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# The Future of Canadian Lithium

October 2022

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

# 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 decreases 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:

1: Certain scientific and technical information contained herein is derived from the Inferred Minerals Resources outlined in NI 43-101 report for Clearwater Lithium Project PEA (September 17, 2021), Exshaw West Property (September 21, 2021), North Rocky Property (December 22, 2017) and Bashaw Resource Project (August 23, 2022). NI 43-101 Report and accompanying News Releases can be found on E3 Lithium’s website ([www.e3lithium.ca](http://www.e3lithium.ca)) or SEDAR ([www.sedar.com](http://www.sedar.com)).



OUR VISION

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

## Proprietary tech

Our proprietary ion-exchange technology has been developed to extract lithium from Alberta brines



## Robust resource

24.3 Mt of Inferred Lithium Mineral Resource<sup>1</sup> with significant opportunities for growth in a world-class jurisdiction

# About E3 Lithium

## Well-funded

We are well capitalized to accomplish major milestones as we continue to scale up our process towards commercialization.



## Small footprint

The simplicity of our design enables no tailings, no freshwater aquifer interaction and minimal land disturbance. Our goal is to be one of the lowest GHG emitters in the lithium industry.



## Alberta brines to battery grade

Our technology is engineered for purity to support the production of high-quality lithium products for direct sale to battery manufacturers.



## Experienced team

High-performing, technical and experienced team to progress our projects and deliver shareholder value.

## Optimized operations

Operating similar to petroleum in Alberta, we have the advantage of a mature industry and stable workforce ideally suited for commercial lithium operations.



# E3 Lithium and Imperial Oil advance commercial lithium in Canada

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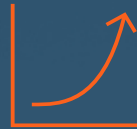
First investment in lithium from a global energy industry leader



USD\$5.0M equity investment



Technical support towards commercial lithium



Increases E3 Lithium's land position, giving E3 control over the most advanced resource area for lithium brines in Canada



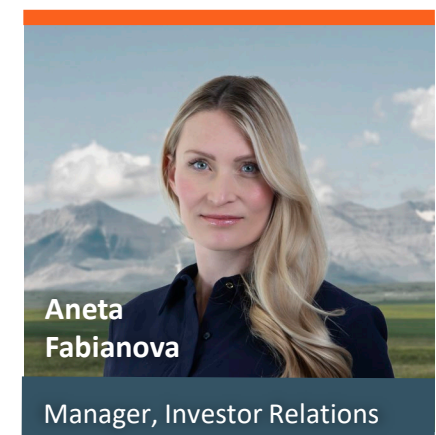
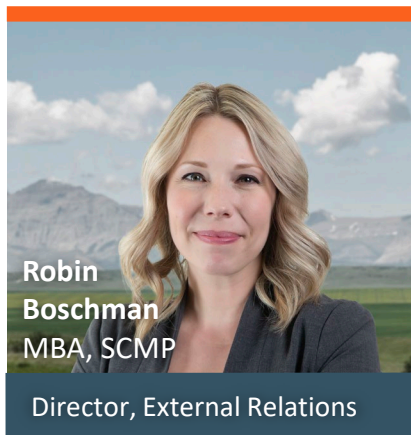
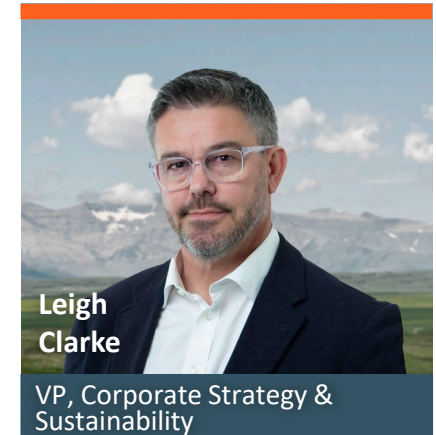
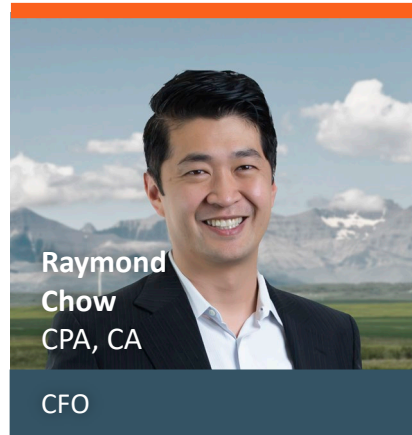
Supports E3's Pilot Project and commercial development plans to be one of the first to produce EV-ready lithium in Canada





# Management team

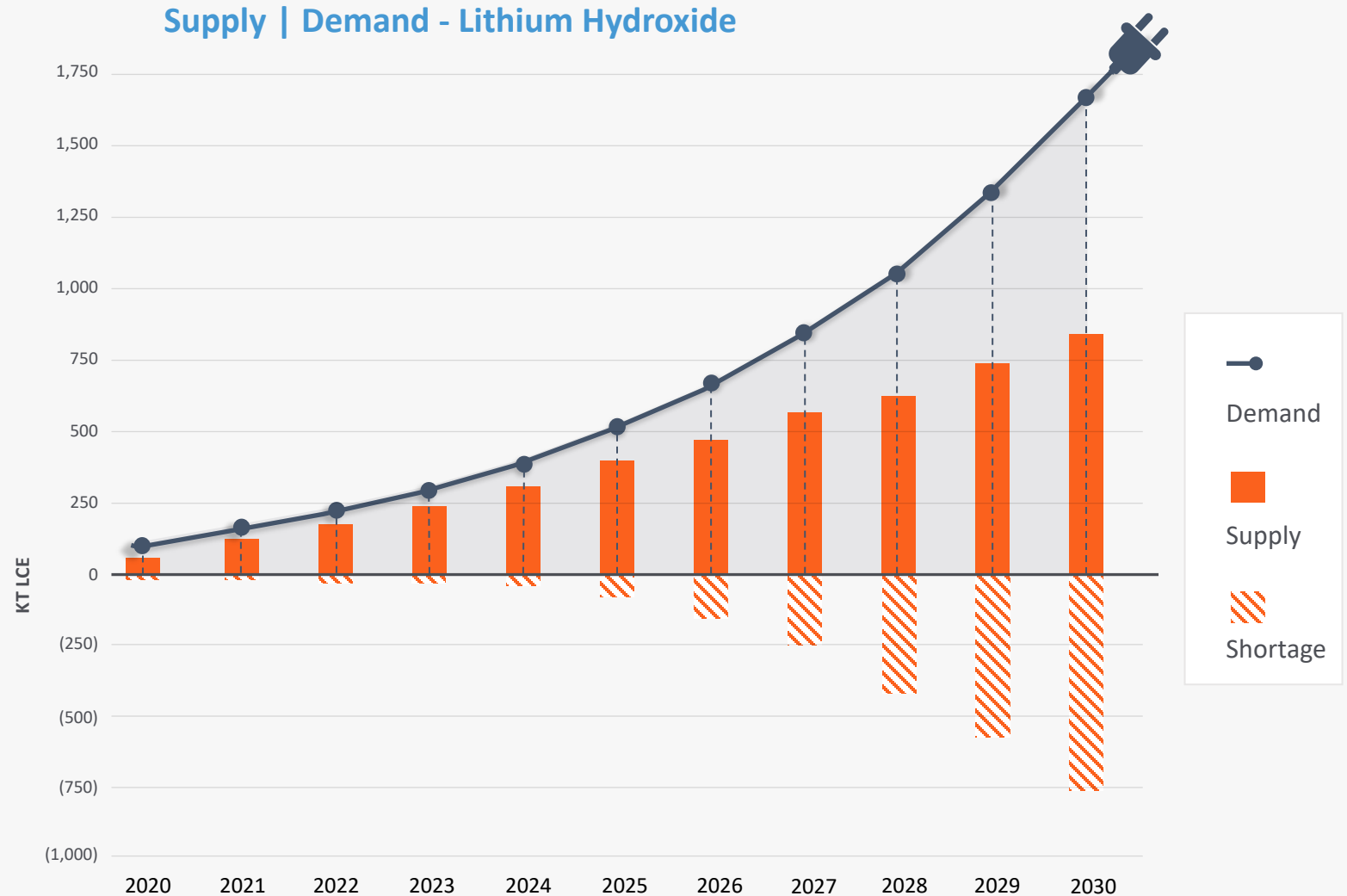
Experienced and technical team to drive shareholder value





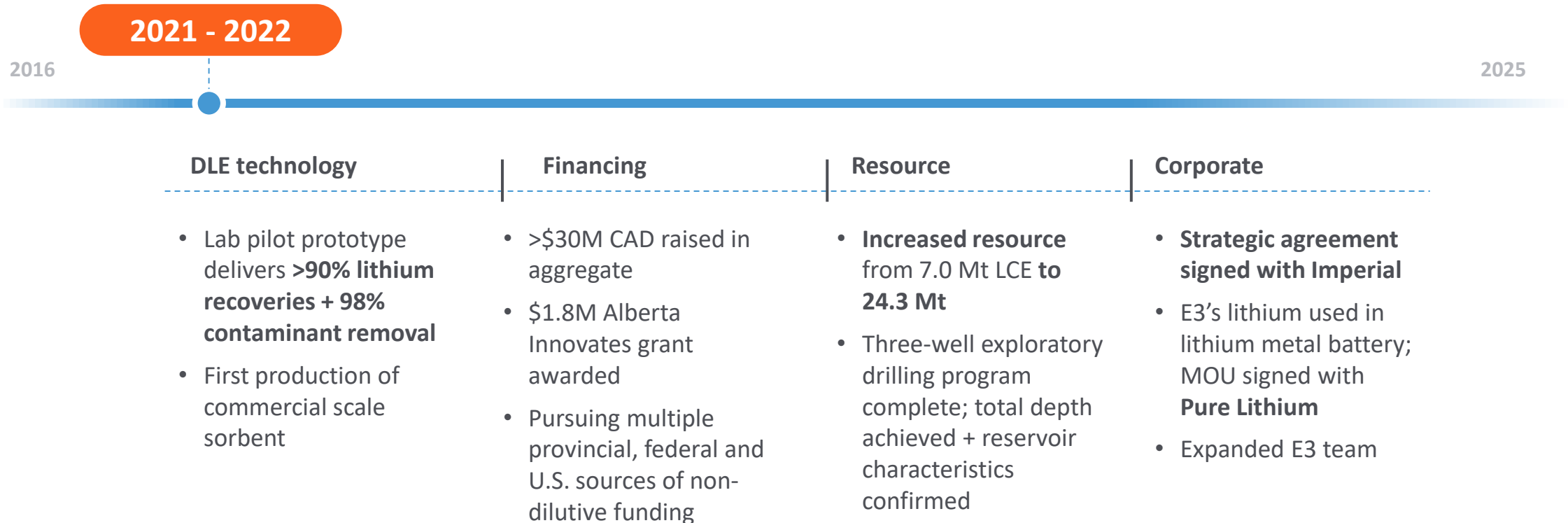
# A growing and robust market

- **Strong demand growth** expected from Electric Vehicle (EV) sales and battery capacity growth
- **Lithium pricing is increasing** as demand is expected to outstrip supply
- **Anticipated supply constraints** likely to coincide with E3's planned production



Source: RK Equity

# A track record of success





# Preliminary Economic Assessment

**NPV<sub>8%</sub>**  
US\$1.1B  
project  
value

**Price**  
US \$14,079  
per tonne  
LHM

**OpEx**  
US \$3,656  
per tonne

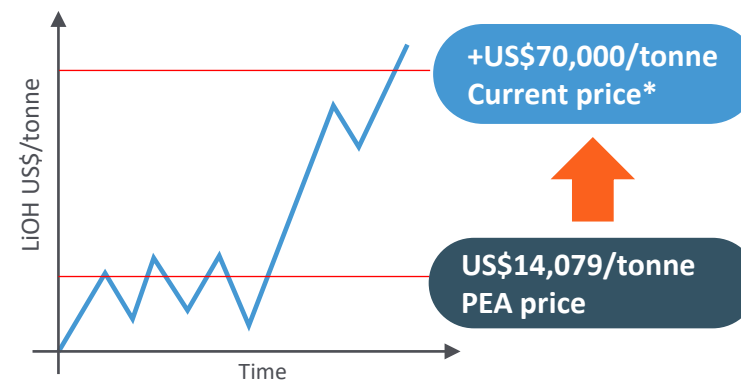
**CapEx**  
US \$600M

The PEA is preliminary in nature and the cost estimate includes inferred mineral resources. These are considered too geologically speculative to have the economic considerations applied that would enable them to be categorized as mineral reserves. There is no certainty the Clearwater Project outlined by the PEA will be realized.

Project Metrics <sup>1</sup>	Value	Unit
LHM Production	20,000	Tonnes/Year
Flow Rate	130,000	Metres <sup>3</sup>
Project Life	20	Years
Average Selling Price	US \$14,079	Per Tonne
Cash Operating Costs (OPEX)	US \$3,656	Per Tonne
Total Initial Capital Cost (CAPEX)	US \$602	Million
Pre-Tax NPV <sub>8%</sub>	US \$1.1	Billion
Payback Period (After-Tax)	3.4	Years

Refer to E3 Lithium's Preliminary Economic Assessment Sept 2021 ([www.e3lithium.ca](http://www.e3lithium.ca))

## Significant upside given current market



\*source: Benchmark Minerals



**Brine production**  
\$230M



**DLE facility technology**  
\$170M



**LiOH conversion**  
\$200M





# The next generation of lithium production

## Production steps (PEA basis<sup>1</sup>)



### Lithium-rich brine production

- Production of brine from the Leduc Reservoir
- Lithium concentration 75 mg/L
- Closed loop system: 100% re-injection of brine



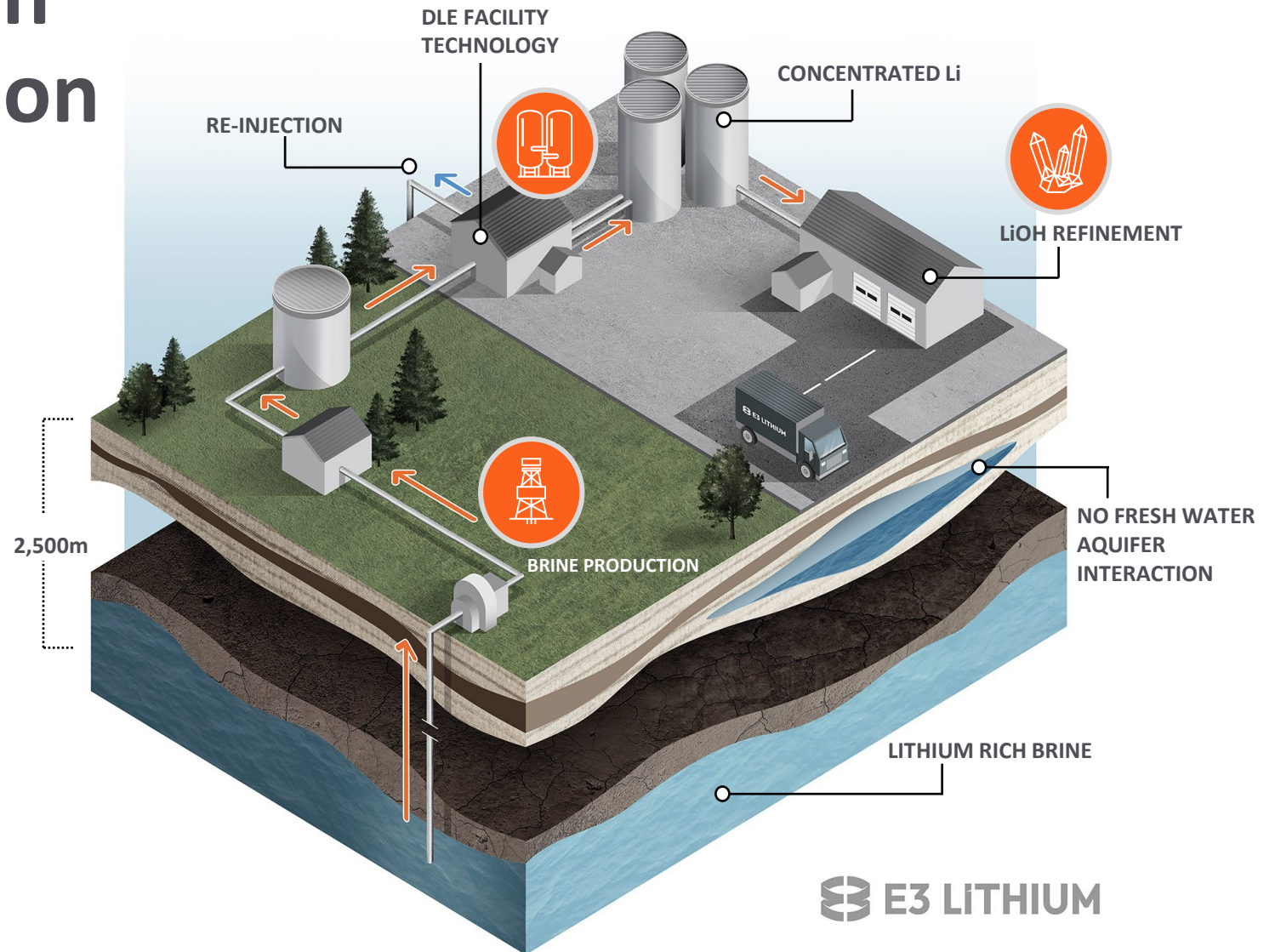
### E3's proprietary DLE ion-exchange technology

- Pre-treatment of brine before entering the DLE plant
- DLE technology generates a high purity lithium concentrate solution



### LiOH production

- Refinement of the lithium concentrate into battery quality lithium hydroxide for direct sale to battery manufacturers



**E3 LITHIUM**

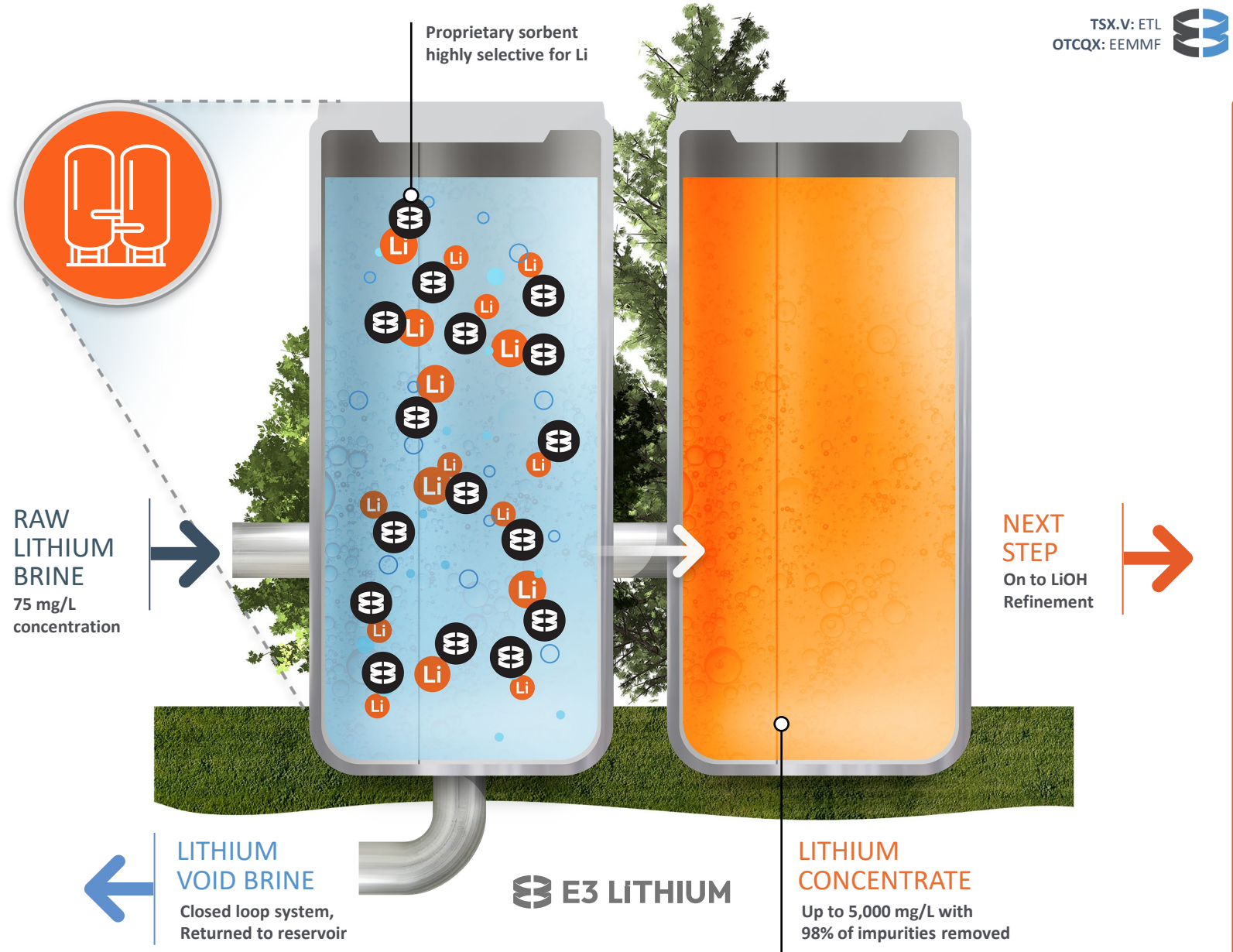
# Using ion-exchange for Direct Lithium Extraction

E3 Lithium has developed an industry-leading Direct Lithium Extraction (DLE) technology.

Competitive advantages of the technology include:

- Reducing 98% of impurities
- Rapid and high recovery
- Low energy consumption

E3's DLE technology is advancing through the pilot stage, however there is no guarantee the technology will work at a commercial level.





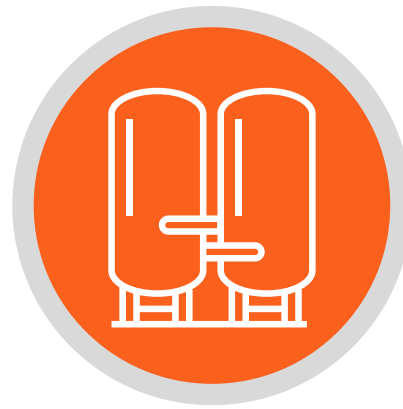
# A process path from proven industry standards



## Brine production

75 mg/L brine and high flow rates means economic brine production

**Building on 70 years of drilling in Alberta**



## Primary extraction - DLE

High recovery, fast extraction times and high efficiency means less capital and lower operating costs

**Repurposing water treatment processes**



## LiOH conversion

A high purity DLE lithium sulphate combined with industry standard processes leads to battery quality lithium hydroxide

**Using established lithium conversion methods**

Refer to E3 Lithium's Preliminary Economic Assessment Sept 2021 ([www.e3lithium.ca](http://www.e3lithium.ca))

# A secure, domestic source of lithium – 24.3 MT LCE<sup>1</sup>

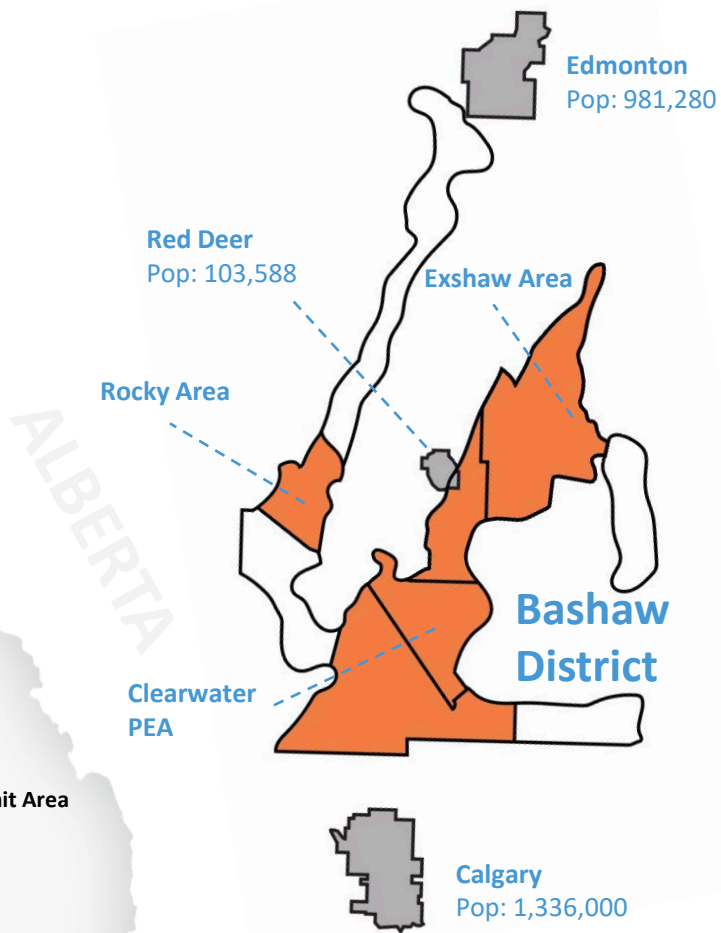


## HIGH PRODUCTION VOLUMES

- 24.3 Mt LCE of Inferred Mineral Resources<sup>1</sup> already identified to date
- One of the largest lithium resources GLOBALLY
- Opportunities for resource expansion across the Leduc and Nisku Aquifers

E3's resource area <sup>1</sup>	Percentage of E3's permit area	Brine volume (L)	Average lithium grade (mg/L)	Total LCE (Million Tonnes)
Bashaw District	64%	59.0 x10 <sup>12</sup>	74.5	23.4
Rocky Area	5%	3.3x10 <sup>9</sup>	52.9	0.9

- 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



Resource Areas

E3's Existing Permit Area

<sup>1</sup>: Inferred Mineral Resources outlined in NI 43-101 report for Bashaw District and Rocky Resource Area



# The Alberta Advantage

Established and efficient permitting process



## **Government & regulatory**

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



## **Established foundation for resource development**

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



# DLE provides the potential for industry leading ESG

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



## Hard rock mining

- Energy and capital intensive
- Large environmental footprint



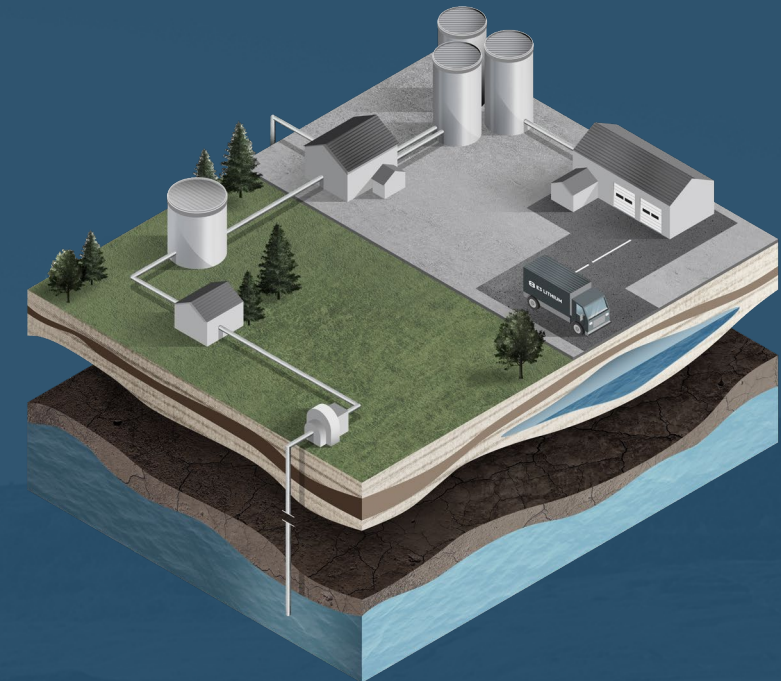
## Salars (Brines – Evaporative)

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



## Direct Lithium Extraction (DLE)

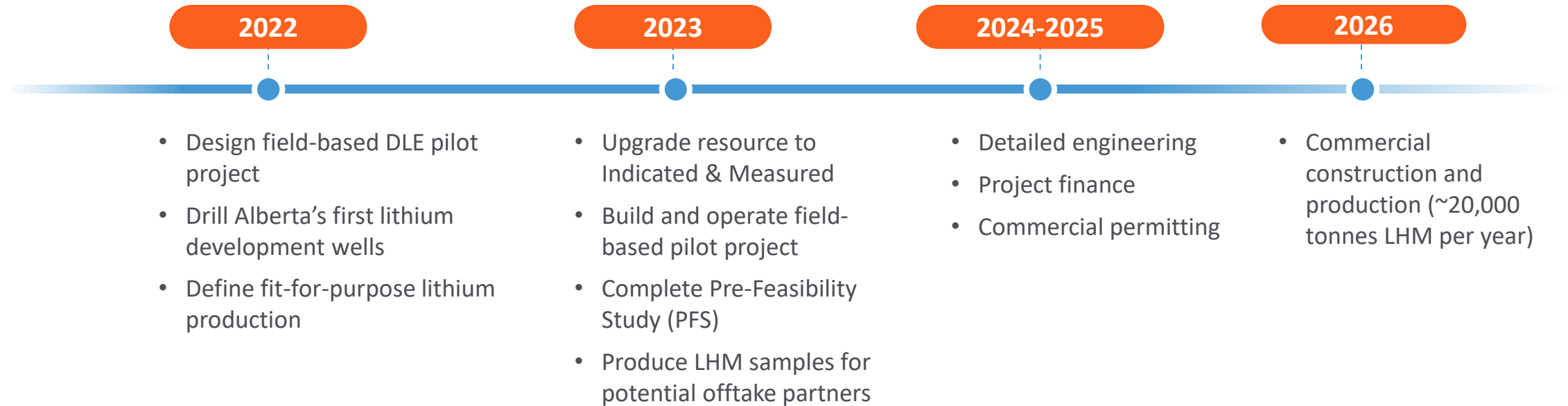
- No freshwater aquifer interaction
- Closed loop system
- Minimal land footprint
- High flow rates
- Fixed reclamation and abandonment costs
- Low operation costs



TSX.V: ETL  
OTCQX: EEMMF



# Road to commercialization



# Capital structure

As of June 30, 2022

TSX Venture – Quoted in CAD	ETL
Share Price (as of Oct. 4)	\$2.37
Market Cap (as of Oct. 4)	\$138M
Cash Balance (CAD)	\$14.7M
Shares Outstanding	59.5M
Warrants Outstanding	5.6M
Value of Unexercised Warrants	\$7.8M

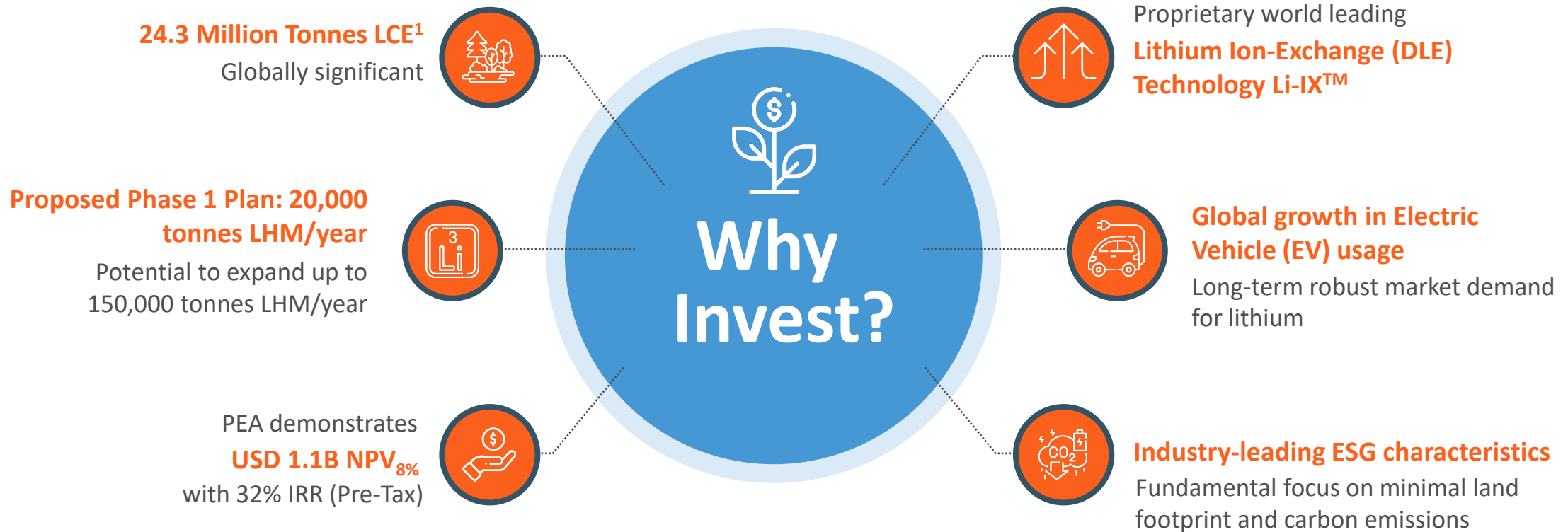
OTCQX – Quoted in USD	EEMMF
Share Price (as of Oct. 4)	\$1.78
Market Cap (as of Oct. 4)	\$106M

## Stock Chart (12 month)



# Peer comparison

	E3 Lithium	Standard Lithium	Lake Resources	Vulcan Resources	Controlled Thermal	LithiumBank
Country	Canada	USA	Argentina	Germany	USA	Canada
Flagship project	Clearwater	LANXESS	Kachi	Zero Carbon Lithium Project™	Hell's Kitchen	Boardwalk
Location	Leduc	Smackover	Catamarca	Rhine Valley	Salton Sea	Leduc
Stage	Pilot	Demonstration	Offsite Pilot	Demonstration	Offsite Pilot	Pre-PEA
Market Cap (CAD) <sup>1</sup>	\$138M	\$1B	\$1.25B (\$1.42B AUD)	\$968M (\$1.1B AUD)	N/A	\$26M
Capacity (LCE)	20,000/yr	20,900/yr	25,500/yr	40,000/yr	25,000/yr	N/A
Total resource size (Mt LCE)	24.3 Inferred	4.3 Inferred & Indicated	4.4 Inferred & Indicated	15.85 Inferred & Indicated	Undisclosed	5.97 Inferred
Partners	Imperial – Exxon / Pure Lithium	LANXESS / Koch Minerals & Trading (LOI)	Ford / Hanwa	VW / Stellantis / Groupe Renault / Umicore / LG Energy Solution	GM	N/A
Latest economic study completed	PEA	PEA	PFS	PFS	PEA	N/A
NPV (pre tax) USD	\$1.1B (8%)	\$1.3B (8%)	\$1.05B (8%)	\$2.8B (% undisclosed)	Undisclosed	N/A
Price Battery product	US\$14,079/t LHM	US\$13,550/t Li2CO3	US\$15,500/t Li2CO3	US\$14,900/t LHM	Undisclosed	N/A



**Our Partners:**

**Imperial**

**PURE LITHIUM**

# 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.

**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.

**Peeyush Varshney, B.COMM, LLB**

**Chair – Audit Committee**

Peeyush has been actively involved in the capital markets for more than 25 years.

**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 – Compensation and HR 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.



# The Future of Canadian Lithium

## Get In Touch

[investor@e3lithium.ca](mailto:investor@e3lithium.ca)

[www.e3lithium.ca](http://www.e3lithium.ca)

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