footprint



- High flow rates
- Low operation costs





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Globally significant resource includes 16.0 Mt of M&I and 0.9 Mt of Inferred LCE<sup>1</sup>



Direct Lithium Extraction technology successfully tested

at near commercial scale in realworld operating conditions on E3's brines

# Proposed Phase 1 Plan: 20,000+ tonnes LHM/year

Potential to expand to up to 150,000 tonnes LHM/year with a potential operating life up to 50 years



Why Invest?



# Global growth in Electric Vehicle (EV) usage

Long-term robust market demand for lithium







## Industry-leading ESG characteristics

Fundamental focus on minimal land footprint and carbon emissions

**Our Partners:** 





PURE LITHIUM

<sup>1:</sup> The mineral resource NI 43-101 Technical Report for the North Rocky Property, effective October 27, 2017, identified 0.9Mt LCE (inferred). The mineral resource NI 43-101 Technical Report for the Bashaw District Project, effective March 21, 2023, identified 16.0Mt LCE (measured & indicated). All reports are available on the E3 Lithium's website (e3lithium.ca/technical-reports) and SEDAR (www.sedar.com).



# **Capital Structure**

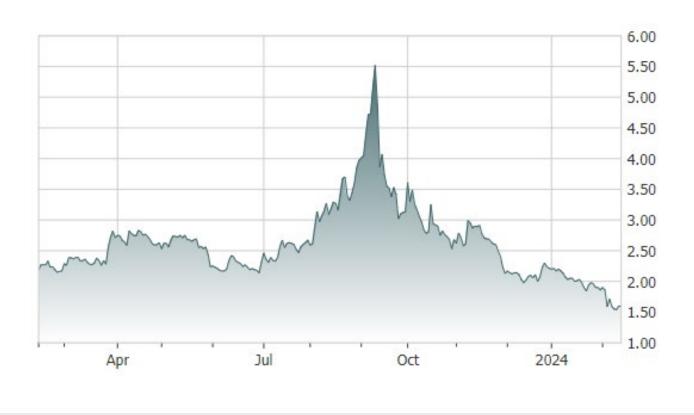
#### **CAPITAL STRUCTURE**

Working Capital(1)	\$37.7M
Shares Outstanding(1)	74.8M
Warrants Outstanding(2)	3.8M
Stock Options(1)	5.0M

#### As of February 23, 2024

TSX VENTURE – QUOTED IN CAD	ETL	
Share Price	\$1.78	
Market Cap	\$134M	
OTCQX – QUOTED IN USD	EEMMF	
Share Price	\$1.33	
Market Cap	\$100M	

#### **Stock Chart (12 month)**



Source: TSX InfoSuite February 12, 2024

<sup>(1)</sup> As at September 30, 2023

<sup>(2)</sup> Includes 3.4 million pre-paid warrants issued to Imperial Oil Limited

# Appendix



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# **Analyst Coverage**





WEALTH PARTNERS

**Research Analyst:** Gabriel Gonzalez



Research Analyst: Puneet Singh



Research Analyst: Alina Islam



Research Analyst: Joe Reagor

The views and recommendations which may be expressed by the analysts listed above or in such analysts' reports are the views and responsibility of the analysts and the firm they represent and do not necessarily represent the views of the management of E3 Lithium Ltd. ("E3"). E3 claims no ownership or proprietary interest in, or adoption of, such analysts' recommendations or reports, and the provision of the above information does not necessarily represent E3's agreement or disagreement with such analysts' recommendations or any information, forecasts, projections or forward-looking statements contained in such analysts' reports.

# **Management Team**



#### Experienced and highly skilled team committed to maximizing shareholder value



**Chris Doornbos**, P.Geo President, CEO & Director



Ray Chow, CPA, CA Chief Financial Officer



**Kevin Carroll**, P.Eng Chief Development Officer



Leigh Clarke , LL.B.
VP, Government & Regulatory



**Peter Ratzlaff**, P.Eng VP, Resource Development



Brian Ceelen, P.Eng Director, Commercial Development



Caroline Mussbacher, P.Eng.
Director, Direct Lithium
Extraction



Paul Godley P.Eng, PMP Senior Director, Project Execution



Jody Calvert, P.Eng. Director, Projects



**Robin Boschman,** MBA Director, Investor Relations & Corporate Communications

### **Board of Directors**



#### A history of strong governance

#### John Pantazopolous, CFA, ICD.D Chairman of the Board

John is a finance and capital markets professional with more than 20 years of energy industry and senior banking experience.

# Alexandra Cattelan, MASC Chair – Compensation and HR Committee

Alex has more than 30 years of experience leading electric propulsion and advanced mobility programs and lithium battery development.

#### **Kevin Stashin,** MBA, P.Eng Chair – Corporate Governance Committee

Kevin is an oil and gas executive with more than 40 years of industry experience with both junior and major companies.

# **Chris Doornbos,** P.Geo, ICD.D Director, President, CEO

Chris is an expert in developing major projects both in Canada and across the globe and founded E3 Lithium in 2016.

#### Mike O'Hara, B.SC, P.Eng Chair – Audit Committee

Mike is an oil and gas executive with 35 years of experience in founding, developing and managing profitable, growth-oriented oil and gas companies.

# Hon. Sonya Savage, KC, ECA, LLM Independent Director

Sonya started her career practicing law before transitioning to the pipeline industry. Sonya served for four years as a Senior Minister in the Alberta Government including as Minister of Energy.

# **Advisory Committee**



#### Designed to propel growth

#### Justin Jimmy, ICD.D

Justin is an aviator and a Chief Financial Officer with Indigenous Government, as well as an entrepreneur in the retail and consulting industries.

#### **Suzanne Patrick**

A retired Navy Commander and former Deputy Undersecretary of Defense, Suzanne served in the United States Navy Reserve for 21 years, rising to the rank of Commander.

#### Hon. Brad Wall

Brad previously served as the Premier of Saskatchewan where he demonstrated a consistent ability to bring political and business leaders together, implementing creative ways to bolster the Province's economic well-being.



Supplementing our strong
Board of Directors, our Advisory
Committee's extensive experience
and specialized expertise will help
realize our vision to be a global
leader in responsibly
sourced lithium."

Chris Doornbos, President, CEO and Director E3 Lithium

## E3 Lithium's Alberta-based M&I Resources



E3'S RESOURCE AREA	BRINE VOLUME (M³)	AVERAGE LITHIUM GRADE (MG/L)	RESOURCE TYPE	TOTAL LCE (TONNES)
Bashaw District	16.64x10 <sup>9</sup>	74.5	Measured	6,598,000
	23.72x10 <sup>9</sup>	74.5	Indicated	9,404,000
Bashaw TOTAL	40.36x10 <sup>9</sup>	74.5	M&I	16,002,000
Rocky	3.3x10 <sup>9</sup>	52.9	Inferred	930,000

#### **High Production Values**

- 16.0 Mt LCE of Measured & Indicated and 0.9 Mt LCE of Inferred Mineral Resources<sup>1</sup>
- Represents Canada's largest M&I resource<sup>2</sup> by ~5x
- The Clearwater Area contains 4.3 Mt M&I within the Bashaw District
- Of E3's total permit area, 31% is still to be developed with a resource estimate
- High reservoir deliverability; excellent porosity and permeability enables high production volumes
- 70+ years of production history
- Access to current and historical robust technical data sets
- Significant land position across 600,000 hectares

<sup>1:</sup> The mineral resource NI 43-101 Technical Report for the North Rocky Property, effective October 27, 2017, identified 0.9Mt LCE (inferred). The mineral resource NI 43-101 Technical Report for the Bashaw District Project, effective March 21, 2023, identified 16.0Mt LCE (measured & indicated). All reports are available on the E3 Lithium's website (e3lithium.ca/technical-reports) and SEDAR (www.sedar.com).

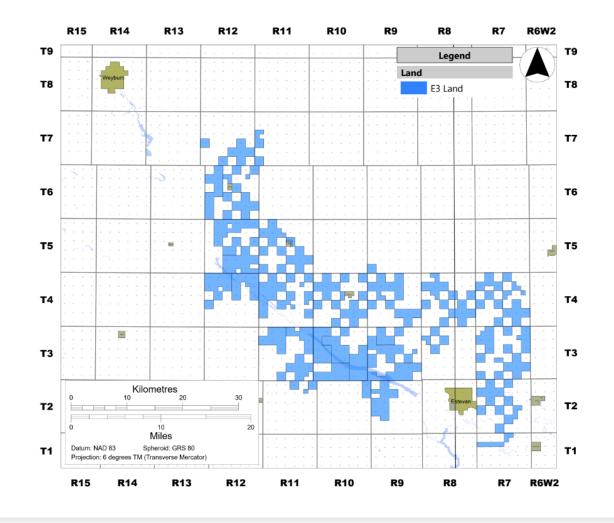
<sup>2:</sup> According to Natural Resources Canada, Canada currently has an estimated 3.2 million tonnes of M&I lithium resources located in hard rock deposits, making E3's M&I resource Canada's largest: https://natural-resources.canada.ca/our-natural-resources/minerals-metals-facts/lithium-facts/24009

# Strategically Positioned Saskatchewan Assets

#### **Overview**

- Located in the Estevan, Saskatchewan area
- Contiguous land position of 66,800 hectares (~258 sections)
- Duperow formation
- Lithium concentrations in the area as high as 191 mg/L
- Land held since 2021





### The Future of Canadian Lithium

# Get In Touch

investor@e3lithium.ca www.e3lithium.ca

