## **Date: August 21, 2024**

This Management's Discussion and Analysis ("MD&A") provides a discussion and analysis of the financial condition and results of the operations of Lithium Ionic Corp. (individually or collectively with its subsidiaries, as applicable, "Lithium Ionic" or the "Company"), to enable a reader to assess material changes in the financial condition and results of operations as at and for the three and six months ended June 30, 2024. This MD&A should be read in conjunction with the condensed interim consolidated financial statements for the three and six months ended June 30, 2024 as well as the annual audited consolidated financial statements and MD&A for the year ending December 31, 2023. All amounts included in the MD&A are expressed in Canadian dollars, unless otherwise specified.

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**") as published by the International Accounting Standards Board. Please refer to Note 3 of the annual audited consolidated financial statements as at and for the year ended December 31, 2023 for disclosure of the Company's material accounting policies.

Additional information about the Company may be found on SEDAR+ at www.sedarplus.ca.

The scientific and technical contents of this MD&A have been reviewed and approved by Carlos H.C. Costa, P.Geo (APGO), Qualified Person under National Instrument 43-101 ("**NI 43-101**").

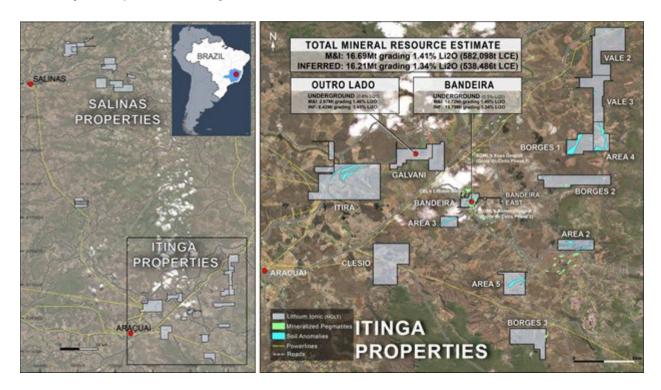
The Board of Directors of the Company has reviewed this MD&A and the consolidated financial statements for the three and six months ended June 30, 2024, and the Company's Board of Directors approved these documents prior to their release.

# **Overview and Strategy**

Lithium Ionic Corp. is a publicly traded Canadian exploration and development company listed on the TSX Venture Exchange ("TSXV"). The Company is engaged in the acquisition, exploration, and development of mineral properties with a primary focus on exploring in Brazil. Exploration is conducted through the Company's wholly owned Brazilian subsidiaries, MGLIT Empreendimentos Ltda. ("MGLIT") and Neolit Minerals Participacoes Ltda ("Neolit"). Through MGLIT, the Company has a 10% ownership interest in Valitar Participações S.A.("Valitar"), a special purpose vehicle incorporated in Brazil for the purpose of acquiring surface rights for the Company. For accounting purposes, management has concluded that the Company has control of Valitar and, in accordance with IFRS 10 – Consolidated Financial Statements, the Company consolidates the financial statements of Valitar into its own.

On June 14, 2024, the Company incorporated its new subsidiary, Lithium Ionic Bandeira Corp., in the Cayman Islands.

## **Summary of Properties and Projects**



### **Mineral Exploration Properties**

The Company holds certain property interests for lithium exploration in Minas Gerais State (MG) in Brazil.

### **Itinga Properties**

# Bandeira Project

On December 23, 2020, MGLIT acquired seven mineral licenses from Falcon Metais Ltda covering more than 1,300 hectares in the prolific Aracuai lithium province. A portion of the project occurs immediately south of the CBL lithium mine and plant, and immediately north of the large Barreiro and South Xuxa lithium deposits of Sigma Lithium Corp. In April 2024, the Company reported an updated Mineral Resource Estimate and on May 29, 2024, the Company announced the results from its Feasibility Study. (See Mineral Resources and Preliminary Economic Assessment.)

### Galvani Mining Licenses

In September 2022, the Company completed the acquisition of a 100% ownership interest in two lithium mining licenses (the "**Licenses**") in Minas Gerais, Brazil from Galvani Nordeste Mineracao Ltd. ("**Galvani**") through its wholly-owned subsidiary, MGLIT. This includes the Outro Lado Project on which a maiden resource estimate was reported in June 2023. (See Mineral Resources.)

The two large Licenses are located approximately 2 km to the west of the large Xuxa lithium deposit of Sigma Lithium and approximately 3 km to the northwest of the CBL lithium mining operation. Mineralized pegmatites have been identified on the Licenses.

Pursuant to the agreement to acquire the Licenses, Lithium Ionic paid to Galvani:

• USD\$100,000 (\$129,400) on execution of the Agreement in June 2022; and

USD\$3,210,000 (\$4,210,397) on closing of the Transaction in September 2022.

# Borges claims

In December 2022, the Company, through MGLIT, acquired 3 mineral claims totaling 1,527 hectares from Mineracao Borges Ltda. These claims are located along trend with known lithium deposits including CBL's deposit and Sigma Lithium's Xuxa and Barreiro deposits.

Upon closing, the Company paid R\$500,000 (\$129,133) upon execution of the conveyance documents transferring the clams to MGLIT. The Company amended this agreement in February 2024 whereby R\$50,000 was paid in March 2024 and, upon producing an independent NI 43-101 compliant mineral resource estimate on the claims of 2 million tons of Li<sub>2</sub>O content over 1.3% by June 5, 2024, the Company shall pay an additional R\$14,950,000 (approximately \$4,100,000) to the vendor.

### Vale claims

In January 2023, the Company, through MGLIT, entered into a binding share purchase agreement with Exotic Mineração Ltda. ("**Exotic**"), pursuant to which MGLIT has the option to acquire up to a 100% equity interest in Vale Do Litio Mineracao Ltda. ("**Vale Litio**"). Vale Litio has a 100% beneficial ownership interest in 3 lithium mining claims in Minas Gerais covering 3,140 hectares. The first of three claims cover 1,738 hectares and is located adjacent to the Galvani target. The other two claims are located in the northeastern portion of the prospective Araçuai-Itinga Pegmatite region.

Pursuant to the terms of the agreement, in January 2023 the Company acquired an initial 2.78% equity ownership interest in Vale Litio by paying R\$900,000.00 (\$232,834) in cash to Exotic. The Company made additional payments since in accordance with the terms of the agreement and amended the agreement in February 2024:

- R\$500,000 (\$129,947) in cash to acquire an additional 1.54% equity ownership in Vale on or before February 20, 2023 (paid in February 2023);
- R\$500,000 (\$137,625) in cash to acquire an additional 1.54% equity ownership in Vale on or before July 20, 2023 (paid July 2023);
- R\$500,000 (\$136,559) in cash to acquire an additional 1.54% equity ownership in Vale on or before February 20, 2024 (paid in January 2024); and
- R\$50,000 (\$12,375) in cash to acquire an additional 0.15% equity ownership in Vale on or before July 20, 2024 (paid July 2024); and

The final payment required will be:

• R\$29,950,000 (approximately \$8,200,000) in cash to acquire the remaining 92.45% equity ownership in Vale on or before January 20, 2025.

If the Company establishes a NI 43-101 compliant mineral resource estimate on the Vale Claims of at least six million tons with an average content greater than  $1.30\%~\text{Li}_2\text{O}$ , the Company shall pay Exotic a cash bonus of R\$10,000,000.00 (approximately \$2,700,000). The Company may terminate the Agreement at any time without incurring any additional financial penalties.

As of the date hereof, the Company has a 7.55% equity ownership interest in Vale Litio.

### Clesio Claim

In February 2023, the Company entered into a binding asset purchase agreement with Clésio Alves Gonçalves Mineração E Comercio Ltda ("Clesio") pursuant to which MGLIT has acquired a strategic mining claim covering 1,000 hectares in Minas Gerais state, Brazil.

Pursuant to the terms of the agreement, the Company has paid R\$500,000 (\$129,947) in cash to Clesio to acquire the claim. If the Company establishes a NI 43-101 compliant mineral resource estimate on this claim of at least two million tons with an average content greater than 1.30%  $Li_2O$  within 30 months of acquiring the claim, the Company shall pay Clesio a cash bonus of USD\$1 million (approximately \$1,360,000).

If the Company establishes a NI 43-101 compliant mineral resource estimate on the claim of at least five million tons with an average content greater than 1.30% Li<sub>2</sub>O within 48 months of acquiring the claim, the Company shall pay Clesio an additional cash bonus of USD\$1 million (approximately \$1,360,000).

# **Salinas Properties**

### Neolit acquisition - Salinas Claims

In March 2023, the Company acquired a 100% interest in Neolit Minerals Participações Ltda. ("Neolit"). Pursuant to the purchase agreement, the Company paid a cash payment of US\$2,031,005 (\$2,797,709) on closing, as well as a cash payment of US\$2,570,767 (\$3,541,232) to settle all existing liabilities of Neolit on closing. As well, the Company issued 4,000,000 common shares of the Company and 1,500,000 common share purchase warrants to the vendor. These warrants are exercisable at a price of \$2.25 for a period of three years and only vest if the Company establishes an independent NI 43-101 compliant mineral resource estimate on the Salinas Project of at least 20 million tonnes with an average grade greater than 1.3% Li<sub>2</sub>O. A final cash payment of US\$1,500,000 (\$2,032,500) is due on the 18-month anniversary of the closing of the transaction. In addition to the Salinas Project, Neolit, pursuant to a definitive agreement it has in place with an arm's length party can select from a land package of 10 tenements and acquire up to a 90% ownership interest in such claims by incurring exploration expenditures. The founder and CEO of Neolit, Dr. André Guimarães, joined the Company as VP Business Development after the acquisition.

Neolit had earned up to an 85% interest the Salinas Project. In June 2024, Neolit acquired the remaining 15% interest for cash consideration of US\$2,000,000 (\$2,736,200), the issuance of 2,500,000 common shares of the Company valued at \$2,000,000, being the fair market value of the shares on the date of issuance, and a deferred payment of US\$1,000,000 (approximately \$1,368,100) due on April 4, 2025.

### **Exploration activity**

The Company began drilling select targets in April of 2022, and to date has completed over 73,000 metres of drilling at the Itinga properties and over 33,000 at the Salinas project, yielding excellent results which were in line with nearby projects and established deposits.

The Company had identified at least twelve different NE-SW trending lithium-bearing LCT pegmatites. These mineralized bodies ranged from 1 to 24 metres in width and traced over a 1 km strike length. The average depth of the mineralized zones intersected to date is approximately 200 metres, however the Company intersected strong lithium grades and thicknesses up to 700 metres down dip. The style of mineralization found to date, characterized by several staked pegmatite vein sets, is consistent with other nearby lithium deposits.

A maiden NI 43-101 mineral resource estimate was announced for the Bandeira and Galvani deposits in June 2023. SGS Geological Services ("SGS") was engaged to complete the National Instrument 43-101 ("NI 43-101") mineral resource estimate. Following this, the Company commenced a 50,000-metre

expansion and definition drilling program for the second half of 2023 targeting Bandeira, the Galvani deposits, the Salinas target, as well as other prospective regional targets. In October 2023, the Company reported an updated Bandeira mineral resource estimate which formed the basis of a concurrently reported Preliminary Economic Assessment ("PEA") (the complete NI 43-101 technical report can be found on SEDAR+ at <a href="www.sedarplus.ca">www.sedarplus.ca</a> under the Company's issuer profile, as well as on the Company's website at <a href="www.lithiumionic.com">www.lithiumionic.com</a>). In April 2024, the Company completed an updated mineral resource estimate for the Bandeira deposit, prepared by GE21 Consultoria Mineral Ltda.("GE21"). In May 2024, the Company announced the results of an NI 43-101 compliant Feasibility Study for Bandeira, prepared by AtkinsRéalis (formerly SNC Lavalin). Please see Mineral Resources and Feasibility Study below.

A 4,000-metre drill program has been initiated on four properties located between two to ten kilometres from the Bandeira Project. This drilling program aims to test lithium soil anomalies identified by previous systematic mapping and soil geochemistry exploration programs.

The Company completed a drill program at the Salinas Project. This project is located in the lithium-rich Aracuai Pegmatite District, which hosts the largest lithium reserves in Brazil. Salinas is located approximately 100 km north of the Itinga claims. Since acquiring the Salinas project through the Neolit acquisition, the Company completed soil geochemistry to help identify priority drill targets. Drill assay results so far have extended the mineralization at Salinas by at least 250 metres along strike. A new high-grade pegmatite dike has been discovered approximately 1.5 km north of the main Salinas zone. The Company has completed an initial mineral resource at Salinas, prepared by GE21. Please see Mineral Resources below. The Company initiated an expanded 30,000-metre drill program in July 2024, which aims to expand and upgrade the current mineral resource estimate. A Preliminary Economic Assessment is planned at Salinas, with the objective to accelerate directly to a Feasibility Study. As well, the Company is in the process of selecting a suitable consultant to carry out an Environmental Impact Assessment ("EIA") study for the Salinas project, which will contain an analysis of the project's potential environmental and social impacts. Following the completion of the EIA, expected in Q1 2025, the Company can apply for the "Prior License" ("LP") for the first stage of the environmental licensing process in Brazil.

Refer to the Company's news releases on <a href="www.sedarplus.ca">www.sedarplus.ca</a> for drilling highlights and assay results for the diamond drill holes completed to date.

A summary of exploration activity is presented below:

### 1) Itinga

| Activity                       | Accumulated | Comments          |
|--------------------------------|-------------|-------------------|
| Soil Samples                   | 6,618       |                   |
| Rock Samples                   | 375         |                   |
| Cut Lines (Km)                 | 93.38       |                   |
| Geological Mapping (Km)        | 205         |                   |
| Geological Trench Mapping (Km) | 6,464       |                   |
| Geological Garimpos Mapped     | 55          |                   |
| Ground Geophysics (km)         | 16.44       |                   |
| Galvani Diamond Drilling (m)   | 7,954       | 66 DDH Completed  |
| Bandeira Diamond Drilling (m)  | 55,876      | 277 DDH Completed |

### 2) Salinas

| Activity                       | Accumulated | Comments          |
|--------------------------------|-------------|-------------------|
| Soil Samples                   | 3,554       |                   |
| Rock Samples                   | 154         |                   |
| Cut Lines (Km)                 | 15.12       |                   |
| Geological Mapping (Km)        | 3,320       |                   |
| Geological Trench Mapping (Km) | 0           |                   |
| Geological Garimpos Mapped     | 1           |                   |
| Ground Geophysics (km)         | 2.56        |                   |
| Salinas Diamond Drilling (m)   | 33,195      | 152 DDH Completed |

### **Mineral Resource Estimate**

On June 27, 2023, the Company announced its maiden NI 43-101 compliant mineral resource estimate ("MRE") on the Bandeira Project and Outra lado Project, which was prepared by SGS. On October 19, 2023, the Company updated the MRE for Bandeira. And on April 12, 2024, the Company reported an updated NI 43-101 MRE for Bandeira. This latest MRE was based on 233 drill holes, or 50,760 metres, drilled between April 2022 and March 2024.

| Updated Mineral Resource Estimate for the Bandeira Project (April 2024)                         |            |            |         |         |  |  |  |
|---|------------|------------|---------|---------|--|--|--|
| Deposit / Cut-Off Grade Contained  Category Resource Grade Contained  (tonnes) (% Li2O) LCE (t) |            |            |         |         |  |  |  |
| Bandeira (0.5% Li2O)  | Measured   | 3,320,000  | 1.38    | 113,100 |  |  |  |
| Indicated   |            | 20,360,000 | 1.33    | 669,600 |  |  |  |
|   | 23,680,000 | 1.34       | 782,700 |         |  |  |  |
|   | Inferred   | 18,250,000 | 1.37    | 618,400 |  |  |  |

- 1. The spodumene pegmatite domains were modeled using composites with Li<sub>2</sub>O grades greater than 0.3%
- 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 is January 10, 2024.
- 6. The QP responsible for the MRE is the geologist Carlos Silva (MAIG #7868).
- 7. The MRE numbers provided have been rounded to the estimate relative precision. Values cannot be added due to rounding.
- 8. The MRE is delimited by Lithium Ionic Bandeira Target Claims (ANM).
- 9. The MRE was estimated using ordinary kriging in 12m x 12m x 4m blocks.
- 10. The MRE report table was produced in Leapfrog Geo software.
- 11. The reported MRE only contains fresh rock domains.
- 12. The MRE was restricted by RPEEE with grade shell using 0.5% Li₂O cut-off.

| Maiden Mineral Resource Estimate for the Outra Lado Project (June 2023)             |                      |           |      |         |  |  |  |
|---|----------------------|-----------|------|---------|--|--|--|
| Deposit / Cut-Off Grade Category Resource Grade Contained (tonnes) (% Li2O) LCE (t) |                      |           |      |         |  |  |  |
| Outro Lado (Galvani) Underground (0.8%  | Measured             | 2,577,915 | 1.47 | 93,691  |  |  |  |
| Li2O)   | Indicated            | 393,370   | 1.43 | 13,908  |  |  |  |
|   | Measured + Indicated | 2,971,285 | 1.46 | 107,599 |  |  |  |
|   | Inferred             | 415,767   | 1.48 | 15,168  |  |  |  |

- 1. The spodumene pegmatite domains were modeled using composites with Li<sub>2</sub>O 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% Li<sub>2</sub>O cut-off.

On April 4, 2024, the Company announced a maiden NI 43-101 compliant mineral resource estimate on the Salinas Project, prepared by GE21 Consultoria Mineral Ltda.("GE21"). This estimate is based on 122 holes or 27,030 metres drilled between May and November 2023. GE21 has identified potential significant mineral resource growth from additional lithium-rich spodumene mineralization including recently discovered targets.

| Mineral Resource Estimate for the Salinas Project |                      |                      |                   |                      |  |  |
|---|----------------------|----------------------|-------------------|----------------------|--|--|
| Deposit / Cut-Off Grade                           | Category             | Resource<br>(tonnes) | Grade<br>(% Li2O) | Contained<br>LCE (t) |  |  |
| Salinas Open-Pit* (0.5% Li2O)                     | Measured             | 940,000              | 1.22              | 28,360               |  |  |
|   | Indicated            | 3,140,000            | 1.11              | 86,194               |  |  |
|   | Measured + Indicated | 4,080,000            | 1.14              | 114,554              |  |  |
|   | Inferred             | 5,540,000            | 0.99              | 135,634              |  |  |
| Salinas Underground (0.5% Li2O)                   | Measured             | 170,000              | 0.93              | 3,910                |  |  |
|   | Indicated            | 1,610,000            | 1.01              | 40,213               |  |  |
|   | Measured + Indicated | 1,780,000            | 1.00              | 44,123               |  |  |
|   | Inferred             | 3,360,000            | 0.95              | 78,938               |  |  |
|   | Measured             | 1,110,000            | 1.18              | 32,270               |  |  |
| TOTAL   | Indicated            | 4,750,000            | 1.08              | 126,407              |  |  |
| TOTAL   | Measured + Indicated | 5,860,000            | 1.09              | 158,678              |  |  |
|   | Inferred             | 8,900,000            | 0.97              | 214,572              |  |  |

(\*) SR limited to 18

- 1. The spodumene pegmatite domains were modeled using composites with Li<sub>2</sub>O 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.
- 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 is January 4, 2024.
- 6. The QP responsible for the MRE is geologist Leonardo Soares (MAIG #5180).
- 7. The MRE numbers provided have been rounded to the estimate relative precision. Values cannot be added due to rounding.
- 8. The MRE is delimited by Lithium Ionic Baixa Grande Target Claims (ANM).
- 9. The MRE was estimated using ordinary kriging in 16m x 16m x 4m blocks.
- 10. The MRE report table was produced in Leapfrog Geo software.

- 11. The reported MRE only contains fresh rock domains.
- 12. The MRE was restricted by a pit shell using a selling price of 2750 US\$/t Conc., Mining cost of 2.50 US\$/ton mined, processing cost of 12.50 US\$/ ton ROM and a selling cost of 112.56 US\$/t conc.

# Feasibility Study - Bandeira Project

The Company announced the results of its Feasibility Study on May 29, 2024. Please see the Company's press release dated May 29, 2024 on Sedar+ or on the Company's website for further details. The Feasibility Study for the Bandeira Project, completed by Atkins Réalis (formerly SNC Lavalin), is the culmination of over 12 months of comprehensive work involving the expertise of numerous mine, mineral processing and environmental engineering disciplines as well as market studies. This includes detailed planning for the mine, process design, plant layout, infrastructure, and product logistics. The certification of mineral resources was conducted by GE21, with geologist Carlos José Evangelista Silva serving as the qualified professional for the estimation. Underground mine studies were led by mining engineer Rubens Mendonça from Planminas, who signed off as the qualified professional for this discipline. The mineral processing studies were consolidated and defined by Tony Lipiec, Process Engineer and Vice President Global, Minerals & Metals Processing at AtkinsRéalis. Environmental studies were reviewed by Branca Horta from GE21, who signed off as the qualified professional for this area. The economic and financial model was validated by L&M Advisory ("L&M"), with João Augusto Hilario de Souza as the qualified professional.

The study supports a robust project with strong economic viability, featuring an underground mine, an efficient and straightforward processing circuit, and a safe, sustainable dry stack tailings facility.

The Feasibility Study focuses solely on Measured and Indicated resources with an earlier data cut-off date of November 13, 2023, which includes 186 drill holes or 41,831 metres. The study plan is therefore based on a smaller estimate of 20.95 Mt grading 1.35% Li<sub>2</sub>O (697kt LCE) M&I, in addition to 16.91 Mt grading 1.40% Li<sub>2</sub>O (584kt LCE) Inferred (see table below). Inferred resources are anticipated to provide additional feed in the future as further drilling is completed.

| Mineral Resource Estimate for the Bandeira Project (November 2023)      |           |       |        |        |  |  |  |
|---|-----------|-------|--------|--------|--|--|--|
| Deposit / Cut-Off Grade Contain  Category Resource (Mt) (% Li2O) LCE (k |           |       |        |        |  |  |  |
| Bandeira (0.5% Li2O) Measured   |           | 3.42  | 1.39   | 117.61 |  |  |  |
|   | Indicated |       | 1.34   | 578.92 |  |  |  |
|   | 20.95     | 1.35  | 696.52 |        |  |  |  |
|   | Inferred  | 16.91 | 1.40   | 583.53 |  |  |  |

- 1. The spodumene pegmatite domains were modelled using composites with Li<sub>2</sub>O grades greater than 0.3%.
- 2. The mineral resource estimates were prepared by the CIM Standards and the CIM Guidelines, using geostatistical and classical methods, plus economic and mining parameters appropriate to the deposit.
- 3. Mineral Resources are not ore reserves or demonstrably economically recoverable.
- 4. Grades reported using dry density.
- The effective date of the MRE is November 13, 2023.
- 6. Geologist Carlos José Evangelista da Silva (MAIG #7868) is the QP responsible for the Mineral Resources.
- 7. The MRE numbers provided have been rounded to estimate relative precision. Values cannot be added due to rounding.
- B. The MRE is delimited by MGLIT Bandeira Target Claims (ANM).
- 9. The MRE was estimated using ordinary kriging in 12m x 12m x 4m blocks.
- 10. The MRE report table was produced using Leapfrog Geo software.
- 11. The reported MRE only contains fresh rock domains.
- 12. The MRE was restricted by RPE3 with grade shell using 0.5% Li<sub>2</sub>O cut-off.
- 13. To convert percentage lithium (Li) to percentage lithium oxide (Li<sub>2</sub>O), multiply by 2.153; to convert Li to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>), multiply by 5.323. To convert a percentage of lithium oxide (Li<sub>2</sub>O) to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>), multiply by 2.472.

The inclusion of the larger April 2024 MRE, as well as the additional drilling completed after the March 2024 data cut-off represents important future upside to the Project. The mine plan will be updated to incorporate the expanded mineral resource estimate in the next phase of project development.

Spodumene Concentrate Price (5.5% Li<sub>2</sub>O; LOM Avg)

Exchange rate (USD: BRL)

Discount Rate

| Project Economics  |                          |
|--|--------------------------|
| Post - Tax NPV <sub>8</sub>                                    | \$1.31 billion           |
| Post - Tax IRR   | 40%                      |
| Pre - Tax NPV <sub>8</sub>                                     | \$1.57billion            |
| Pre - Tax IRR  | 44%                      |
| Annual Revenue – Life Of Mine ("LOM") Average                  | \$417 million            |
| Average Annual After-tax Free Cash Flow                        | \$286 million            |
| Payback  | 41 months                |
|  |                          |
| Production Profile   |                          |
| Total Project Life (LOM)                                       | 14 years                 |
| Total LOM production (ore mined)                               | 17.2 Mt                  |
| Nominal Plant Capacity   | 1.3 Mtpa                 |
| Average plant throughput                                       | 1.23 Mtpa                |
| Run-of-Mine grade, Li2O (mine diluted)                         | 1.16%                    |
| Average Annual Production of Spodumene Concentrate @ 5,5% Li2O | 178 ktpa (24.2 ktpa LCE) |
| Metallurgical recovery (SPO 5.5% Li2O)                         | 68.90%                   |
|  |                          |
| CAPEX AND OPEX   |                          |
| Initial Capital Costs  | \$266 million            |
| Sustaining CAPEX   | \$81 million             |
| Operating costs (FOB / t SC5.5)                                | \$444/t                  |
| Economic Accumptions & Deremeters                              |                          |
| Economic Assumptions & Parameters                              |                          |

The Bandeira project is designed to incorporate dual underground mining operations, ensuring efficient extraction of its deposits. The primary orebodies, representing approximately 83% of the total deposit, will be mined using a bottom-up sublevel stoping method (Bandeira Sublevel Mine, or "BSL Mine"). Concurrently, the secondary southeast orebody, which comprises approximately 0.98 million tonnes, will be mined using the room-and-pillar technique (Bandeira Room and Pillar Mine, or "BRP Mine"). and 3 present the annual mine production plan and the annual plant feed along with the Li<sub>2</sub>O grade, highlighting the project's robust production capabilities.

\$2,277/t

8%

\$1.00:\$5.07

The mineral processing flowsheet for the Bandeira project is designed to maximize lithium recovery and quality. It features a two-stage crushing circuit, which includes a Jaw crusher and a Gyratory Cone crusher, followed by dry screening classification. The coarse and mid fractions undergo ore sorting and Dense Media Separation (DMS) to produce a final SC5.5 Li<sub>2</sub>O concentrate.

The underground mine is expected to produce ore with an average Li<sub>2</sub>O grade of 1.16% over the Life of Mine (LOM), considering a mined dilution rate of 17.0%. The ore sorting process will enhance the ore quality by removing undesirable dilution materials, mainly schist, and non-lithium-bearing minerals such as feldspar and muscovite. This process improves the lithium oxide grade to approximately 1.50%, providing a higher-quality feed for the DMS while rejecting barren uneconomical waste. Based on Heavy Liquid Separation (HLS) bench scale test work completed by the Company, ore sorting and DMS pilot plant operations, the overall Li<sub>2</sub>O recovery is projected to reach 68.9%.

Initial capital costs for the Bandeira Project are estimated at \$266 million, which includes a 15% contingency of \$33.7 million. The sustaining capital over the 14-year mine life is projected at \$81.4 million.

The operating costs of the Bandeira Project are estimated to be US\$64.30 per tonne of ore processed. Total operating costs are estimated at US\$444 per tonne of 5.5% Li<sub>2</sub>O spodumene concentrate produced, placing it in the first quartile of the global lithium industry.

A long-term spodumene concentrate price of US\$2,277/tonne (5.5% Li<sub>2</sub>O grade) was used in the Feasibility Study. This long-term price forecast was obtained by Fastmarkets, one of the leading providers of global commodity pricing and market intelligence, in a report issued in April 2024.

The conservative spodumene concentrate selling price forecasts in the early years of the Bandeira mine life of \$1,000-\$1,600/t for the years 2026 to 2028 resulted in an increased payback period of the project compared to the PEA results from October 2023 (41 months compared to 14 months). Fastmarkets forecasts a higher long-term price based on strong demand and supply fundamentals, which is expected to benefit the Project's overall economics in the future.

The FS is prepared by independent representatives of AtkinsRéalis, GE21, Planminas and L&M each of whom are Qualified Person as defined by NI 43-101 Standards of Disclosure for Mineral Projects. Each of the QPs are independent of the Company and have reviewed and confirmed that the information disclosed within fairly and accurately reflects, in the form and context in which it appears, the information contained in the respective sections of the Bandeira FS for which they are responsible.

The complete NI 43-101 technical report associated with the Feasibility Study can be found on SEDAR+ at www.sedarplus.ca under the Company's issuer profile, as well as the Company's website at www.lithiumionic.com.

### **Project Advancement and optimization opportunities**

Permitting activities are progressing well, in parallel with the advancement of project engineering. The Company has submitted its application for a Concomitant Environmental and Installation License ("LAC", or Licença Ambiental Concomitante) for the Bandeira operation. The LAC is an accelerated permitting scenario available to projects such as Bandeira, whose mine infrastructure covers a small footprint where deforestation is not required. The LAC replaces the first two steps of the environmental licensing process: the Preliminary License (LP - Licença Prévia) and the Installation License (LI – Licença de Instalação); which precede the final Operating License (LO - Licença de Operação). The State of Minas Gerais have recognized its properties as "priority projects". LAC approval would result in the environmental and social license together with an authorization to begin construction. The review of the LAC application for the Bandeira Project is well underway by the Minas Gerais State Department of Environment and Sustainable Development ("SEMAD"). Since submitting the application in November 2023, Lithium Ionic has engaged in productive discussions with SEMAD, during which no significant concerns or issues were highlighted. The license is expected to be granted in early Q3 2024, aligning with our projected timeline.

The Company entered into an agreement with Cemig Distribuição S.A. ("Cemig") to facilitate the construction and electrification of essential power infrastructure between Cemig's existing power grid and the future Bandeira lithium operation, located approximately 3 kilometers away. The agreement aligns with the Company's goal of fast-tracking Bandeira towards production and solidifies its position as a near-term lithium producer in the region by securing low-cost, renewable hydroelectric power to meet the long-term requirements of the project. Cemig is the largest electricity distributor in Brazil, serving, through its network extensions, approximately 96% of the State of Minas Gerais. The Company, through MGLIT, will directly undertake the construction of the electric connection systems, including negotiations with contractors and suppliers, as well as the purchase of materials and services, in accordance with Cemig's pre-approved list. MGLIT and Cemig will jointly manage environmental licensing and land management. The total project cost is expected to be approximately R\$17 million (\$4.65 million). Following completion of the project, the Company is eligible for reimbursement of up to R\$2.98 million (\$816,000) subject to certain requirements. The construction is

scheduled to be completed by Q4 2025, with electrification scheduled for the same period (subject to specific requirements). Following the construction and a technical inspection by Cemig, the transmission lines and substation will be transferred to Cemig. The operation and maintenance of electrical infrastructure downstream of the new substation will be MGLIT's responsibility.

The Company has received approval to use local water resources for the Bandeira Project by the Minas Gerais Institute of Water Management ("Instituto Mineiro de Gestao das Aguas" or "IGAM") which authorizes a flow rate of 101.3 m³/hour meeting the typical maximum consumption needs of the future Bandeira lithium operation.

The Bandeira Project will proceed to the next phase of engineering, focusing on implementing the optimization opportunities identified during the feasibility stage. This phase will include an expanded mineral deposit, which among other positive impacts could potentially extend the mine life. Significant opportunities have also been identified to streamline capital and operating costs, enhancing overall efficiency and optimization of the Project.

## **Sustainability**

The Company has published it's 2023 Sustainability Report which can be found on the Company's website. Since completing its public listing in 2022, the Company has taken significant steps towards transparent and responsible Environmental, Social and Governance ("ESG") and sustainability practices to ensure that it aligns its operations with best standard business principles in these areas. During 2023, the Company integrated ONYEN Corporation's ESG reporting software allowing for the seamless capture, monitoring and reporting of ESG data points ensuring compliance with global standards. The Company also initiated an Initiative for Responsible Mining Assurance ("IRMA") Ready self-assessment for the Bandeira Project to gain insights into how our operational practices align with the IRMA Ready-Standard and industry best practices.

### **Liquidity and Capital Resources**

As at June 30, 2024, the Company had working capital of \$2,965,347 (December 31, 2023 - \$7,232,975). Working capital is a Non-IFRS performance measure. In the mining industry, it is a common Non-IFRS performance measure but does not have a standardized meaning. The Company believes that, in addition to conventional measures prepared in accordance with IFRS, we and certain investors use this information to evaluate the Company's performance and ability to generate cash, profits and meet financial commitments. This Non-IFRS measure is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

|  | June 30, |            | D  | ecember 31, |
|--|----------|------------|----|-------------|
|  |          | 2024       |    | 2023        |
| Current assets:  |          |            |    |             |
| Cash and cash equivalents                                | \$       | 10,186,607 | \$ | 11,167,803  |
| Amounts receivable                                       |          | 242,896    |    | 336,155     |
| Prepaid expenses   |          | 255,055    |    | 511,679     |
|  |          | 10,684,558 |    | 12,015,637  |
| Current liabilities:                                     |          |            |    |             |
| Accounts payable and accrued liabilities                 |          | 7,511,134  |    | 4,526,494   |
| Short-term lease liability                               |          | 208,077    |    | 256,168     |
|  |          | 7,719,211  |    | 4,782,662   |
|  |          |            |    |             |
| Working capital, current assets less current liabilities | \$       | 2,965,347  | \$ | 7,232,975   |

In May 2024, the Company borrowed \$600,000 from a private company on a short-term basis. This promissory note was repaid in early June 2024. Interest of 20% was paid along with a \$25,000 financing fee.

On June 7, 2024, the Company completed a non-brokered private placement financing raising gross proceeds of \$15,992,800 through the issuance of 17,769,778 units of the Company. Each unit consists of one common share of the Company and one-half of a common share purchase warrant. Each whole warrant will entitle the holder to acquire one common share of the Company at a price of \$1.05 expiring December 7, 2025. The Company incurred cash issue costs of \$741,099, and granted 569,527 broker warrants at an exercise price of \$0.90 expiring on June 7, 2025.

The Company, through its subsidiary MGLIT, is party to right-of-use lease agreements for warehouses and dormitories. These agreements are for terms of between 30 and 36 months.

Future payments for right-of-use leases and financing agreements are detailed below:

| _                          | R\$     | CAD\$   |
|----------------------------|---------|---------|
| Payments due within 1 year | 948,717 | 233,384 |
| Payments due in 1-3 years  | 582,478 | 143,290 |

Subsequent to the end of the quarter, the Company, through its subsidiary Lithium Ionic Bandeira Corp., completed a royalty agreement with an affiliate of Appian Capital Advisory LLP, granting a 2.25% gross revenue royalty in exchange for upfront cash consideration of US\$20,000,000. The proceeds are intended to advance the development and construction of the Bandeira Project.

The Company has a need for equity financing for working capital and exploration and development of its properties. Because of continuing operating losses, the Company's continuance as a going concern is dependent upon its ability to obtain adequate financing and to reach profitable levels of operation. It is not possible to predict whether financing efforts will be successful or if the Company will attain profitable levels of operation. As such, there is material uncertainty that casts significant doubt on the Company's ability to continue as a going concern.

# **Results of Operations**

#### Three months ended June 30, 2024

During the three months ended June 30, 2024, the Company recorded a loss and comprehensive loss of \$14,817,785 or \$0.10 per share. During the comparative period ended June 30, 2023, net loss and comprehensive loss was \$11,571,819 or \$0.09 per share. During the current quarter, the Company acquired the remaining 15% of the Salinas project for a total cost of \$6,115,175 (three months ended June 30, 2023: \$nil).

Exploration and evaluation expenses incurred during the three months ended June 30, 2024 included:

- \$763,678 in drilling and geophysics (June 30, 2023: \$7,720,790)
- \$903,989 in technical work with the completion of the Feasibility Study (June 30, 2023: \$449,573)
- \$698,292 in labour costs, which included bonuses on the successful completion of the Feasibility study (June 30, 2023: \$214,866)

Other expenses for the three months ended June 30, 2024 included:

- \$2,879,792 in consulting and management fees (June 30, 2023: \$654,903). The headcount during
  the current quarter was higher than the comparative quarter. As well, bonuses were awarded during
  the current quarter after the successful completion of the Feasibility Study as well as the negotiations
  on the royalty agreement.
- \$1,361,423 in professional costs which included a break fee on an abandoned deal (June 30, 2023: \$341,590).
- \$612,300 in stock-based compensation representing the accrued value of 1,570,000 stock options approved for grant in June 2024 but actually issued subsequent to the end of the quarter (June 30, 2023: \$nil).

During the current quarter, \$23,519 in interest income was earned primarily from GICs (June 30, 2023: \$159,881). Lower cash balances were held during the current period, resulting in the decrease in interest income.

The Company incurred \$35,849 in interest and a financing fee related to the short-term promissory note.

### Six months ended June 30, 2024

During the six months ended June 30, 2024, the Company recorded a loss and comprehensive loss of \$21,723,862 or \$0.15 per share. During the comparative period ended June 30, 2023, net loss and comprehensive loss was \$37,828,134 or \$0.32 per share. During the current period, the Company acquired the remaining 15% of the Salinas project for a total cost of \$6,115,175. During the comparative period, the Company acquired Neolit for a total cost of \$19,548,788.

Exploration and evaluation expenses incurred during the six months ended June 30, 2024 included:

- \$3,985,793 in drilling and geophysics (June 30, 2023: \$11,411,649)
- \$1,825,503 in technical work with the completion of the Feasibility Study (June 30, 2023: \$827,376)
- \$1,019,833 in labour costs, which increased compared to the comparative period on account of both a higher headcount and a bonus grant on the successful completion of the Feasibility study (June 30, 2023: \$323,015)

Other expenses for the six months ended June 30, 2024 included:

- \$3,734,386 in consulting and management fees (June 30, 2023: \$1,240,066). The increase is attributed to both a higher headcount during the current period as well as bonuses awarded d after the successful completion of the Feasibility Study and the successful negotiations on the royalty agreement.
- \$1,516,340 in professional costs which included a break fee on an abandoned deal (June 30, 2023: \$632,778).
- \$539,923 in office and general costs (June 30, 2023: \$405,304). The increase is a result of higher travel costs during the current period.
- \$612,300 in stock-based compensation representing the accrued value of 1,570,000 stock options approved for grant in June 2024 but actually issued subsequent to the end of the quarter (June 30, 2023: \$336,600 related to a grant of 200,000 options).

During the current period, \$92,256 in interest income was earned primarily from GICs (June 30, 2023: \$437,539). Lower cash balances were held during the current period, resulting in the decrease in interest income.

The Company incurred \$35,849 in interest and a financing fee related to the short-term promissory note.

# Summary of quarter results

The following table presents selected financial information for each of the most recent eight quarters:

| Period              | Interest income | Loss and comprehensive loss | Loss per share,<br>basic and<br>diluted<br>\$ |
|---------------------|-----------------|-----------------------------|---|
| Q2- June 2024       | 23,519          | (14,817,785)                | (0.10)  |
| Q1- March 2024      | 68,737          | (6,906,077)                 | (0.05)  |
| Q4- December 2023   | 158,334         | (13,415,311)                | (0.10)  |
| Q3- September 2023* | 224,067         | (13,080,718)                | (0.10)  |
| Q2- June 2023*      | 159,881         | (11,571,819)                | (0.09)  |
| Q1- March 2023      | 277,658         | (26,256,315)                | (0.22)  |
| Q4- December 2022   | 332,133         | (6,584,810)                 | (0.07)  |
| Q3- September 2022  | 80,006          | (6,950,564)                 | (0.07)  |

<sup>\*</sup>The Company adjusted quarterly amounts for the three months ended June 30, 2023 and three months ended September 30, 2023. The Company assessed the materiality of the error and concluded to correct the 2023 audited annual consolidated financial statements on a prospective basis only because the error was not material to the respective periods in relation to exploration and evaluation expenses. There were no changes to the comparative financial results for the three months ended March 31, 2023.

Loss and comprehensive loss fluctuates in response to the level of exploration carried out and can vary period to period. Exploration activity in particular increased during 2023 with higher drilling levels and the release of the PEA. In Q1-2023, the Company acquired Neolit, which was treated as an asset acquisition of mineral claims which were expensed to exploration costs. In Q2-2024, the Company acquired the remaining portion of the Salinas project which was also treated as an asset acquisition, resulting in an increase to loss during that period.

#### **Cash flows**

### Six months ended June 30, 2024

During the six months ended June 30, 2024, the Company used cash of \$12,036,038 in operating activities (six months ended June 30, 2023: \$18,967,539) as discussed above. Non-cash working capital provided \$2,722,223 during the six months ended June 30, 2024 (six months ended June 30, 2023: used \$1,151,734). The net change in non-cash working capital reported on the cash flow statement identifies the changes in current assets and current liabilities that occurred during the period. An increase in a liability (or a decrease in an asset) is a source of funds, while a decrease in a liability (or an increase in an asset) account is a use of funds.

During the six months ended June 30, 2024, investing activities used \$4,136,890 in cash (six months ended June 30, 2023: provided \$7,157,375). The Company paid \$4,115,715 to acquire the remaining 15% interest in the Salinas Project during the current period. The Company also acquired \$21,715 in equipment during the current period (June 30, 2023: \$110,509). During the comparative period, the Company redeemed \$10,000,000 from short-term GIC investments, paid \$2,872,334 in cash to acquire Neolit and acquired cash from this acquisition of \$140,218.

During the six months ended June 30, 2024, cash provided by financing activities was \$15,191,732 (June 30, 2023: provided \$1,154,617). The Company received gross proceeds of \$15,992,800 from a non-brokered private placement and paid costs of issue of \$741,099 during the current period. The Company also borrowed \$600,000 through a short-term promissory note which was also repaid during the period. The exercise of warrants generated \$86,678 during the current period compared to \$1,108,264. No options were exercised during the current period, but option exercises provided \$148,800 in cash during the comparative period. Payments on lease liabilities for the six months ended June 30, 2024 was \$146,647 (six months ended June 30, 2023: \$102,447).

### **SUBSEQUENT EVENTS**

On July 3, 2024, the Company announced that it's subsidiary, Neolit, entered into an option agreement with K2 Mineração e Exportação EIRELI, Super Clássico Comércio, Importação e Exportação Ltda. and Minerales Empreendimentos, Mineração e Participações Ltda. to acquire up to a 90% interest in each of three newly formed special purpose vehicles which collectively hold five mineral claims in the Itinga region. Neolit will initially hold a minority stake in each that can increase up to 90% with an investment of a minimum of R\$21,300,000 (approximately \$5,500,000) by Q1-2030.

On July 18, 2024, the Company completed a definitive royalty agreement with Appian Capital Advisory LLP ("Appian"). The Company, through its subsidiary, Lithium Ionic Bandeira Corp., granted an affiliate of Appian a 2.25% gross revenue royalty in exchange for upfront consideration of US\$20,000,000. The Company intends to use the proceeds to advance the development and construction of the Bandeira Lithium Project. The agreement stipulates an option to fully buy-back the Royalty within the first five years for a fee of US\$67,500,000. The royalty obligations will be secured by charges and share pledges over substantially all current and future assets relating to the Bandeira Project.

On July 26, 2024, shareholders approved the Company's RSU/DSU plan. The Board of Directors may at any time authorize the grant to eligible participants RSUs and/or DSUs. Each grant shall specify the performance period and performance conditions, if any, and the vesting date. Each RSU or DSU award represents the right for the participant to receive on vesting either one common share of the Company or a cash payment equal to the equivalent therefore, which shall be at the sole and absolute discretion of the Board of Directors. The aggregate number of common shares that may be reserved for issuance under the RSU/DSU plan is limited to 12,500,000 common shares. The maximum aggregate number of common shares that are issuable pursuant to all share-based compensation granted or issued in any 12-month period to any one eligible consultant shall not exceed 2% of the total number of issued and outstanding common shares of the Company on a non-diluted basis. RSUs shall be settled by the Company upon the vesting date in either cash or common shares, however DSUs, upon vesting, shall be settled in either cash or shares upon the earlier of the death, eligible retirement or termination of the participant.

### FINANCIAL INSTRUMENTS

Financial instruments recorded at fair value on the statement of financial position are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

- a) Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities;
- b) Level 2 Inputs other than quoted prices that are observable for assets or liabilities, either directly or indirectly; and
- c) Level 3 Inputs for assets and liabilities that are not based on observable market data.

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of the hierarchy for which a significant input has been considered in measuring fair value.

The Company's financial instruments include cash and cash equivalents, and accounts payable and accrued liabilities whose carrying values reported in the statement of financial position approximate their respective fair values due to the relatively short-term nature of these instruments. Management believes the carrying value of lease liabilities approximate fair value.

The Company's risk exposures and the impact on the Company's financial instruments are summarized below:

# (a) Credit risk

Counterparty credit risk is the risk that the financial benefits of contracts with a specific counterparty will be lost if a counterparty defaults on its obligations under the contract. This includes any cash amounts owed to the Company by those counterparties, less any amounts owed to the counterparty by the Company where a legal right of set-off exists and also includes the fair values of contracts with individual counterparties which are recorded in the financial statements.

#### Trade credit risk

The Company is not exposed to significant trade credit risk.

#### Cash

In order to manage credit and liquidity risk the Company's policy is to invest only in highly rated investment grade instruments that have maturities of three months or less. Limits are also established based on the type of investment, the counterparty and the credit rating.

# (b) Currency risk

Currency risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will fluctuate because of changes in foreign exchange rates. The Company's foreign currency risk arises primarily with respect to the Brazilian Real (BRL) from its property interests in Brazil. Fluctuations in the exchange rates between these currencies and the Canadian dollar could have a material effect on the Company's business, financial condition and results of operations. The Company does not engage in any hedging activity to mitigate this risk.

As at June 30, 2024, the Company had the following financial instruments and denominated in foreign currency (expressed in Canadian dollars):

June 30, 2024

|  | E         | razilian reals | US dollars  |
|--|-----------|----------------|-------------|
| Cash                                     | \$        | 1,088,229 \$   | 6,778       |
| Accounts payable and accrued liabilities |           | (1,166,097)    | (3,491,189) |
| Lease liabilities                        | (344,084) |                | -           |
|  | \$        | (421,952) \$   | (3,484,411) |

A 10% strengthening (weakening) of the Canadian dollar against the Brazilian real would decrease (increase) net loss and comprehensive loss by approximately \$42,000 (June 30, 2023 - \$366,000).

A 5% strengthening (weakening) of the Canadian dollar against the US dollar would decrease (increase) net loss and comprehensive loss by approximately \$174,000 (June 30, 2023 - \$216,000).

### (c) Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. At June 30, 2024, the Company had a cash and cash equivalents balance of \$10,186,607 (December 31, 2023 - \$11,167,803) to settle current liabilities of \$7,719,211 (December 31, 2023 - \$4,782,662). Of the current liabilities, approximately \$1,900,000 have contractual maturities of less than 30 days and are subject to normal trade terms.

# (d) Commodity / Equity price risk

The Company is exposed to price risk with respect to commodity and equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. Commodity price risk is defined as the potential adverse impact on earnings and economic value due to commodity price movements and volatilities. The Company closely monitors commodity prices, as they relate to lithium, individual equity movements and the stock market to determine the appropriate course of action to be taken by the Company. Commodity price risk is remote as the Company is not a producing entity.

### **Critical Accounting Policies**

The Company's significant accounting policies are described in Note 3 of the Company's consolidated financial statements for the year ended December 31, 2023. The preparation of statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. The following is a list of the accounting policies that management believes are critical, due to the degree of uncertainty regarding the estimates and assumptions involved and the magnitude of the asset, liability or expense being reported:

- Foreign currencies
- Exploration and evaluation properties

### Foreign currencies

The Foreign currency translation presentation and functional currency of the Company and its subsidiary is the Canadian dollar.

Transactions in currencies other than the functional currency are recorded at the rates of exchange prevailing on the dates of the transactions. At each financial position reporting date, monetary assets and liabilities that are denominated in foreign currencies are translated at the rates prevailing at the date of the statement of financial position. Exchange differences are recognized in operations in the period in which they arise.

The Company makes expenditures and incurs costs in Brazilian reals ("BRL"). At June 30, 2024, one Canadian dollar was worth BRL 4.0650 (December 31, 2023 - BRL 3.6684). During the six months ended June 30, 2024, the average value of one Canadian dollar was BRL 3.7394 (June 30, 2023 - BRL 3.7597).

# Project evaluation expenses

The Company expenses exploration and evaluation expenses as incurred. Exploration and evaluation expenses include acquisition costs of mineral property rights and exploration and evaluation activities. Once a project has been established as commercially viable, technically feasible and the decision to proceed with development has been approved by the Board of Directors, related development expenditures are capitalized. This includes costs incurred in preparing the site for mining operations. Capitalization ceases when the mine is capable of commercial production.

|   | Three months ended June 30, |               |               | ths ended<br>e 30, |  |
|---|-----------------------------|---------------|---------------|--------------------|--|
|   | 2023                        | 2022          | 2023          | 2022               |  |
| Acquisition of Neolit property            | 6,115,175                   | _             | 6,115,175     | 19,548,788         |  |
| Drilling and geophysics                   | 763,678                     | 7,720,790     | 3,985,793     | 11,411,649         |  |
| Mining licenses and land acquisition      | 224,864                     | 952,489       | 392,319       | 1,447,969          |  |
| Technical reports                         | 903,989                     | 449,573       | 1,825,503     | 827,376            |  |
| Project overhead costs                    | 385,334                     | 366,842       | 709,824       | 705,497            |  |
| Labour                                    | 698,292                     | 214,866       | 1,019,833     | 323,015            |  |
| Land management fees, taxes and permits   | 71,822                      | 323,356       | 183,837       | 419,421            |  |
| Professional fees                         | 86,105                      | 109,451       | 164,626       | 141,732            |  |
| Travel, meals and accomodation            | 48,453                      | 17,319        | 130,929       | 43,715             |  |
| Total exploration and evaluation expenses | \$<br>9,297,712             | \$ 10,154,686 | \$ 14,527,839 | \$ 34,869,162      |  |

### **Commitments and Contingencies**

The Company's exploration activities are subject to various laws and regulations governing the protection of the environment. These laws and regulations are continually updated and may become more restrictive. The Company believes its operations are materially in compliance with all applicable laws and regulations. The Company expects to make expenditures to comply with such laws and regulations.

The Company is subject to various claims, lawsuits and other complaints arising in the ordinary course of business. The Company records provisions for losses when claims become probable and the amounts are estimable.

The Company, through its subsidiary MGLIT, is contesting a decision by the Agência Nacional de Mineração ("ANM") which reduced the area of one of its Bandeira claims, and intends to file a lawsuit seeking to reinstate the original area of the claim.

The Company is party to certain management contracts. As of June 30, 2024, these contracts require payments of approximately \$9,730,000 (December 31, 2023 - \$7,600,000) to be made upon the occurrence of a change of control to the officers and consultants of the Company. The Company is also committed to payments upon termination of approximately \$2,700,000 (December 31, 2023 - \$2,410,000) pursuant to the terms of these contracts as of June 30, 2024. As a triggering event has not taken place on June 30, 2024, these amounts have not been recorded in these consolidated financial statements.

Subject to the agreement to acquire mineral claims from Mineracao Borges Ltda. in December 2022, upon producing an independent NI 43-101 compliant mineral resource estimate on the claims of 2 million tons of Li<sub>2</sub>O content over 1.3% by June 21, 2025, the Company shall pay an additional R\$14,950,000. As at June 30, 2024, no determination has been made in this regard and no amount has been accrued related to this contingent arrangement.

In connection with the Company's agreement to acquire a 100% interest in the Vale Litio claims, the Company is to scheduled to pay R\$50,000 on July 20, 2024; and R\$29,950,000 on or before January 20, 2025 to acquire the remaining 92.6% interest. As well, if the Company establishes a NI 43-101 compliant mineral resource estimate on the Vale claims of at least six million tonnes with an average content greater than 1.3%  $\text{Li}_2\text{O}$ , the Company shall pay Exotic a cash bonus of R\$10,000,000. The Company may terminate the agreement at any time without incurring any additional financial penalties.

Subject to the agreement with Clesio, if the Company establishes a NI 43-101 compliant mineral resource estimate on the Clesio claim of at least two million tonnes with an average content greater than 1.3% Li<sub>2</sub>O by August 13, 2025, the Company shall pay Clesio a cash bonus of USD\$1,000,000. If the Company establishes a NI 43-101 compliant mineral resource estimate on the Clesio claim of at least five million tonnes with an average content greater than 1.3% Li<sub>2</sub>O by February 13, 2027, the Company shall pay Clesio an additional cash bonus of USD\$1,000,000. As at June 30, 2023, no determination has been made in this regard and no amount has been accrued related to this contingent arrangement.

Subject to the acquisition of Neolit, 1,500,000 warrants were issued as part of the consideration are exercisable at a price of \$2.25 until March 10, 2026 and only vest if the Company establishes an independent NI 43-101 compliant mineral resource estimate on the Salinas Project of at least 20 million tonnes with an average grade greater than 1.3% Li<sub>2</sub>O.

# **Transactions with Related Parties**

As at June 30, 2024, an amount of approximately \$1,930,000 (December 31, 2023 - \$227,800), included in accounts payable and accrued liabilities, was owed to directors and officers of the Company. This includes bonuses granted upon the successful completion of the Feasibility Study in June 2024. Such amounts are unsecured and non-interest bearing.

During the three and six months ended June 30, 2024, the Company paid \$34,021 and \$64,021 respectively (three and six months ended June 30, 2023: \$12,436 and \$19,936 respectively) to Troilus Gold Corp. for office space, administrative services and reimbursable costs. As at June 30, 2024, a balance of \$2,908 (December 31, 2023: \$315) is payable to Troilus Gold Corp. Mr. Tom Olesinski, the Company's Chief Financial Officer, is a director of Troilus Gold Corp, and Mr. Ian Pritchard, a director of the Company, is an officer of Troilus Gold Corp.

Also during the three and six months ended June 30, 2024, the Company paid \$14,741 and \$30,392 respectively (three and six months ended June 30, 2023: \$17,773 and \$36,285 respectively) to Falcon Metais Ltda. for various administrative services. Mr. Helio Diniz, the Company's President, is an officer of Falcon Metais Ltda.

In June 2024, directors and officers subscribed for approximately 655,552 units of the Company in relation to the non-brokered private placement offering (Note 11).

The Company, through MGLIT, loaned approximately R\$10,000,000 (\$2,697,000) to Valitar Participacoes Ltda., a company in which Mr. Helio Diniz indirectly owns a 90% interest and of which he is an officer, in order to acquire additional land titles and/or land leases. As Valitar is controlled by the Company, this loan is eliminated on consolidation.

#### Compensation of key management personnel of the Company

In accordance with IAS 24, key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company directly or indirectly, including any directors (executive and non-executive) of the Company. During the three and six ended June 30, 2024 and 2023, the remuneration of directors and other key management personnel is as follows:

|                                | Three months ended June 30, |    |         | Six months ended June 30, |             |
|--------------------------------|-----------------------------|----|---------|---------------------------|-------------|
|                                | 2024                        |    | 2023    | 2024                      | 2023        |
| Management and Consulting fees | \$2,676,320                 |    | 543,471 | \$3,445,021               | \$1,032,274 |
| Share-based compensation       | 423,150                     |    | -       | 423,150                   |             |
| _Total                         | \$3,099,470                 | \$ | 543,471 | \$3,868,171               | \$1,032,274 |

### Off-balance sheet arrangements

As of the date of this MD&A, the Company does not have any off-balance-sheet arrangements that have, or are reasonably likely to have, a current or future effect on the financial performance or financial condition of the Company, including, and without limitation, such considerations as liquidity and capital resources.

# **Risk Factors**

Mining exploration inherently contains a high degree of risk and uncertainty, which even a combination of careful evaluation, experience and knowledge may not eliminate. The following are certain factors relating to the business of the Company, which investors should carefully consider when making an investment decision concerning the Company's shares. These risks and uncertainties are not the only ones facing the Company. Additional risks and uncertainties not presently known that the Company currently deems immaterial, may also impair the operations of the Company. If any such risks occur, the financial condition, liquidity and results of operations of the Company could be materially adversely affected and the ability of the Company to implement its growth plans could be adversely affected. An investment in the Company is speculative. An investment in the Company will be subject to certain material risks and investors should not invest in securities of the Company unless they can afford to lose their entire investment. The following is a description of certain risks and uncertainties that may affect the Company.

# Substantial Capital Requirements and Liquidity

Substantial additional funds for the establishment of the Company's current and planned operations will be required. No assurances can be given that the Company will be able to raise the additional funding that may be required for such activities, should such funding not be fully generated from operations. Mineral prices, environmental rehabilitation or restitution, current financial conditions, revenues, taxes, capital expenditures, operating expenses and geological results are all factors which will have an impact on the amount of additional capital that may be required. To meet such funding requirements, the Company may be required to undertake additional equity financing, which would be dilutive to shareholders. Debt financing, if available, may also involve restrictions on financing and operating activities. There is no assurance that additional financing will be available on terms acceptable to the Company or at all. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and pursue only those projects that can be funded through cash flows generated from its existing operations, if any.

#### Financing Risks and Dilution to Shareholders

The Company will have limited financial resources, no operations, and no revenues. Even if the Company's exploration program on one or more of the properties is successful, additional funds will be required for the purposes of further exploration and development. There can be no assurance that the Company will be able to obtain adequate financing in the future or that such financing will be available on favourable terms or at all. It is likely such additional capital will be raised through the issuance of additional equity which would result in dilution to the Company's shareholders.

# **Limited Operating History**

The Company is a relatively new company with limited operating history. The Company only recently acquired its interest in its material properties and the Company has no history of business or mining operations, revenue generation or production history. The Company has yet to generate a profit from their activities. The Company will be subject to all the business risks and uncertainties associated with any new business enterprise, including the risk that it will not achieve its growth objective. The Company anticipates that it may take several years to achieve positive cash flow from operations.

#### Calculation of Mineral Resources and Mineral Reserves

There is a degree of uncertainty attributable to the calculation and estimates of resources and reserves and the corresponding metal grades to be mined and recovered. Until resources and reserves are actually mined and processed, the quantities of mineralization and metal grades must be considered as estimates only. Any material change in the quantity of mineral resources and/or reserves, grades and recoveries may affect the economic viability of the Company's operations.

# Fluctuating Mineral Prices

The economics of mineral exploration are affected by many factors beyond the Company's control, including commodity prices, the cost of operations, variations in the grade of minerals explored and fluctuations in the market price of minerals. Depending on the price of minerals, the Company may determine that it is impractical to continue a mineral exploration operation.

Mineral prices are prone to fluctuations and the marketability of minerals is affected by government regulation relating to price, royalties, allowable production and the importing and exporting of minerals, the effect of which cannot be accurately predicted. There is no assurance that a profitable market will exist for the sale of any minerals that may be found on the Company's properties.

### Regulatory, Permit and License Requirements

The current or future operations of the Company require permits from various governmental authorities, and such operations are and will be governed by laws and regulations that may concern, among other things, exploration, development, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, site safety and other matters. Companies engaged in the exploration and development of mineral properties generally experience increased costs and delays in development and other schedules because of the need to comply with applicable laws, regulations and permits. There can be no assurance that all permits which the Company may require for facilities and the conduct of exploration and development operations on its properties will be obtainable on reasonable terms, or that such laws and regulations will not have an adverse effect on any exploration or development project which the Company might undertake.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in exploration and development operations may be required to compensate those suffering loss or damage by reason of the exploration and development activities and may have civil or criminal fines or penalties imposed upon them for violation of applicable laws or regulations. Amendments to current laws, regulations and permits governing operations and activities of mineral companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or exploration and development costs, or require abandonment or delays in the development of new or existing properties.

# Title to Properties

Acquisition of title to mineral properties is a very detailed and time-consuming process. Title to, and the area of, mineral properties may be disputed. The Company cannot give an assurance that title to some or all the Company's interest in its properties will not be challenged or impugned. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify. A successful claim that the Company does not have the interest it understands it has in its properties could cause the Company to lose any rights to explore, develop and mine any minerals on such properties without compensation for its prior expenditures relating thereto.

## Competition

The mineral exploration and development industry is highly competitive. The Company will have to compete with other companies, many of which have greater financial, technical and other resources than the Company, for, among other things, the acquisition of minerals claims, leases and other mineral interests, as well as for the recruitment and retention of qualified employees and other personnel. Failure to compete successfully against other companies could have a material adverse effect on the Company and its prospects.

# Reliance on Management and Dependence on Key Personnel

The success of the Company will be largely dependent upon the performance of its directors and officers and the ability to attract and retain key personnel. The loss of the services of these persons may have a material adverse effect on the Company's business and prospects. The Company will compete with numerous other companies for the recruitment and retention of qualified employees and contractors. There is no assurance that the Company can maintain the service of its directors and officers, or other qualified personnel required to operate its business. Failure to do so could have a material adverse effect on the Company and its prospects.

#### **Environmental Risks**

The Company's exploration and appraisal programs will, in general, be subject to approval by regulatory bodies. Additionally, all phases of the exploration, development and mining business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of international conventions and national and local laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emissions of various substances produced in association with exploration, development and mining operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs.

### Local Resident Concerns

Apart from ordinary environmental issues, the exploration, development and mining of the Company's properties could be subject to resistance from local residents that could either prevent or delay exploration and development of the properties.

# Foreign Operations

The Company's properties are located in Brazil. As such, the Company's proposed activities with respect to its properties will be subject to governmental, political, economic and other uncertainties, including but not limited to expropriation of property without fair compensation, repatriation of earnings, nationalization, currency fluctuations and devaluations, exchange controls and increases in government fees, renegotiation or nullification of existing concessions and contracts, changes in taxation policies, economic sanctions and the other risks arising out of foreign governmental sovereignty over the areas in which the Company's operations will be conducted, as well as risks including loss due to civil strife, acts of war, insurrections and the actions of national labour unions. Future government actions concerning the economy, taxation, or the operation and regulation of nationally important facilities such as mines, could have a significant effect on the Company. No assurances can be given that the Company's plans and operations will not be adversely affected by future developments in Brazil. Any changes in regulations or shifts in political attitudes will be beyond the Company's control and may adversely affect the Company's business.

### Uninsurable Risks

Exploration, development and production operations on mineral properties involve numerous risks, including unexpected or unusual geological operating conditions, rock bursts, cave-ins, fires, floods, earthquakes and other environmental occurrences, any of which could result in damage to, or destruction of, equipment and mines, damage to life or property, environmental damage and possible legal liability. Although precautions to minimize risk will be taken, operations are subject to hazards that may result in environmental pollution and consequent liability that could have a material adverse impact on the business, operations and financial performance of the Company. It is not always possible to obtain insurance against all such risks and the Company may decide not to insure against certain risks as a result of high premiums or other reasons. Should such liabilities arise, they could have an adverse impact on the Company's results of operations and financial condition and could cause a decline in the value of the Company securities.

### Litigation

The Company and/or its directors or officers may be subject to a variety of civil or other legal proceedings, with or without merit.

# **Outstanding Share Data**

As at the date of this MD&A, the Company has:

- 1) 158,579,158 common shares outstanding.
- 2) 12,713,353 warrants outstanding, with expiry dates ranging from October 5, 2024 to March 10, 2026. If all the warrants were exercised, 12,713,353 shares would be issued for gross proceeds of \$16,441,727.
- 3) 15,782,000 options outstanding, with expiry dates ranging from April 20, 2027 to July 11, 2029. If all the options were exercised, 15,782,000 shares would be issued for gross proceeds of \$16,744,880.

### CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This MD&A contains, or incorporates by reference, "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, statements with respect to the future performance of Lithium Ionic, Lithium Ionic's mineral properties, the future price of lithium, the estimation of mineral resources and mineral reserves, results of exploration activities and studies, the realization of mineral resource estimates, exploration activities, costs and timing of the development of new deposits, the acquisition of additional mineral resources, the results of future exploration and drilling, costs and timing of future exploration of the mineral projects, requirements for additional capital, management's skill and knowledge with respect to the exploration and development of mining properties in Brazil, 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 the Company 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 mineral projects; general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; risks associated with dependence on key members of management; conclusions of economic evaluations and studies; currency fluctuations (particularly in respect of the Canadian dollar, the United States dollar, the Brazilian real and the rate at which each may be exchanged

for the others); future prices of lithium; uncertainty in the estimation of mineral resources; 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. Such forward-looking statements are based on a number of material factors and assumptions, including; that contracted parties provide goods and/or services on the agreed timeframes; that ongoing contractual negotiations will be successful and progress and/or be completed in a timely manner; that no unusual geological or technical problems occur; that plant and equipment work as anticipated and that there is no material adverse change in the price of lithium. Although the Company 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. looking statements contained herein are made as of the date of this MD&A. There can be no assurance that the 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.