The Future of Canadian Lithium

October 2022
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 the future prices of minerals; the fact that resource figures for minerals are estimates only and no assurances can be given than any estimated levels may become uneconomical to extract and process; the potential of future changes in prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection; environmental regulation, which mandate, among others, 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 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) or 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

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\(^1\) with significant opportunities for growth in a world-class jurisdiction.

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.

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.

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.

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

1: Inferred Mineral Resources outlined in NI 43-101 report for Bashaw District and Rocky Resource Area
E3 Lithium and Imperial Oil advance commercial lithium in Canada

1. 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

- Chris Doornbos P.Geo
  President | CEO | Director

- Raymond Chow CPA, CA
  CFO

- Chris Ward P.Eng
  VP, Clearwater Project

- Peter Ratzlaff P.Eng
  VP, Resource Development

- Leigh Clarke
  VP, Corporate Strategy & Sustainability

- Robin Boschman MBA, SCMP
  Director, External Relations

- Caroline Mussbacher BSc., P.Eng
  Director DLE Development

- Josh Rubenstein M.Sc., P.Eng
  Director, Process Engineering

- Joanie Kennedy P.Geo, PMP
  Manager, Geosciences

- Aneta Fabianova
  Manager, Investor Relations

TSX.V: ETL
OTCQX: EEMMF
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

### 2021 - 2022

<table>
<thead>
<tr>
<th>DLE technology</th>
<th>Financing</th>
<th>Resource</th>
<th>Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab pilot prototype delivers &gt;90% lithium recoveries + 98% contaminant removal</td>
<td>&gt;$30M CAD raised in aggregate</td>
<td>Increased resource from 7.0 Mt LCE to 24.3 Mt</td>
<td>Strategic agreement signed with Imperial</td>
</tr>
<tr>
<td>First production of commercial scale sorbent</td>
<td>$1.8M Alberta Innovates grant awarded</td>
<td>Three-well exploratory drilling program complete; total depth achieved + reservoir characteristics confirmed</td>
<td>E3’s lithium used in lithium metal battery; MOU signed with Pure Lithium</td>
</tr>
<tr>
<td></td>
<td>Pursuing multiple provincial, federal and U.S. sources of non-dilutive funding</td>
<td></td>
<td>Expanded E3 team</td>
</tr>
</tbody>
</table>

**TSX.V: ETL**
**OTCQX: EEMMF**
### Project Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHM Production</td>
<td>20,000</td>
<td>Tonnes/Year</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>130,000</td>
<td>Metres³</td>
</tr>
<tr>
<td>Project Life</td>
<td>20</td>
<td>Years</td>
</tr>
<tr>
<td>Average Selling Price</td>
<td>US $14,079</td>
<td>Per Tonne</td>
</tr>
<tr>
<td>Cash Operating Costs (OPEX)</td>
<td>US $3,656</td>
<td>Per Tonne</td>
</tr>
<tr>
<td>Total Initial Capital Cost (CAPEX)</td>
<td>US $602</td>
<td>Million</td>
</tr>
<tr>
<td>Pre-Tax NPV%</td>
<td>US $1.1</td>
<td>Billion</td>
</tr>
<tr>
<td>Payback Period (After-Tax)</td>
<td>3.4</td>
<td>Years</td>
</tr>
</tbody>
</table>

Refer to E3 Lithium’s Preliminary Economic Assessment Sept 2021 (www.e3lithium.ca)

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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.

**NPV**

8%  
US$1.1B  
project value

**Price**

US $14,079  
per tonne  
LHM

**OpEx**

US $3,656  
per tonne

**CapEx**

US $600M

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**Significant upside given current market**

- Brine production: $230M
- DLE facility technology: $170M
- LiOH conversion: $200M

*source: Benchmark Minerals*
The next generation of lithium production

Production steps (PEA basis)

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

Refer to E3 Lithium’s Preliminary Economic Assessment Sept 2021 (www.e3lithium.ca)
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.

- **Primary extraction - DLE**: High recovery, fast extraction times and high efficiency means less capital and lower operating costs.

- **LiOH conversion**: A high purity DLE lithium sulphate combined with industry standard processes leads to battery quality lithium hydroxide.

Building on 70 years of drilling in Alberta

Repurposing water treatment processes

Using established lithium conversion methods

Refer to E3 Lithium’s Preliminary Economic Assessment Sept 2021 (www.e3lithium.ca)
A secure, domestic source of lithium – 24.3 MT LCE

E3's Existing Permit Area

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

<table>
<thead>
<tr>
<th>E3's resource area</th>
<th>Percentage of E3's permit area</th>
<th>Brine volume (L)</th>
<th>Average lithium grade (mg/L)</th>
<th>Total LCE (Million Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bashaw District</td>
<td>64%</td>
<td>59.0 x10^{12}</td>
<td>74.5</td>
<td>23.4</td>
</tr>
<tr>
<td>Rocky Area</td>
<td>5%</td>
<td>3.3x10^{9}</td>
<td>52.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

- 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

1: 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
Road to commercialization

- **2022**
  - Design field-based DLE pilot project
  - Drill Alberta’s first lithium development wells
  - Define fit-for-purpose lithium production

- **2023**
  - Upgrade resource to Indicated & Measured
  - Build and operate field-based pilot project
  - Complete Pre-Feasibility Study (PFS)
  - Produce LHM samples for potential offtake partners

- **2024-2025**
  - Detailed engineering
  - Project finance
  - Commercial permitting

- **2026**
  - Commercial construction and production (~20,000 tonnes LHM per year)

TSX.V: ETL
OTCQX: EEMMF
Capital structure
As of June 30, 2022

<table>
<thead>
<tr>
<th>Capital Structure</th>
<th>ETL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Price (as of Oct. 4)</td>
<td>$2.37</td>
</tr>
<tr>
<td>Market Cap (as of Oct. 4)</td>
<td>$138M</td>
</tr>
<tr>
<td>Cash Balance (CAD)</td>
<td>$14.7M</td>
</tr>
<tr>
<td>Shares Outstanding</td>
<td>59.5M</td>
</tr>
<tr>
<td>Warrants Outstanding</td>
<td>5.6M</td>
</tr>
<tr>
<td>Value of Unexercised Warrants</td>
<td>$7.8M</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital Structure</th>
<th>EEMMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Price (as of Oct. 4)</td>
<td>$1.78</td>
</tr>
<tr>
<td>Market Cap (as of Oct. 4)</td>
<td>$144M</td>
</tr>
</tbody>
</table>

### Stock Chart (12 month)

![Stock Chart (12 month)](image)
## Peer comparison

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

Why Invest?

- Proprietary world leading Lithium Ion-Exchange (DLE) Technology Li-IX™
- 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
- Proposed Phase 1 Plan: 20,000 tonnes LHM/year
  Potential to expand up to 150,000 tonnes LHM/year
- 24.3 Million Tonnes LCE
  Globally significant
- PEA demonstrates USD 1.1B NPV_8% with 32% IRR (Pre-Tax)

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.

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.

Peeyush Varshney, B.COMM, LLB
Chair – Audit Committee

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

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www.e3lithium.ca