Emerging Clean Energy Projects in a World-Class Hard-Rock Lithium District in Minas Gerais, Brazil

Advancing a long-life, low-cost project with near-term production of high-quality spodumene concentrate for the global lithium supply chain

OCTOBER 2023

TSX.V: LTH
OTCQX: LTHCF
FSE: H3N
This presentation contains, or incorporates by reference, “forward looking information” within the meaning of applicable Canadian securities legislation. Forward looking information may include, but is not limited to, statements with respect to the future performance of Lithium Ionic Corp. (“Lithium Ionic” or the “Company”), Lithium Ionic mineral properties, the future price of lithium and other metals, the mineralization of the Company’s properties, results of exploration activities and studies, the realization of mineral resource and mineral reserve estimates, exploration activities, costs and timing of the development of new deposits, the results of future exploration and drilling, the results of environmental studies, management’s skill and knowledge with respect to the exploration and development of mining properties in Brazil, the Company’s ability to raise adequate financing; the Company’s ability to obtain the requisite permits and approvals, the economic viability of its mining projects, government regulation of mining operations and exploration operations, timing and receipt of approvals and licenses under mineral legislation, the Company’s local partners, and environmental risks and title disputes. In certain cases, forward looking statements can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “believes”, or variations (including negative variations) of such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Lithium Ionic to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, risks associated with the Company’s dependence on the Bandeira property; general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; risks associated with dependence on key members of management; currency fluctuations (particularly in respect of the Canadian dollar, the United States dollar, the Brazilian reais and the rate at which each may be exchanged for the others); uncertainty in the estimation of mineral resources and mineral reserves, exploration and development risks; infrastructure risks; inflation risks; defects and adverse claims in the title to the projects; accidents, political instability, insurrection or war; labour and employment risks; changes in government regulations and policies, including laws governing development, production, taxes, royalty payments, labour standards and occupational health, safety, toxic substances, resource exploitation and other matters; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; insufficient insurance coverage; the risk that dividends may never be declared; and liquidity and financing risks related to the global economic crisis. Although Lithium Ionic has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward looking statements contained herein are made as of the date of this presentation. There can be no assurance that forward looking 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 due to the inherent uncertainty therein.

Information in this presentation relating to other companies are from their sources believed to be reliable but that have not been independently verified by the Company.

Unless otherwise indicated, the scientific and technical information in this presentation has been reviewed and approved by Carlos Costa, Vice President of Exploration for Lithium Ionic, who is a Qualified Person as defined by National Instrument 43-101 of the Canadian Securities Administrators (“NI 43-101”).

The mineral resource estimate for Outro Lado was prepared by Maxime Dupere, P.Geo., M.Sc., and Faisal Sayeed, P.Geo of SGS, each a Qualified Person as defined by NI 43-101, with an effective date of June 24, 2023. The supporting Technical Report can be found on SEDAR+ under the Company’s issuer profile and on the Company’s website (www.lithiumionic.com).

The mineral resource estimate and preliminary economic assessment for Bandeira was prepared by Carlos José Evangelista Silva (MAIG Membership Number 7868), and Guilherme Gomides Ferreira (MAIG Membership Number: 7586), each from GE21 and a Qualified Person as defined by NI 43-101.

DISCLOSURE FOR U.S. INVESTORS: The securities described herein have not been and will not be registered under the U.S. Securities Act 1933, as amended (the "U.S. Securities Act") or any U.S. state securities laws. Accordingly, the securities described herein will not be offered or sold in the United States except in reliance on exemptions from registration provided under the U.S. Securities Act and the rules thereunder. Securities may not be offered or sold in the United States absent registration with the Securities and Exchange Commission or an exemption from such registration. Under no circumstances is this presentation or the information contained herein to be construed as a prospectus, offering memorandum or advertisement, and neither any part of this written or oral presentation nor any information or statement contained herein or therein shall form the basis of or be relied upon in connection with any contract or commitment whatsoever. This presentation should not be construed as legal, financial or tax advice to any investor, as each investor’s circumstances are different. Readers should consult with their own professional advisors regarding their particular circumstances. There are certain risks inherent in an investment in the securities of the Company that prospective investors should carefully consider before investing in the securities of the Company.
Within 500m from CBL’s Cachoeira lithium mine (36ktpa of SC5.5)
Less than 4km from Sigma Lithium’s Grota do Cirilo project (Phase 1: 270ktpa of SC5.5)
Regional proof-of-concept greatly reduce CAPEX and OPEX risk

Projects cover 14,182ha in Minas Gerais, Brazil (2nd largest mineral rights holder in the region)
+300 mines operate in Minas Gerais; Highly efficient and expeditious permitting process

Within 500m from CBL’s Cachoeira lithium mine (36ktpa of SC5.5)
Less than 4km from Sigma Lithium’s Grota do Cirilo project (Phase 1: 270ktpa of SC5.5)
Regional proof-of-concept greatly reduce CAPEX and OPEX risk

Initial Phase (Bandeira only): Post-tax NPV% of $1.6B; IRR of 121%
20-year mine life producing 217,700tpa of high-quality spodumene concentrate (5.5% Li2O)

Over 80 years of cumulative experience in exploration and mining in Brazil
Proven track record in permitting and developing mining projects

Definitive Feasibility Study and Environmental Impact Assessment expected by end of 2023, triggering the environmental permitting process
All LTH projects granted “Priority Status” by state gov. bodies

LCE – Lithium carbonate equivalent
= lithium hydroxide + lithium carbonate
**CORPORATE OVERVIEW**

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| Common Shares Outstanding* | 138,185,554 |
| Options                  | 11,507,000  |
| Warrants                 | 2,563,468   |

**SHAREHOLDER DISTRIBUTION**

- Institutional: 27%
- 50% Retail & Other
- 23% Management & Insiders

**Share Price** *(10/17/23)*: C$1.72

**52-week High/Low**: C$3.05/C$1.27

**Market Capitalization**: ~C$238 million

**Cash Position****: ~C$30 million

**ANALYST COVERAGE:**

- CLARUS Securities Inc
- STIFEL GMP
- Canaccord Genuity
- DELBROOK CAPITAL
- NEWGEN ASSET MANAGEMENT
- LITHIUM IONIC

*As at last reported quarter, Q2 2023 ending June 30, 2023

**As of August 15, 2023; including the $28.7M financing closed on July 31, 2023
Blake Hylands
CEO, Director
- Professional Geoscientist; +10 yrs experience in advanced and early-stage exploration with a focus in gold, base metals, and iron ore in Canada and internationally incl. S.A. and Europe.
- Co-founder of Trolus Gold: Led technical team to the discovery of +8 Moz AuEq gold in Quebec.
- He has held numerous board positions for junior mining companies
- Extensive professional experience in capital markets and community outreach including executive roles in corporate development and communications with First Nations.
- B.Sc in Geology from the University of Western in London Ontario.

Helio Diniz
President, Director
- +40 yrs experience in exploration/ mining activities
- Managing Director of Brazil Potosi since July 2009.
- Began his career with GENCOR South Africa: Sao Bento gold mine, Brazil (now Eldorado)
- Former Managing Director Brazil for Xstrata (now Glencore): discovered world class Araguaia Nickel Deposit (+100Mt, 1.5% Ni).
- Founder of Falcon Metais and HDX Consultoria to identify, explore and develop mining opportunities in Brazil.
- Founded and developed several companies for the F&M Group, incl. Brasil Potosi, Agua Metais (potosi), Belo Sun Mining (gold) and Irati Petroleo e Energia Ltda. (oil shale)

Carlos Costa
VP Exploration
- ~40 years experience; 29 yrs in base metals, gold and PGE exploration throughout Brazil.
- Managed several exploration programs, from regional grassroots to bankable feasibility studies.
- 10 yrs experience in mine geology, including underground and open pit operations.
- Country Manager Brazil for Emerita; Belo Sun ($800M budget – 200,000m drill program) and Xstrata, former Falconbridge ($50 Mi budget).
- Also worked for Vale and BP Mineracao (British Petroleum Group).
- Holds a P.Geo (APGO) and a BS Geology from the University of Rio de Janeiro

André Guimarães
VP Corp. Development
- Geology graduate with a PhD specialization in igneous petrology
- +10 years of experience in research
- Former Neolith Minerals (2020), where he has been directly involved in all corporate and exploration activities, including analyses and interpretation of geological data, particularly geochemical results, field work and contract negotiations.
- Former archaeologist who was involved in rescue archaeology projects associated with the development of mining sites in Brazil.

Tom Olesinski
CFO
- +20 yrs of finance and executive management experience
- Former forensic accountant for BDO Dunwoody, where he earned a Certified Fraud Examiner designation before moving into the marketing communications industry.
- Served as Director of Finance and Operations for Cossette Communication Group, CEO and CFO at Havas Media Canada, and COO and CFO for Brainrider.
- Current board member of Trolus Gold Corp.
- Holds a Bachelor of Commerce and Economics from the University of Toronto

Damian Lopez
Corporate Secretary
- Corporate securities lawyer with +15 yrs experience working as a legal consultant to various TSX and TSXV listed companies.
- Previously worked as a securities and merger & acquisitions lawyer at a large Toronto corporate legal firm, where he worked on a variety of corporate and commercial transactions.
- Obtained a Juris Doctor from Osgoode Hall and he received a Bachelor of Commerce with a major in Economics from Rotman Commerce at the University of Toronto

BOARD OF DIRECTORS

David Gower
Mr. Gower has held Executive and Director positions with several junior and midsize mining companies for the past 10 years. He was President of Emerita Resources, Nobel Resources and President of Brazil Potosi Corp. David spent over 20 yrs with Falconbridge (now Glencore) as Director of Global Nickel and PGM exploration and as a member of the Senior Operating Team for mining projects and operations. He led exploration teams that made brownfield discoveries at Raglan and Sudbury, Matagami, Falcón, in the Dominican Republic, and greenfield discoveries at Araguaia in Brazil, Kabanga in Tanzania and Amazonas in Brazil. Mr. Gower is a Director of Alamos Gold.

Lawrence Guy
Mr. Guy is CEO of North 52nd Asset Mgmt Inc. and Chair of Emerita Resources. He was formerly a PM with Aston Hill and CFO/Director of Navina Asset Management Inc., a company he co-founded. Mr. Guy has also held senior offices at Fairway Capital Mgmt Corp., and First Trust Portfolios Canada Inc. He holds a Bachelor of Arts (Economics) degree from the University of Western Ontario and is a Chartered Financial Analyst.

Patrizia Ferrarese
+20 years of experience in capital markets, entrepreneurship, and strategy consulting. Currently VP of Business Design and Innovation at Investment Planning Counsel (IPC). Formerly held senior roles in product management and performance optimization at Tangerine Bank and Praxair. Currently pursuing her Doctorate in Business Administration at SDA Bocconi and holds an MBA from Wilfrid Laurier University and a Bachelor of Arts (Honours) in Economics from York University.

Michael Shuh
Managing Director, Investment Banking, at Canaccord Genuity. +20 yrs in investment banking; leads the Financial Institutions Group at Canaccord. Deep expertise in structured finance and special purpose acquisition corporations (SPACs). Serves as CEO and Chairman of Canaccord Genuity Growth II Corp., a publicly-listed SPAC that raised $100MM to pursue acquisitions. Mr. Shuh received an Honours, Bachelor of B.A. from the Lazaridis School of Business & Economics at Wilfrid Laurier University and a Masters of B.A. from the Richard Ivey School of Business at Western University.

Juliana Sprott
Ms. Sprott is the Chief Giving Officer at the Sprott Foundation. Ms. Sprott has a B.A. from the University of Western Ontario and completed the one-year program, The Philanthropy Workshop, at the Institute for Philanthropy.

Ian Pritchard
Mr. Pritchard has +30 yrs of experience in project and operations management in the mining industry both in N.A. and internationally, particularly in Brazil. His mining experience includes the management of pre-feasibility and feasibility studies, engineering, procurement and construction management projects. He has held senior executive positions at various organizations worldwide including SNC-Lavalin and De Beers Canada.
PROLIFIC LITHIUM DISTRICT

AMONG THE WORLD’S MOST PROLIFIC MINING DISTRICTS
- Minas Gerais, Brazil: A traditional mining jurisdiction with a highly efficient and expeditious permitting process

GOVT EFFORTS TO REDUCE BUREAUCRACY IN THE MINING SECTOR
- July 2022: Brazil issues presidential decree allowing unrestricted trade of any products containing lithium
- Launch of “Lithium Valley Brazil” in May 2023: initiative aimed at enabling regulatory simplicity and streamlining the permitting process for environmentally sustainable projects in the region

INFRASTRUCTURE
- Favourable mining and transport infrastructure, hydroelectric power, water and easy access to foreign markets via nearby port access.

Porto de Ilhéus, State of Bahia
Irapé Dam (360MW), Minas Gerais
Nearby Powerlines
Araçuaí: Nearest city (~40,000 ppl)
EASTERN BRAZILIAN PEGMATITE PROVINCE (EBPP)

Under explored region that currently contains 100% of Brazil’s official lithium reserves.

- One of the world’s largest geological belts of granitic pegmatites hosting high-quality lithium-bearing spodumene and petalite.
- 150,000 km², stretching from the state of Bahia, through Minas Gerais, to Rio de Janeiro.
- Major pegmatite-forming event took place 525-545M years ago.
- Pegmatite gemstones first found 400 years ago; in last 100 years, this area has produced most of the world’s supply of gem crystals and cut gemstones.
TOTAL MINERAL RESOURCES

Measured & Indicated:
16.69Mt grading 1.41% Li₂O (582,098t LCE)

Inferred:
16.21Mt grading 1.34% Li₂O (538,486t LCE)

OUTRO LADO
Underground; 0.5% Li₂O cut-off
M&I: 16.69Mt grading 1.41% Li₂O
Inferrred: 16.21Mt grading 1.34% Li₂O

BANDEIRA
Underground; 0.5% Li₂O cut-off
M&I: 13.72Mt grading 1.40% Li₂O
Inferrred: 15.79Mt grading 1.34% Li₂O

OUTRO LADO MRE: See MRE slide in Appendix for further detail, or the press release dated June 27, 2023
Bandeira MRE: See MRE slide in Appendix for further detail, or the press release dated October 19, 2023
BANDEIRA PRELIMINARY ECONOMIC ASSESSMENT

Near-term production of high-quality low-cost lithium concentrate

HIGHLIGHTS

- Post-tax NPV: $1.6B (~$2.2B)
- Post-tax IRR: 121%
- Mine life: 20 years
- LOM production: 217,700tpa of high-quality spodumene concentrate at 5.5% Li2O (“SC5.5”) equivalent
- Underground mine with low environmental footprint
- Annual throughput: 1.3Mtpa
- Payback: 14 months
- CAPEX: $233M (incl. 25% contingency)
- Pre-tax free cash flow: $243M/yr
- All-in OPEX: $349/t SC5.5

* See press release dated October 19, 2023

BANDEIRA PROJECT:

- Phase 1: Bandeira covers only 175 hectares within LTH’s largely unexplored 14,182ha land package
- Nearest city: Araçuaí (~40,000 ppl), -15km away
- Existing infrastructure: Transmission lines (hydroelectric power), existing highway to Port Vitoria, access to water.
- Mineral Resource Estimate based on 204 drill holes:
  M&I: 13.72Mt @ 1.40% Li2O (474,892 LCE)
  Inferred: 15.79Mt @ 1.34% Li2O (523,118 LCE)
BANDEIRA PEA: LOW-COST PROJECT

Proposed Site Layout

Processing
- Simple processing circuit with minimal land-use footprint
- Low-cost and simple DMS (Dense Media Separation) operation
- 67% recovery + 10.7% through gravity concentration (based on preliminary testwork) into a high-quality 5.5% Li2O spodumene concentrate (“SC5.5”) eq.

OPEX
- $61/t ore processed
- $349/t SC5.5 eq. produced

CAPEX
- $232.8 million

Compared to:
- Developer Avg: $467/t
- Global Avg: $404/t

* See press release dated October 19, 2023
BANDEIRA PEA: LONG-LIFE PROJECT TO BUILD UPON

Mine Production

- 20-year mine life
- LOM annual production: 217,700t of high-quality SC5.5 eq.
- Annual throughput: 1.3Mt

Mining

- Dual underground mining operations
  - Primary orebodies (~90% of the deposit) to be extracted using a bottom-up "sublevel stoping" method (Bandeira Sublevel Mine, “BSL mine”)
  - Simultaneously, the secondary orebody, comprising approximately 1.5Mt, to be mined using "room-and-pillar" technique (Bandeira Room and Pillar, “BRP mine”).

* See press release dated October 19, 2023
### Explorers

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<th>Opex (US$/t SPO)</th>
<th>Post-Tax NPV8% (US$M)</th>
<th>Post-Tax IRR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlas</td>
<td>$404</td>
<td>Brazil</td>
<td>SC</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>83%</td>
</tr>
<tr>
<td>Patriot</td>
<td>$1,328</td>
<td>Quebec</td>
<td>SC</td>
<td>3,835</td>
<td>123</td>
<td>NA</td>
<td>NA</td>
<td>$213</td>
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<tr>
<td>Leo</td>
<td>$430</td>
<td>Mali</td>
<td>SC</td>
<td>7,161</td>
<td>23</td>
<td>NA</td>
<td>NA</td>
<td>$399</td>
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<td>Frontier</td>
<td>$240</td>
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<td>$349</td>
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<tr>
<td>Lithium Ionic</td>
<td>$201</td>
<td>Bandeira</td>
<td>SC</td>
<td>998</td>
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<td>NA</td>
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<td>Global Lithium</td>
<td>$170</td>
<td>Maribo, Manna</td>
<td>SC</td>
<td>2,165</td>
<td>52</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Atlantic</td>
<td>$318</td>
<td>Ewoyaa</td>
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<td>Georgia, Gubon</td>
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<td>986</td>
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<td>NA</td>
<td>NA</td>
<td>$669</td>
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<tr>
<td>Latin Resources</td>
<td>$122</td>
<td>Salinas</td>
<td>SC</td>
<td>1,477</td>
<td>104</td>
<td>NA</td>
<td>NA</td>
<td>$379</td>
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<td>AVZ</td>
<td>$602</td>
<td>Manono</td>
<td>SC</td>
<td>12,265</td>
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<td>NA</td>
<td>NA</td>
<td>$311</td>
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<tr>
<td>Sayona</td>
<td>$2,388</td>
<td>Multiple</td>
<td>SC</td>
<td>2,764</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
<td>$421</td>
</tr>
<tr>
<td>Piedmont</td>
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<td>Multiple</td>
<td>SC</td>
<td>2,723</td>
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<tr>
<td>Critical</td>
<td>$896</td>
<td>Rose</td>
<td>SC</td>
<td>766</td>
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<td>NA</td>
<td>$352</td>
</tr>
<tr>
<td>Core</td>
<td>$362</td>
<td>Finniss</td>
<td>SC</td>
<td>613</td>
<td>98</td>
<td>NA</td>
<td>NA</td>
<td>$319</td>
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<td>Liontown</td>
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<td>SC</td>
<td>5,643</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>$290</td>
</tr>
</tbody>
</table>

**Source:** Project company disclosures, Refinitiv, market data as of Oct 17, 2023

**Notes:** Project economics based on most recently published technical studies. Global Lithium based on Manna Scoping Study, Piedmont based on Carolina Lithium FS, Sayona based on Authier FS. Opex includes mining, processing and G&A and excludes royalties and transport costs.
BLUEPRINT NEXT DOOR: SIGMA LITHIUM CORP.

- Sigma has the largest hard rock lithium deposit in the Americas
  - Lithium Ionic’s Bandeira + Itinga group of properties are located within ~5km

- Rapid Scale Expansion
  - LTH’s Bandeira Phase 1 project covers only 175ha within its largely unexplored 14,182ha land package; strong potential to expand resources and project scale

- Strong potential to repeat and improve on Sigma’s fast permitting timeline
  - Maiden Resource to Permit: 18 months
  - Maiden Resource to Production: 5 years

- Sigma’s current market cap of ~C$4B provides compelling valuation goal post

EXPEDITIOUS PERMITTING PROCESS IN MINAS GERAIS

Q4 2019: Feasibility Study
Q2 2020: PEA doubles capacity
Q4 2022: Phase 1 Production Plant Complete

Q1 2018:
Maiden MRE Xuxa:
M&I: 12.9Mt @ 1.56% Li2O

Resource to Permit ~18 months
Q2 2019:
Environmental licenses obtained for construction/installation of Li plant

Maiden Resource to Production ~5 yrs
Q2 2023:
1st production

TSX.V: SGML
Oct. 18, 2023: $37.31/sh
Market Cap: ~C$4 billion
50,000m DRILL PROGRAM UNDERWAY IN H2 2023

- 13 drills operating: Bandeira (6), Salinas (4) and Itira (3)
- Designed to:
  - Increase MRE and upgrade the resource classification at Bandeira and Outro Lado
  - Define NI 43-101 mineral resource estimates at other regional targets (Salinas/Itira)

APRIL 2022 - JUNE 2023 DRILL HIGHLIGHTS

**BANDEIRA**
- 1.62% Li₂O over 20m
- 1.32% Li₂O over 24m
- 1.73% Li₂O over 13.6m
- 1.31% Li₂O over 14m
- 1.47% Li₂O over 15m
- 1.43% Li₂O over 17.1m

**OUTRO LADO**
- 1.87% Li₂O over 45m
- 2.10% Li₂O over 19.4m
- 1.98% Li₂O over 25.6m
- 1.94% Li₂O over 19.8m
- 1.71% Li₂O over 21.9m
- 1.68% Li₂O over 20.7m
POWERLINES
ROADS

ITINGA PROPERTIES

REGIONAL PROOF-OF-CONCEPT

CBL’s CACHOEIRA LITHIUM MINE
- Private Brazilian company, producing lithium since 1991
- Li-carbonate & Li-hydroxide produced in its Divisa Alegre (MG) plant
- 36,000 tpa of spodumene concentrate @ 5.5%; Spodumene Reserves of +1.3Mt

BANDEIRA & OUTRO LADO PROJECTS
- M&I: 16.69Mt grading 1.41% Li₂O (582,098t LCE)
- Inferred: 16.21Mt grading 1.34% Li₂O (538,486t LCE)
- 50,000m drill program underway for H2 2023
- MRE definition/expansion and upgrading to Reserves

GROTA DO CIRILO PROJECT
- The largest hard rock lithium deposit in the Americas
- 1st production achieved in April 2023
- Total resource estimate of 85.6Mt at 1.43% Li₂O
- Phase 1 CAPEX $131M; 14-month construction
CBL Mine
(in production since 1991)

800m

BANDEIRA
Drilling Site
OUTRO LADO DRILL HIGHLIGHTS (JULY 2022 – APRIL 2023)

- 1.87% Li₂O over 45m
- 2.10% Li₂O over 19.4m
- 1.53% Li₂O over 46.2m, incl. 2.22% /12.5m
- 1.98% Li₂O over 25.6m
- 1.94% Li₂O over 19.8m, incl. 2.33% /7.4m
- 1.71% Li₂O over 21.9m
- 1.68% Li₂O over 20.7m, incl. 2.22% /8.6m
- 1.57% Li₂O over 24.9m, incl. 2.10% /7.5m
- 1.17% Li₂O over 42.1m, incl. 1.95% /11.7m

* See Galvani press releases dated June 14, June 28, July 26, August 9, August 30, Sept. 14 and Sept. 26 2022, and April 11, 2023, for further detail.
Significant regional soil anomalies have yet to be drilled: AREA 2-5 and BORGES 1
Colina Lithium Deposit
Mineral Resource Estimate of
45.2Mt @ 1.34% Li2O
reported above a cut-off of 0.3% Li2O, with
0.4Mt @ 1.3% Li2O Measured, 29.7Mt @ 1.4%
Li2O Indicated and 15.0Mt 1.2% Li2O Inferred

- 20,000m drill program
  initiated in April 2023
- 9 tenements totaling 5,713 ha
- Several lithium-rich spodumene-
  bearing pegmatites outcropping at
  surface have been defined
  (7-14m thick)
- Highlights from 24 holes (4,000m)
  drill program in H2 2022:
  - 1.53% Li2O over 11.36m
  - 1.22% Li2O over 13.76m
  - 1.71% Li2O over 9.82m
  - 1.19% Li2O over 13.35m
SALINAS PROJECT

- 20,000m drill program underway (4 drills)
- Designed to test, define, and expand multiple lithium-bearing spodumene-rich pegmatites identified in 2022 (4,000m, 24-hole drill program)

Drill hole SLOE-D018
1.19% Li2O over 13.35m from 239.65m to 253m

"Lavra de Zoe": Large outcropping pegmatite (55m x 210m) with typical metre-sized spodumene crystals

- 7.44m @ 1.09% Li2O
  SLOE-D022
- 11.36m @ 1.53% Li2O
  SLOE-D014
- 13.76m @ 1.22% Li2O
  SLOE-D015

LRS’s COLINA DEPOSIT
45.2Mt @ 1.34% Li2O

4.26m @ 1.32% Li2O
SLSB-D004
3.85m @ 1.55% Li2O
SLSB-D006
4.08m @ 1.26% Li2O
SLCU-D002

9.82m @ 1.71% Li2O
SLOE-D013
13.35m @ 1.19% Li2O
SLOE-D018 (core photo below)
LTH PROJECTS GRANTED PRIORITY STATUS
MOU SIGNED WITH INVEST MINAS

JULY 2023:

- **MOU signed with Invest Minas** *(State Economic Department of Minas Gerais and the Minas Gerais Integrated Development Institute)*, mutually supporting the development of the battery materials sector in the region.

- Lithium Ionic’s **Itinga and Salinas lithium projects are granted priority status** by the state of Minas Gerais regional government bodies, facilitating support and acceleration of approvals and licensing through the development process.

- **Invest Minas to support and prioritize Lithium Ionic** from the exploration to operational stages, including environmental licensing and regulatory approvals.
PROJECT TIMELINE & UPCOMING CATALYSTS

- Lithium Ionic begins trading on the TSXV: May 2022
- Initial met test work complete: Dec. 2022
- Acquisition of Neolit Minerals (Salinas Project): March 2023
- Maiden MRE (181 holes, 28,204m): June 2023
- PEA for Bandeira: Q4 2023
- Outro Lado: Engineering Study, Field work & report completion target + application for LAC: Q4 2023
- Bandeira Definitive Feasibility Study Completion target: Q4 2023/Q1 2024
- Bandeira: EIA completion target: Q4 2023
- 2024 Permitting milestones:
  - Bandeira: LAC approval expected Q2

Lithium Ionic continues to assess and consolidate prospective lithium properties in the “Lithium Valley” of Brazil.

LITHIUM IONIC LAND POSITION

- March 2023: 14,182ha
- May 2022: 1,300ha

2022

2023

2024
Q2 2023 - Implementation of the ONYEN ESG Reporting System

A platform that captures, monitors, manages and reports ESG risks and opportunities to ensure reporting accuracy to governments and international sustainability agencies such as SASB, GRI and TCFD, who are driving ESG policies.

Currently evaluating a suitable 3rd party ESG audit platform:

Towards Sustainable Mining (TSM): Performance reported against TSM indicators in an annual Progress Report. Results externally verified every 3 years.

IRMA is an assessment system for mine performance, which includes independent 3rd party audits against the IRMA Ready Standard. Projects receive a score based on results.

ESG & Safety at Lithium Ionic: Initiatives and Milestones

✓ Our admin. office is powered 100% by hydroelectricity from the Irape Dam, in Minas Gerais
✓ Ongoing work safety dialogue on site
✓ Corporate policies in place
✓ Community initiatives include local bridge construction (Araçuaí), hospital donation (São Vicente de Paulo Hospital), and planned church renovations (Barreiro & Barra da Barriguda)

Our Vision & Guiding Principles

We are committed to help decarbonize the fuel and energy industry through the production of high-quality commercial grade lithium

Environment

We want to make a large-scale positive impact on local communities while having minimal impact on the environment.

Social

Work within and with local communities by initiating our community action plan and ensuring local citizens are involved in Lithium Ionic's operations

Governance

Ensure equity and inclusion are at the forefront of our corporate and on-site operations. This includes prioritizing transparency and ESG within our corporate structure.
Emerging high-grade lithium district with known economic deposits

2nd largest mineral rights holder in the region > excellent long-term discovery potential

PEA shows a simple and economic project: a strong foundation for future growth

Infrastructure and regional proof-of-concept greatly reduce CAPEX and OPEX risk

Sigma Lithium (SGML ~C$4bn mkt cap) provides compelling valuation goal post

Accelerated timeline to production (“Lithium Valley Brazil” + “Priority Status” project)
INITIAL METALLURGICAL RESULTS

Initial metallurgical tests carried out on two-20 kgs samples obtained from drill core at its Outro Lado (Galvani Claims) and Bandeira targets.

RESULT HIGHLIGHTS (DECEMBER 2022)

▪ Excellent lithium recoveries of 77.99% (Bandeira) and 82.52% (Galvani) achieved with Heavy Liquid Separation (HLS) gravity separation tests, producing a high-quality lithium concentrate of 6%, with low iron content of 0.24% and 0.51%, respectively.
▪ Head grade samples of 1.62% Li2O for Bandeira and 1.69% Li2O for Galvani, reflecting average exploration drilling grades obtained over the last year.
▪ Further metallurgical test work underway by SGS Geosol

*See December 15, 2022, press release for further detail.*
Hole ITDD-23-065
1.32% Li₂O over 24m, incl. 2.12% Li₂O over 8m from 354.2m to 378.2m

* See press release dated March 29, 2023, for further detail.
## BANDEIRA UPDATED MRE (OCTOBER 2023)

<table>
<thead>
<tr>
<th>Category</th>
<th>Resource (tonnes)</th>
<th>Grade (% Li2O)</th>
<th>Contained LCE (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>2,000,000</td>
<td>1.40</td>
<td>69,226</td>
</tr>
<tr>
<td>Indicated</td>
<td>11,720,000</td>
<td>1.40</td>
<td>405,666</td>
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<tr>
<td><strong>Measured + Indicated</strong></td>
<td><strong>13,720,000</strong></td>
<td><strong>1.40</strong></td>
<td><strong>474,892</strong></td>
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<tr>
<td>Inferred</td>
<td>15,790,000</td>
<td>1.34</td>
<td>523,118</td>
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</tbody>
</table>

1. The spodumene pegmatite domains were modeled using composites with Li2O grades greater than 0.3%.
2. The mineral resource estimates were prepared in accordance with the CIM Standards, and the CIM Guidelines, using geostatistical and/or classical methods, plus economic and mining parameters appropriate to the deposit.
3. Mineral Resources are not ore reserves and are not demonstrably economically recoverable.
4. Grades reported using dry density.
5. The effective date of the MRE was October 11, 2023.
6. The MRE numbers provided have been rounded to the estimate relative precision. Values cannot be added due to rounding.
7. The MRE is delimited by Lithium Ionic Bandeira Target Claims (ANM).
8. The MRE was estimated using ordinary kriging in 12m x 12m x 4m blocks.
9. The MRE report table was produced in Leapfrog Geo software.
10. The reported MRE only contains fresh rock domains.
11. The MRE was restricted by grade shell using 0.5% Li2O cut-off.

For further detail, see press release dated October 19, 2023
## MINERAL RESOURCE ESTIMATE (JUNE 2023)

<table>
<thead>
<tr>
<th>Deposit / Cut-Off Grade</th>
<th>Category</th>
<th>Resource (tonnes)</th>
<th>Grade (% Li2O)</th>
<th>Contained LCE (t)</th>
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</thead>
<tbody>
<tr>
<td>Bandeira Open-Pit (0.5% Li2O)</td>
<td>Measured</td>
<td>1,137,247</td>
<td>1.43</td>
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<td>3,105,047</td>
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<td>Measured + Indicated</td>
<td>4,242,294</td>
<td>1.36</td>
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<td>Inferred</td>
<td>5,914,961</td>
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<td>205,379</td>
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<tr>
<td>Bandeira Underground (0.8% Li2O)</td>
<td>Measured</td>
<td>3,445</td>
<td>1.10</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Indicated</td>
<td>353,363</td>
<td>1.26</td>
<td>11,008</td>
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<tr>
<td></td>
<td>Measured + Indicated</td>
<td>356,808</td>
<td>1.26</td>
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<td></td>
<td>Inferred</td>
<td>5,529,821</td>
<td>1.47</td>
<td>200,974</td>
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<td>Outro Lado (Galvani) Underground (0.8% Li2O)</td>
<td>Measured</td>
<td>2,577,915</td>
<td>1.47</td>
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<td>415,767</td>
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### Notes:

1. The results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Project. The results are used as a guide to assist in the preparation of a Mineral Resource statement and to select an appropriate resource reporting cut-off grade.

2. Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resources has a lower level of confidence than that applying to a Measured and Indicated Resources and must not be converted to Mineral Reserves. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

3. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing or other relevant issues.

4. The effective date of the MRE is June 24, 2023.

5. All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.

For further detail, see press release dated June 27, 2023
ACQUISITION OF NEOLIT MINERALS

On March 10, 2023, Lithium Ionic acquired 100% of Neolit Minerals Participações Ltda. (“Neolit”), a Brazilian company which owns an 85% interest in the Salinas Project.

Terms of the Agreement

Pursuant to the securities purchase agreement dated March 10, 2023, between the Company, André Guimarães (the “Vendor”) and Neolit, the Company acquired a 100% ownership interest in Neolit. The consideration for the transaction is as follows:

- A cash payment by the Company of USD$2,031,004.56 to the Vendor on closing; (complete)
- A cash payment by the Company of USD$2,570,766.82 to Neolit to settle all existing liabilities of Neolit on closing; (complete)
- Issuance of 4 million Lithium Ionic Shares to the Vendor on closing; (complete)
- Issuance of 1.5 million Lithium Ionic common share purchase warrants (the “LTH Warrants”). The LTH Warrants have an exercise price of CAD$2.25, a term of three years and only vest if Lithium Ionic establishes an independent National Instrument 43-101 compliant mineral resource estimate on the Salinas Project of at least 20 million tons with an average grade greater than 1.3% Li2O; (complete)
- A cash payment by the Company of USD$1,500,000 to the Vendor on the 18-month anniversary of the closing of the transaction.

Additionally, Neolit, at its sole discretion, can expand its footprint near Lithium Ionic’s Itinga Project by up to 4,140 hectares pursuant to a definitive agreement it has in place with an arm’s length party. Neolit can select from a land package of 10 tenements comprising 4,140 hectares owned by the vendor, the areas within these tenements Neolit considers most prospective and acquire up to a 90% ownership interest in such claims by incurring certain exploration expenditures.
WHY LITHIUM?

Lithium is crucial to the energy storage sector and to the global energy transition.

**EVs Fueling Lithium Demand**

**Growing Supply-Demand Gap**

**Li-Ion Global Market Size**

The global market size of Li-ion batteries crossed USD $52.5 billion in 2022...

2022: $52.5Bn

...and is expected to record over 16.5% gains annually through 2032...

>16.5% CAGR

...for a global market size of USD $254.5 billion by 2032.

2032: $254.5Bn

Industry Preference: NCM 811 and 622 have higher energy densities, longer lifespans and provide better EV driving range.

### SOURCE
- **Salt Pan**
- **Brine**
- **Mine**
- **Spodumene**

### RAW MATERIAL
- Brine
- Spodumene

### Li PRODUCT
- Lithium Carbonate ($\text{Li}_2\text{CO}_3$)
- Lithium Hydroxide (LiOH)

### CATHODE MATERIAL
- LCO
- LMO
- NCM 111
- NCM 622
- NCM 811
- LFP
- NCA

**Preferred battery-grade material.** Lithium hydroxide battery cathodes have better storage capacity and longer life cycles.

Lithium carbonate can be converted to Lithium Hydroxide at an added cost.

- Lithium supply originates in two main forms: “brines” or “hard rock”
- Both occur naturally in the earth, but use different extraction methods
- Lithium Ionic’s lithium deposits are hosted in hard rock spodumene
SOARING LITHIUM PRICE

Lithium carbonate, battery grade
Spot price, $’000 per tonne (Feb 2023)

The transition to green energy has made lithium one of the most sought-after metals.

- The price of lithium carbonate (LCE), the raw material used in lithium-ion batteries, soared in 2022 from a 5-year avg. of ~$14,000/t to +$80,000/t.
- According to Benchmark Minerals Intelligence, demand for LCE is set to increase to 2.4Mt in 2030, compared with around 600,000t in 2022.

Surging Industry Demand

Major advancements in lithium-ion battery technology in the last 10 years have made them cheaper and more effective.

Electric Vehicles
EV sales to experience a compound annual growth rate of 40% per year through 2025.

Renewable Energy
Renewables are expected to witness an estimated CAGR of 13.8% from 2020 to 2027 owing to the advancements in solar PV and wind energy systems.

Industrial Equipment
The global Lithium Battery Manufacturing Equipment market is valued at $5Bn in 2020 is expected to reach $12Bn by the end of 2026, growing at a CAGR of 14.0% during 2021-2026.

Consumer Electronics
Revenue is expected to show an annual growth rate from 2021-2025 of 6.80%, resulting in a market volume of US$974Bn by 2025.

5) https://www.360marketupdates.com/global-lithium-battery-manufacturing-equipment-market-14858032

• The price of lithium carbonate (LCE), the raw material used in lithium-ion batteries, soared in 2022 from a 5-year avg. of ~$14,000/t to +$80,000/t.

**Lithium carbonate, battery grade**
Spot price, $’000 per tonne (Feb 2023)
LITHIUM SUPPLY CHAIN

Source: L.E.K. research and analysis