



**ELECTRA BATTERY MATERIALS CORPORATION  
(FORMERLY FIRST COBALT CORP.)**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2022**

**(EXPRESSED IN THOUSANDS OF CANADIAN DOLLARS)**

**ELECTRA BATTERY MATERIALS CORPORATION**  
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*(expressed in thousands of Canadian dollars)*

## GENERAL

This Management's Discussion and Analysis of Electra Battery Materials Corporation ("Electra" or the "Company") ("MD&A") was prepared on August 11, 2022 and provides an analysis of the Company's financial results for the three months and six months ended June 30, 2022, and 2021. The following information should be read in conjunction with the accompanying condensed interim consolidated financial statements for the three months and six months ended June 30, 2022, and 2021 with accompanying notes which have been prepared following IAS 34, Interim Financial Reporting ("IAS 34"). All dollar figures are expressed in thousands of Canadian dollars unless otherwise stated. Financial Statements are available at [www.sedar.com](http://www.sedar.com) and the Company's website at [www.electrabmc.com](http://www.electrabmc.com).

## COMPANY OVERVIEW

Electra was incorporated on July 13, 2011, under the Business Corporations Act of British Columbia and on September 4, 2018, the Company filed a Certificate of Continuance in Canada and adopted Articles of Continuance as a Federal Company under the Canada Business Corporations Act (the "CBCA"). On December 6, 2021, the Company changed its name from First Cobalt Corp. to Electra Battery Materials Corporation to better align with its strategic vision. The Company is focused on onshoring the EV supply chain and processing battery materials from its Refinery in Temiskaming Shores, Ontario.

In addition, the Company continues to explore its Idaho mineral properties as a potential future source of North American cobalt and copper.

Electra is a public company listed on the TSX Venture Exchange (TSX-V) (under the symbol ELBM). On April 27, 2022, the Company began trading on the Nasdaq Capital Market (Nasdaq) (under the symbol ELBM). The Company's registered and records office is Suite 2400, Bay-Adelaide Centre, 333 Bay Street, Toronto, Ontario, M5H 2T6. The Company's head office is located at 133 Richmond Street W, Suite 602, Toronto, Ontario, M5H 2L3.

## Q2 2022 HIGHLIGHTS AND RECENT EVENTS

On April 5, 2022, the Company announced that it was undertaking a consolidation of its outstanding common share capital on an 18-to-1 basis, thereby reducing the number of shares outstanding from 564,443,309 to 31,357,959. The share consolidation was completed to support a listing application for Electra's shares on the Nasdaq, which required a share price of at least US\$3.00 at the time of the application. Approval was subsequently received and the Company commenced trading on Nasdaq on April 27, 2022, under the ticker symbol "ELBM".

The at-the-market equity program ("ATM Program") established in January 2022 to allow the Company to issue up to \$20,000 of common shares from treasury to the public was amended on May 17, 2022, to extend the program to the Nasdaq.

On April 11, Electra announced the appointment of Renata Cardoso as Vice-President, Sustainability and Low Carbon. Renata will have overall responsibility for the Company's mission to exceed global ESG norms in the industry, in line with Electra's business objective to be the partner of choice in the EV market. On May 25, 2022, Electra announced the appointment of Joe Racanelli as Vice President, Investor Relations, responsible for the Company's engagement with the investment community. On June 8, 2022, Electra announced the appointment of Craig Cunningham as Chief Financial Officer and ended Michael Insulan's appointment as Interim Chief Financial Officer. On June 22, 2022, the Company appointed David Marshall as Vice President, Engineering to oversee refining expansion studies and support the Refinery construction project currently underway.

On June 22, 2022, Electra announced preliminary discussions with the Government of Quebec on the construction of a new cobalt refinery in Becancour, Quebec that will integrate with an emerging battery materials park in the province.

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In support of the effort, Electra is undertaking a study to determine the feasibility of building a second cobalt refinery and potential synergies from integration with other battery material companies in the province as well as potential funding from the federal and provincial governments.

On July 26, 2022, Electra announced the completion of a Benefits Agreement with the Métis Nation of Ontario solidifying a relationship between the two parties and providing employment, training, procurement, and business opportunities related to the construction and expansion of the Company's battery materials refinery north of Toronto near Temiskaming Shores. 20,000 common shares were issued as part of the agreement with a deemed value of \$82 at a market price of \$4.11 per share as of the market close on July 25, 2022.

During the six months ended June 30, 2022, noteholders converted US\$3,500 of the principal value of notes, resulting in the Company issuing a total of 789,103 post-consolidation common shares. The Company also made interest make-whole payments to the noteholders upon conversion totalling US\$485. As of June 30, 2022, a total of US\$9,000 of the principal value of notes were converted by noteholders which resulted in the Company issuing a total of 2,029,122 post-consolidation common shares.

During the six months ended June 30, 2022, the Company was in a net income position of \$9,864 or \$0.31 earnings per share. This was primarily driven by a \$16,685 gain on the fair value of the embedded derivative liability portion of the convertible debt. The Company's costs associated with the Refinery expansion were capitalized, and as a result operating expenses were reduced, thus producing an income position.

Commitments as at June 30, 2022, of \$33,449 exceed unencumbered cash of \$32,100 after the US \$7,500 minimum cash balance required under the convertible debt agreement. Management believes that current commitments can be met through the sale of marketable securities, outstanding government grants, funds available through the ATM, and strategic investments as well as potential equity and debt raise.

To complete the construction and commissioning of the Refinery the Company will require additional funding in 2022. The Company is also in discussion with several parties for a working capital lending facility to finance the purchase of refinery feedstock. As the cobalt Refinery achieves full production, the size of the working capital facility could reach approximately \$80,000. Although the Company has historically been successful in financing activities there can be no assurances that the Company will be able to obtain financing. This represents a material uncertainty that may cast significant doubt on the Company's ability to continue as a going concern. The accompanying interim consolidated financial statements and amounts disclosed here do not include the adjustments and classifications of assets and liabilities that would be necessary should the Company be unable to continue as a going concern. Any such adjustments may be material.

### **Battery Materials Park**

The Company continued to advance the battery materials park study commenced in March 2022 in partnership with the Government of Canada, the Government of Ontario, Glencore plc and Talon Metals. The consortium is collaborating on a \$900 study of the engineering, permitting, socio-economic, ESG and costs associated with the construction of a nickel sulfate plant as well as a battery precursor cathode active materials (PCAM) plant adjacent to Electra's cobalt refinery and recycling plant. The realization of this vision would result in the creation of an integrated, localized and environmentally sustainable battery materials park for the North American electric vehicle market. The Company's strategic plan would entail the construction of a nickel sulfate facility adjacent to its cobalt and recycling facilities and a partnership with an existing PCAM producer to co-locate at Electra's industrial complex north of Toronto.

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The cobalt Refinery construction project continued to advance with a projected delay in final commissioning in Spring 2023. As detailed below, project completion has been primarily impacted by three developments; equipment quality issues, availability of electrical components and pipe fabrication lead times. Additional cost pressures stemming from equipment delays as well as general inflationary trends increased the average cost of project inputs, such as steel, copper, nickel and freight rates have increased the project cost of completion for the Refinery to \$100,000-\$105,000 (US\$70,000-US\$73,500). The expected total capital cost to complete the Refinery is \$16,000-\$21,000, or 19%-25%, higher when compared to the Company's original guidance of \$83,774 (US\$67,020). Additional financing will be required to complete the construction and commissioning of the plant.

On April 6, the Company provided an update on battery recycling, Phase 2 of the Battery Materials Park project. A battery recycling demonstration plant is expected to be commissioned in Q3 2022, using existing equipment at a cost of \$3,000. The demonstration plant will allow the Company to complete the early commissioning of the feed handling system and leach circuits that will be required for the cobalt sulfate plant. Once the recycling facility achieves expected commercial production in the second half of 2023, nickel and cobalt will be sold to Glencore until the end of 2024 on market-based terms.

#### ***Iron Creek Cobalt-Copper Project***

On March 14, the Company released drill results to the west of its Iron Creek cobalt-copper project, which extended mineralization by 130 metres along strike and by 110 metres at depth. Broad widths of copper mineralization were intercepted along with high-grade cobalt intercepts. Results to the east of the current deposit were released on May 9, highlighting new cobalt intercepts and extending mineralization by an additional 180 metres as well as a down dip from the eastern edge of the resource zone. The Iron Creek strike extent now extends over more than one kilometre and is open along strike and at depth.

On August 4, 2022, the Company provided updates on Iron Creek including the identification of new mineralization in the Idaho cobalt belt. An open-ended anomaly at Ruby was defined using Induced Polarization (IP) and drilling was initiated on the Ruby target to determine its structure, size, and viability as a deposit extension. 2,500 m of drilling is planned to complete this first pass evaluation. The Company's objective over the next two years is to meaningfully increase the resource size at Iron Creek and advance the asset towards a development decision.

#### ***Amendment to Base Shelf Prospectus and At-the-Market Equity Program***

On November 30, 2021, the Company announced that it had filed an amendment to its base shelf prospectus to increase the total offering price of the securities of the Company that may be offered from time to time under the Prospectus from \$20,000 to \$70,000. The original \$20,000 capacity had been fully utilized, and this amendment provided an additional \$50,000 of flexibility to consider future financing opportunities under favourable market conditions to advance its battery materials park and other growth plans to increase shareholder value.

On May 17, 2022, the Company announced an update to the at-the-market equity program established in Q1 2022 (the "2022 ATM Program"), to allow sales of Common Shares under the ATM in the United States following the listing on the Nasdaq Capital Market in April 2022. The ATM acts as a supplement to the amended base shelf prospectus, that allows the Company to issue up to \$20,000 of common shares from treasury to the public from time to time, at the Company's discretion. Distributions of common shares through the 2022 ATM Program will be made under the terms of the distribution agreement between the Company and CIBC Capital Markets. The volume and timing of distributions under the ATM Program will be determined at the Company's sole discretion, and the ATM program is effective until the earlier of the issuance of all common shares issuable under the ATM Program and December 26, 2022. As of the date of this MD&A, August 11, 2022, the Company has issued a total of 472,494 common shares under the 2022 ATM Program at an average price of \$5.61 per share, providing gross proceeds of \$2,651. A

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commission of \$66 was paid to CIBC Capital Markets concerning these distributions. There is approximately \$17,349 of room remaining under the program.

### **COVID-19 Impacts**

Market volatility and economic uncertainty due to the COVID-19 pandemic have cast uncertainty over global economic activity levels. Despite pandemic-related market instability, the electric vehicle (EV) market continues to strengthen in North America, Europe and around the world. The Company continues to advance its plans for the Refinery and has not encountered any adverse effects relating to COVID-19 to date. Best practice protocols have been developed and implemented for an on-site activity to ensure the health and safety of all personnel. Where possible, the Company has procured equipment and materials for the Refinery expansion from North American sources to attempt to mitigate any impacts from global supply chain constraints.

Notwithstanding the foregoing, global uncertainty related to the pandemic may present other challenges that are not known at the current time beyond new supply chain interruptions, cost impacts, or alteration of business plans by the Company's strategic partners.

### **OUTLOOK AND OVERVIEW OF CURRENT PROGRAMS**

The Company's vision is to provide sustainable battery materials to the EV industry. The Company owns two main assets – the Refinery located in Ontario, Canada and the Iron Creek cobalt-copper project located in Idaho, United States. It also controls several properties in Ontario known as the Cobalt Camp.

The Company has been progressing plans to create an integrated battery materials park in Ontario, Canada. The first phase of this plan involves recommissioning and expanding the Refinery to become the only refiner of battery-grade cobalt sulfate in North America. Electra's primary focus for 2022 is advancing the construction and commissioning of the Refinery and expects to commence commissioning in the spring of 2023. The second phase of the Company's strategic plan involves the introduction of recycled battery materials (known as black mass) as additional feedstock for the Refinery, with commercial, metallurgical, and engineering activities on the potential incorporation of black mass into the Refinery being conducted in parallel with the phase one expansion project. The Company intends to operate a black mass demonstration plant at its refinery complex in the Fall of 2022 to test its flow sheet on a larger scale. The Company has also increased exploration activity in Idaho.

As part of the Company's strategic plan, it is committed to industry-leading Environment, Social and Governance (ESG) principles and expects to have the greenest source of battery materials when in production. The Company has developed an independent life cycle assessment (LCA) that compares projected carbon emissions, water consumption and other environmental outputs against operating facilities in China, and the study will be updated upon the Refinery's commissioning. The Company's 90% renewable energy-powered Refinery scored very favourably on the key environmental metrics. In July 2022, the Company joined the Responsible Minerals Initiative and is developing leading reports and metrics that demonstrate its path to low carbon operations. The Company intends to release its first sustainability report in Q4 2022.

The outlook for Electra's North American assets is discussed below:

#### **1. The Cobalt Refinery**

The Company is working towards restarting its wholly owned Refinery in Ontario, Canada as the first phase in a multi-phase strategy to create an integrated battery materials park in North America. In 2020, the Company announced the results of an engineering study on the expansion of the Refinery that demonstrated that the facility could become a significant, globally competitive producer of cobalt sulfate for the electric vehicle market. The engineering study

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determined the Refinery could produce 25,000 tonnes of battery-grade cobalt sulfate annually (equating to approximately 5,000 tonnes of contained cobalt), which would represent 5% of the total refined cobalt market and 100% of the North American cobalt sulfate supply. The study indicated strong operating margins at the asset level.

Many difficulties stemming from global supply chain disruptions have been avoided by the owner's team. However, a number of pressures facing projects across North America are also impacting the schedule to completion and capital estimate of the project. Project completion has been primarily impacted by three developments; equipment quality issues, availability of electrical components and pipe fabrication lead times. Metso:Outotec the manufacturer chosen to provide solvent extraction tanks, rejected six of the tanks they produced due to quality issues with the resulting refabrication delaying the delivery of the tanks by approximately three months. Related electrical and piping installation is also delayed. As the tanks are critical to the completion of the SX facility the delay forces the pushback of construction and commissioning. Ongoing global supply issues related to electrical componentry have delayed the expected arrival of critical control systems by three months. Additionally, upstream delays and other issues have increased the timeline for the completion of piping fabrication beyond original forecasts.

As a result of these issues, the Company is revising its capital cost guidance from a budget of \$83,774 budget amount to a range of \$100,000-\$105,000 (US\$70,000-US\$73,500). The expected total capital cost to complete the Refinery is \$16,000-\$21,000 higher when compared to the Company's original guidance of \$83,774 (US\$67,020). The Company's early decision to create an experienced owner's team has helped mitigate some of these impacts and Management believes the Company is well positioned to handle the complex and rapidly changing landscape.

In response to strong customer demand, the Company has invested in increased capacity for its cobalt crystallizer, which can result in an installed capacity of 6,500 tonnes of annual contained cobalt production, a 30% increase from the engineering study design of 5,000 tonnes. Future permit amendments will be sought to permit this increased output level.

The Company's outlook concerning the production phase of the Refinery reflects forward-looking price estimates for cobalt inputs and outputs, and operating costs and recoveries, in line with the latest internal technical estimates. Operating cost estimates are based on consumption levels of key consumables such as sodium hydroxide, sulfuric acid, quicklime, natural gas, and cyanex based on the Refinery's technical design and current market pricing for such consumables. Estimates of labour costs and power consumption also form key components of the Refinery's operating costs. The required volume and market pricing of these items is subject to change. Recoveries reflect Management's best estimates based on metallurgical lab tests of representative feedstock from contracted providers. Total recovery could vary in the future due to variations in feedstock and operating conditions.

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The Company utilized and updated the following key market assumptions when estimating its outlook:

- Cobalt sulfate average price of US\$38.59 per pound
- Cobalt metal average price of US\$35.59 per pound
- Cobalt hydroxide payability of 90%
- USD to CAD foreign exchange rate of 1.30 for 2023

The Company's EBITDA and updated projected production and EBITDA outlooks for phase one of its Refinery are as follows:

	<b>Six Months Ended June 30, 2022</b>	<b>Year Ended December 31, 2023</b>
Cobalt production (tonnes)	-	2,200
EBITDA <sup>(1)</sup>	\$9,780	\$9,500-10,500

Key milestones on the development path for the Refinery include:

Construction is expected to continue into 2023 with commissioning taking place in the Spring of 2023. Production ramp-up will continue through 2023 and steady-state production of 5,000 tonnes of contained cobalt production per year is anticipated in 2024. As a result of changing marketing conditions and inflationary pressures, the Company cautions that guidance on production and EBITDA for years after 2023 should no longer be relied upon. Management believes estimations of operating costs are no longer reliable given the significant uncertainties in the future prices for critical inputs, specifically reagents, brought on by global supply chain issues as well as the recent degree of price volatility in the associated markets. Management's focus remains on completing the construction and commissioning of the Refinery which reflects the updated capital investment forecast and nearer-term operating results in 2023.

The Company notes that the engineering study and the associated update were prepared by Ausenco Engineering under the definitions of an Association for the Advancement of Cost Engineering (AACE) Class 3 Feasibility Study. The report does not constitute a feasibility study within the definition employed by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM"), as it relates to a standalone industrial project and does not concern a mineral project of Electra. As a result, disclosure standards prescribed by National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") do not apply to the scientific and technical disclosure in the report. Any

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references to scoping study, pre-feasibility study, or feasibility study by the Company, concerning the Refinery, are not the same as terms defined by the CIM Definition Standards and used in NI 43-101.

The project capital table is provided below:

	<b>Refinery Expansion Capital Budget</b>	<b>Total Spent &amp; Accrued at Jun 31, 2022</b>	<b>Remaining Project Spend</b>
Feed Prep, Leaching and Solvent Extraction	37,578	17,602	19,976
Crystallization and Sulfate Handling	14,232	5,174	9,058
Tailings, Site Services and Reagent Storage	11,126	1,222	9,904
Other Infrastructure	5,489	-	5,489
Project Management and Indirects	16,541	4,058	12,483
Spares, First Fills, and Owners Costs	10,179	2,039	8,140
Contingency	4,700	-	4,700
<b>Total</b>	<b>99,845</b>	<b>30,095</b>	<b>69,750</b>

Subject to the uncertainty noted above, cash requirements for the Refinery expansion from June 30, 2022, through to completed commissioning are estimated between \$79,000-\$84,000. The total cash spent to June 30, 2022, is approximately \$21,336.

The Company will also require a working capital arrangement of approximately \$80,000 (US\$65,000) to fund inventory purchases through to the sale of final cobalt sulfate and is in discussions with various parties on alternatives.

The Company continues to make progress toward achieving its objective of providing the world's most sustainable battery materials for the electric vehicle market. The Company continues to work with engineering firms, its commercial partners, process experts and financial advisers to finalize and execute the plans for its phase one recommissioning and expansion of the Refinery.

## **2. Black Mass Recycling**

Phase 2 of the Battery Materials Park project centres on a battery recycling demonstration plant that is expected to be commissioned in Q3 2022, using existing equipment at a cost of \$3,000. The objective of the demonstration plant is to produce products such as nickel, cobalt, graphite and lithium from recycled black mass sourced primarily from spent batteries. The demonstration plant will also, in parallel, allow the Company to complete the early commissioning of significant components of cobalt hydroxide to cobalt sulphate process. Equipment within Electra's on-site metallurgical laboratory will also be commissioned and utilized in the demonstration plant as well as the completed refinery. Once the recycling facility achieves expected commercial production in the second half of 2023, nickel and cobalt will be sold to Glencore until the end of 2024 on market-based terms. The Company is also reviewing opportunities to utilize black mass from recycled lithium-ion batteries as supplemental refinery feedstock.

## **3. The Iron Creek project**

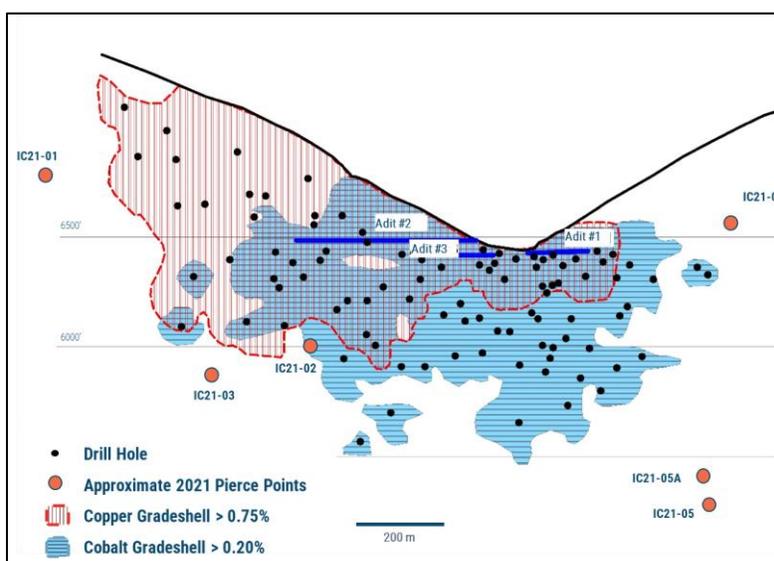
Following the acquisition of US Cobalt in June of 2018, the Company commenced an extensive drill program at Iron Creek. In October 2018, the Company filed a technical report supporting the maiden resource estimate for the Iron Creek Project in Idaho. A second phase drill campaign was initiated to conduct infill drilling to upgrade a portion of the inferred resources to the indicated category for mine planning and to improve the confidence for future engineering

studies. As a secondary priority, this campaign increased the resource along strike and at depth. However, as the cobalt price declined in 2018, the Company elected to suspend step-out drilling until market conditions improved. During 2019, the Company completed assaying work and further geological modelling to support a resource update, with a new technical report filed in early 2020.

The 2020 technical report includes a new mineral resource estimate based on infill drilling and limited step-out drilling which includes the conversion of 49% of resources from the Inferred category to the Indicated category while also increasing the overall tonnage. The indicated resource is 2.2 million tonnes grading 0.32% cobalt equivalent (0.26% cobalt and 0.61% copper) containing 12.3 million pounds of cobalt and 29.1 million pounds of copper. The inferred mineral resource is 2.7 million tonnes grading 0.28% cobalt equivalent (0.22% cobalt and 0.68% copper) for an additional 12.7 million pounds of cobalt and 39.9 million pounds of copper.

The mineralization remains open along strike and downdip. Management believes that there is potential to continue to expand the size of the Iron Creek resource. In 2020, the Company completed a new geophysics program at the property which identified several new drill targets.

In 2021, the Company completed a 2,433-metre drill program, targeting extensions to the resource along strike to the cobalt-rich east and copper-rich west, as shown in Figure 1.



**Figure 1. A long section of the Iron Creek Deposit showing 2021 drill holes. Inclined section cut at 340 degrees azimuth dipping 70 degrees to the northeast with a 125m cutting thickness.**

Drill results have been received for the 6 holes completed during the 2021 drill program, which extended mineralization along strike to the east and the west.

On March 14, the Company released drill results to the west of its Iron Creek cobalt-copper project, which extended mineralization by 130 metres along strike and by 110 metres at depth. Broad widths of copper mineralization were intercepted along with high-grade cobalt intercepts. Results to the east of the current deposit were released on May 9, highlighting new cobalt intercepts and extending mineralization by an additional 180 metres as well as a down dip from the eastern edge of the resource zone. The Iron Creek strike extent now extends over more than one kilometre and is open along strike and at depth.

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On August 4, 2022, the Company provided an update on Iron Creek including the identification of new mineralization in the Idaho cobalt belt. A strong and open-ended anomaly at Ruby was defined using Induced Polarization (IP) and drilling was initiated on the Ruby target to determine its structure, size, and viability as a deposit extension. 2,500 m of drilling is planned to complete this first pass evaluation and some drill samples from Ruby are expected before the end of Q3 2022. Two drill holes have been completed at a total of 824 metres with both holes intercepting strong zones of pyrite mineralization. Additional drilling will move west and target the strongest portion of the anomaly.

The Company's objective over the next two years is to meaningfully increase the resource size at Iron Creek and advance the asset towards a development decision.

**4. The Cobalt Camp**

Electra holds an interest in a significant land package in the historic silver-cobalt mining camp of Cobalt, Ontario.

In 2021, the Company completed a transaction with Kuya Silver Corporation ("Kuya") to sell a portion of these properties outright and potentially form a joint venture on the remaining mineral assets in the Canadian Cobalt Camp.

Electra retains a right of first offer to refine base metal concentrates produced at Electra's Refinery as well as a back-in right for any discovery of a primary cobalt deposit on the Remaining Assets.

**EXPLORATION AND EVALUATION ASSETS**

The Company is focused on building a North American cobalt supply chain. The Company's Iron Creek Project in Idaho, U.S. is its flagship mineral property and a new, upgraded resource estimate was published in January 2020. The Iron Creek property includes patented and unpatented claims totalling approximately 3,200 hectares as well as 600 metres of underground drifting from three adits. Other cobalt-copper targets exist on the Company's property away from the Iron Creek resource. While not a major focus of the Company's exploration efforts in recent years, the Cobalt Camp properties are shown separately below due to their different geographic location.

	<b>Balance</b>		<b>Balance</b>
	<b>December 31,</b>	<b>Acquisition</b>	<b>June 30,</b>
	<b>2021</b>	<b>Costs</b>	<b>2022</b>
<b>Iron Creek</b>	\$ 87,661	\$ -	\$ 87,661
<b>Total</b>	\$ 87,661	\$ -	\$ 87,661

	<b>Balance</b>		<b>Balance</b>
	<b>December 31,</b>	<b>Acquisition</b>	<b>December 31,</b>
	<b>2020</b>	<b>Costs</b>	<b>2021</b>
<b>Iron Creek</b>	\$ 87,420	\$ 241	\$ 87,661
<b>Total</b>	\$ 87,420	\$ 241	\$ 87,661

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**SUMMARY OF QUARTERLY RESULTS**

Key financial information for the three months ended June 30, 2022, as well as the quarters spanning the most recently preceding fiscal years, are summarized as follows, reported in thousands of Canadian dollars except for per share amounts.

	June 30, 2022 (\$)	March 31, 2022 (\$)	December 31, 2021 (\$)	September 30, 2021 (\$)
<b>Financial Position</b>				
Current Assets	45,601	56,578	61,935	64,930
Exploration and Evaluation Assets	87,661	87,661	87,661	87,539
Total Assets	176,355	171,258	167,611	160,837
Current Liabilities	11,078	6,039	4,708	2,115
Long-term Liabilities	47,094	61,057	62,939	51,749
<b>Operations</b>				
General and administrative and Travel	377	69	169	162
Consulting and professional fees	932	586	977	2,173
Exploration and evaluation expenditures	1,084	394	2,931	1,212
Investor relations and marketing	318	246	492	109
Refinery, engineering and metallurgical studies	327	93	437	1,797
Refinery, permitting and environmental expenses	33	28	182	299
Salary and benefits	529	624	1,221	606
Share-based payments	304	434	185	189
Total Operating Expenses	3,904	2,474	6,594	6,547
(Income) Net Loss	(7,534)	(2,330)	15,496	10,502
(Income) Loss per Share	(0.23)	(0.08)	0.03	0.02
	June 30, 2021 (\$)	March 31, 2021 (\$)	December 31, 2020 (\$)	September 30, 2020 (\$)
<b>Financial Position</b>				
Current Assets	15,295	20,717	10,466	5,494
Exploration and Evaluation Assets	87,539	87,420	87,420	87,420
Total Assets	110,094	113,951	103,681	98,709
Current Liabilities	598	536	2,842	7,987
Long-term Liabilities	1,264	9,297	8,689	2,737
<b>Operations</b>				
General and administrative and Travel	68	88	55	111
Consulting and professional fees	691	468	455	179
Exploration and evaluation expenditures	416	146	290	74
Investor relations and marketing	127	115	254	75
Refinery, engineering and metallurgical studies	1,479	730	352	92
Refinery, permitting and environmental expenses	129	257	489	313
Salary and benefits	559	417	645	280
Share-based payments	262	95	143	303
Total Operating Expenses	3,731	2,316	2,683	1,427
Net Loss	6,408	2,510	2,015	1,513
Loss per Share	0.01	0.01	0.00	0.00

*(expressed in thousands of Canadian dollars)*

## RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDED JUNE 30, 2022

The following are highlights from the Company's results of operations for the three months ended June 30, 2022, and 2021:

- General and administrative and Travel were \$377 for the three months ended June 30, 2022, compared to \$68 for the three months ended June 30, 2021. The increase mainly relates to increased insurance costs associated with Nasdaq listing and increased corporate travel.
- Exploration and evaluation expenditures were \$1,084 for the three months ended June 30, 2022, compared to \$416 for the three months ended June 30, 2021. The increase was mainly driven by the drill program conducted at Iron Creek.
- Refinery, engineering and metallurgical studies costs were \$327 for the three months ended June 30, 2022, compared to \$1,479 for the three months ended June 30, 2021. The decrease is related to the capitalization of refinery-related costs while studies such as black mass, nickel sulfate, and cathode active materials continue to be expensed.
- Consulting and professional fees were \$932 for the three months ended June 30, 2022, compared to \$691 incurred during the three months ended June 30, 2021, due to professional and filing fees related to the Nasdaq listing completed in the quarter.
- Refinery, permitting and environmental expenses were \$33 for the three months ended June 30, 2022, compared to \$129 for the three months ended June 30, 2021. These costs have decreased due to the Company's capitalization of refinery-related environmental and permitting costs and reduction of external environmental advisors with the completion of permits in prior periods.

## RESULTS OF OPERATIONS FOR THE SIX MONTHS ENDED JUNE 30, 2022

The following are highlights from the Company's results of operations for the six months ended June 30, 2022, and 2021:

- General and administrative and Travel were \$446 for the six months ended June 30, 2022, compared to \$156 for the six months ended June 30, 2021. The increase mainly relates to increased insurance costs associated with Nasdaq listing and increased corporate travel.
- Exploration and evaluation expenditures were \$1,478 for the six months ended June 30, 2022, compared to \$562 for the six months ended June 30, 2021. The increase was mainly driven by the drill program conducted at Iron Creek.
- Refinery, engineering and metallurgical studies costs were \$420 for the six months ended June 30, 2022, compared to \$2,209 for the six months ended June 30, 2021. The decrease is related to the capitalization of refinery-related costs while studies such as black mass, nickel sulfate, and cathode active materials continue to be expensed.
- Salary and benefits were \$1,153 for the six months ended June 30, 2022, compared to \$976 for the six months ended June 30, 2021. The increase is a result of the Company expanding the corporate workforce during the six months ended June 30, 2022.
- Consulting and professional fees were \$1,518 for the six months ended June 30, 2022, compared to \$1,159 incurred during the six months ended June 30, 2021, due to professional and filing fees related to the Nasdaq listing the Company completed in the period.
- Refinery, permitting and environmental expenses were \$61 for the six months ended June 30, 2022, compared to \$386 for the six months ended June 30, 2021. These costs have decreased due to the Company's capitalization of refinery-related environmental and permitting costs and reduction of external environmental advisors with the completion of permits in prior periods.

**ELECTRA BATTERY MATERIALS CORPORATION**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2022**

(expressed in thousands of Canadian dollars)

**CAPITAL STRUCTURE**

On April 13, 2022, the Company entered into a share consolidation on the basis of one (1) new post-consolidation common share for every eighteen (18) pre-consolidation common shares issued. The consolidation was undertaken in preparation for the NASDAQ listing. This has reduced the number of issued and outstanding common shares from approximately 562,000,000 to approximately 31,000,000, on a non-diluted basis. As of the date of this MD&A, the Company has 32,372,177 post consolidated common shares issued and outstanding. In addition, there are outstanding share purchase warrants and stock options for a further 1,252,215 and 884,183 common shares, respectively. The Company currently has 199,388 Deferred Share Units (DSUs), 92,870 Restricted Share Units (RSUs) and 71,528 Performance Share Units (PSUs) issued under its Long-Term Incentive Plan.

The following warrants were outstanding at the date of this MD&A:

Grant Date	Expiry Date	Number of warrants outstanding	Weighted Average Exercise Price
August 27, 2020	August 27, 2022	271,188	\$3.78
January 22, 2021	January 22, 2023	875,917	9.00
January 22, 2021	January 22, 2023	105,110	5.58
		1,252,215	\$7.58

The following incentive stock options were outstanding and exercisable at the date of this MD&A:

Options Outstanding				Options Exercisable		
Exercise Price	Number of Shares Issuable on Exercise	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number of Shares Issuable on Exercise	Weighted Average Exercise Price	
\$ 2.52	174,259	2.07	\$ 2.52	57,037	\$ 2.52	
2.61	27,778	3.05	2.61	13,889	2.61	
2.88	16,667	2.14	2.88	11,111	2.88	
3.24	55,556	1.53	3.24	55,556	3.24	
4.38	30,000	4.87	4.38	-	4.38	
4.63	19,444	4.79	4.63	-	4.63	
4.86	22,222	1.20	4.86	22,222	4.86	
4.90	40,000	4.83	4.90	-	4.90	
5.40	190,016	4.44	5.40	-	5.40	
5.76	19,444	4.64	5.76	-	5.76	
6.21	31,944	3.68	6.21	31,944	6.21	
6.48	61,111	1.13	6.48	61,111	6.48	
6.48	55,556	3.13	6.48	55,556	6.48	
7.29	5,556	2.52	7.29	-	7.29	
8.82	109,630	0.87	8.82	109,630	8.82	
9.32	25,000	0.47	9.32	25,000	9.32	
	884,183	2.76	\$ 5.20	443,056	\$ 5.99	

**ELECTRA BATTERY MATERIALS CORPORATION**  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2022

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*(expressed in thousands of Canadian dollars)*

The following units were outstanding at the date of this MD&A:

Type	Outstanding
Deferred Share Units	199,388
Restricted Share Units	92,870
Performance Share Units	71,528

## CAPITAL RESOURCES

The Company manages its capital structure to maximize its financial flexibility, making adjustments to it in response to changes in economic conditions and the risk characteristics of the underlying assets and business opportunities. The Company does not presently utilize any quantitative measures to monitor its capital but rather relies on the expertise of the Company's management to sustain the future development of the business. Management reviews its capital management approach on an ongoing basis and believes that this, given the relative size of the Company, is appropriate.

The Company will continue to adjust its capital structure based on Management's assessment of the best capital mix to effectively advance its assets. With the closing of the Notes on September 2, 2021, and the associated Additional Notes issued on October 22, 2021, the Company now has added a debt component to its capital structure.

In addition to its cash on hand, the Company also has executed contribution agreements with the Government of Ontario and the Government of Canada for aggregate funding towards the refinery construction of \$10,000, of which \$4,898 has been received to date. The company expects receipt of the balance of \$5,102 throughout the first phase of the Refinery expansion. The Company is actively pursuing various alternatives including equity and debt financing to increase its liquidity and capital resources to fund the projected Refinery expenditures. The Company is also in discussion with various parties on alternatives to finance the funding of feedstock purchases.

## LIQUIDITY

The Company's objective in managing liquidity risk is to maintain sufficient liquidity to meet operational and asset advancement requirements. The company has partially financed its refinery construction project with a combination of debt instruments and the sale of share capital and is actively pursuing various funding options for the completion of the Refinery and procurement of feedstock. During the year ended 2021, the Company issued convertible notes for total net proceeds of \$54,986 and issued equity for total net proceeds of \$18,266.

At June 30, 2022, the Company had cash and marketable securities of \$41,774 (June 30, 2022 - \$11,481). This figure does not include the remaining \$5,102 (of the original committed \$10,000) of Government investments not yet received.

To maintain liquidity, the Company issued common shares for cash proceeds during the three months ended June 30, 2022, as follows:

- 319,477 common shares at an average price of \$5.74 per share were issued for gross proceeds of approximately \$1,835 under its ATM program with shares issues on both TSX V and NASDAQ listing. The transaction costs associated with these issuances were \$46, which reflect commissions paid to CIBC Capital Markets. The remaining balance under the ATM is approximately \$17,341.

**ELECTRA BATTERY MATERIALS CORPORATION**  
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*(expressed in thousands of Canadian dollars)*

During the three months ended June 30, 2022, US\$3,000 of convertible notes were converted by noteholders which resulted in the Company issuing a total of 676,374 common shares. The Company also made interest make-whole payments to the noteholders upon conversion totalling US\$416. There were no significant transaction costs incurred in relation to the conversions.

No additional conversions were made after June 30, 2022, and the total outstanding principal balance of the notes is currently US\$36,000.

The Company is currently incurring significant cash expenditures in the construction of its Refinery. Cash requirements for the Refinery expansion from June 30, 2022, through to completed commissioning are estimated between \$79,000 - \$84,000. Based on the recently updated cost estimates and updated schedule of construction of the Refinery, the Company will require additional financing in 2022 to complete the construction of the Refinery and remain in compliance with the minimum liquidity covenant under the Convertible Note Arrangement. Beyond this, the Company may also require approximately \$80,000 in 2023 in funding to secure feedstock prior to commercial operations at the Refinery.

	<b>Six months ended</b>		<b>Six months ended</b>	
	<b>June 30</b>		<b>June 30</b>	
	<b>2022</b>		<b>2021</b>	
Cash Flows used in operating activities	\$	(8,803)	\$	(6,659)
Cash Flows used in investing activities		(13,834)		(1,497)
Cash Flows provided by financing activities		4,482		15,494
Changes in cash during the period		(18,155)		7,338
Effect of exchange rates on cash		240		(31)
Cash – Beginning of the period		58,626		4,174
Cash – End of the period	\$	40,711	\$	11,481

Cash used in operating activities was \$8,803 during the six months ended June 30, 2022, compared to \$6,659 used in operating activities during the six months ended June 30, 2021. The increase in cash used in operating activities was driven primarily by increased exploration costs, additional legal and advisory fees related to the NASDAQ listing, and higher salary costs compared to the prior period.

Cash used in investing activities was \$13,834 during the six months ended June 30, 2022, compared to cash provided used in investing activities of \$1,497 during the six months ended June 30, 2021. The cash outflow from investing activities mainly relates to payments for refinery equipment and construction.

Cash flows provided by financing activities were \$4,482 during the six months ended June 30, 2022, compared to the \$15,494 from financing activities during the six months ended June 30, 2021. 2021 inflows related to proceeds from the Company's January 2021 bought deal, and proceeds from the exercise of warrants, while proceeds in Q1 2022 were driven mainly through inflows from the Company's ATM program and government loan installments offset by interest payments made on the convertible notes.

*(expressed in thousands of Canadian dollars)*

## COMMITMENTS

The Company's commitments relate to purchase and service commitments for work programs relating to Refinery expansion and payments under financing arrangements. The Company had the following commitments as of the date of this MD&A:

	2022	2023	2024	2025	Thereafter	Total
Purchase commitments	\$ 30,732	\$ -	\$ -	\$ -	\$ -	\$ 30,732
Convertible notes payments	2,717	3,268	3,277	3,268	49,379	61,909
Government loan payments	-	-	996	996	2,781	4,773
<b>Total</b>	<b>\$ 33,449</b>	<b>\$ 3,268</b>	<b>\$ 4,273</b>	<b>\$ 4,264</b>	<b>\$ 52,160</b>	<b>\$ 97,414</b>

The Company has recorded a provision for environmental remediation, reclamation and decommissioning for its Ontario assets. For the Refinery, a liability of \$1,204 has been recorded, linked plan filed and under review by relevant authorities. Concerning the Refinery closure plan, an amount of \$3,450 has been posted via a surety bond with the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) as financial assurance. The \$938 of cash that was deposited with NDMNRF relating to its old closure plan is expected to be returned to the Company.

## FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Financial assets and liabilities are classified in the fair value hierarchy according to the lowest level of input that is significant to the fair value measurement. Assessment of the significance of a particular input to the fair value measurement requires judgment and may affect placement within the fair value hierarchy levels.

The hierarchy is as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 fair value measurements are those derived from inputs that are unobservable inputs for the asset or liability.

Fair value estimates of financial instruments are made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective, involving uncertainties and matters of significant judgment, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values.

The Company recorded the fair value of the embedded derivative as at June 30, 2022, at \$17,675 and is accounted for at FVTPL. The valuation is derived by a finite difference method, whereby the convertible debt as a whole is viewed as a hybrid instrument consisting of two components, a financial derivative liability component (i.e., the conversion option) and a debt component, each with a different risk. These two risks result in a pair of coupled partial differential equations and are solved simultaneously to calculate the value of the debt and financial derivative liability components of the convertible bond. The key inputs in the valuation include risk-free rates, share price, equity

*(expressed in thousands of Canadian dollars)*

volatility, and credit spread. As there are significant unobservable inputs used in the valuation, the financial derivative liability is included in Level 3.

Methodologies and procedures regarding Level 3 fair value measurements are determined by the Company's management. Calculation of Level 3 fair values is generated based on underlying contractual data as well as observable and unobservable inputs. The development of unobservable inputs requires the use of significant judgment. To ensure reasonability, Level 3 fair value measurements are reviewed and validated by the Company's management. Review occurs formally every quarter or more frequently if review and monitoring procedures identify unexpected changes to fair value.

While the Company considers its fair value measurements to be appropriate, the use of reasonably alternative assumptions could result in different fair values. On a given valuation date, it is possible that other market participants could measure the same financial instrument at a different fair value, with the valuation techniques and inputs used by these market participants still meeting the definition of fair value. The fact that different fair value measurements exist reflects the judgment, estimates and assumptions applied as well as the uncertainty involved in determining the fair value of these financial instruments.

The fair value of the embedded derivative has been estimated as at June 30, 2022, based on significant unobservable inputs which are equity volatility and credit spread. The Company used equity volatility of 56%. If the Company had used equity volatility that was higher or lower by 10%, the potential effect would be an increase of \$1,777 or a decrease of \$1,506 to the fair value of the embedded derivative. The Company used a credit spread of 30.8%. If the Company had used a credit spread that was higher or lower by 5%, the potential effect would be an increase of \$774 or a decrease of \$756 to the fair value of the embedded derivative.

### **Financial Risk Factors**

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

#### *Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company currently settles its financial obligations with cash. The working capital deficiency limits the Company's ability to fund capital expenditures and operations. As a result, there is significant doubt about the Company's ability to continue as a going concern. The continuation of the Company as a going concern is dependent on realizing funds from the sale of marketable securities, issuing shares under the ATM and financing.

#### *Credit risk*

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets including cash and receivables. The Company limits exposure to credit risk on liquid financial assets by maintaining its cash with high-credit quality financial institutions.

#### *Interest rate risk*

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. With the Company's debt with Glencore now extinguished, there is no current interest rate risk present. The Company's convertible notes bear interest at a fixed interest rate.

*(expressed in thousands of Canadian dollars)*

#### *Foreign Currency Risk*

Foreign currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because they are denominated in currencies that differ from the Company's functional currency, Canadian Dollars. The Company is exposed to foreign currency risk on fluctuations related to cash, receivables, and accrued liabilities that are denominated in US Dollars. In addition, the Company's convertible notes are denominated in US dollars and fluctuations in foreign exchange rates will impact the Canadian dollar amounts required to settle interest and principal payments for these convertible notes. The Company has not used derivative instruments to reduce its exposure to foreign currency risk nor has it entered foreign exchange contracts to hedge against gains or losses from foreign exchange

### **BUSINESS RISKS AND UNCERTAINTIES**

There are many risk factors facing companies involved in the mineral exploration industry. Risk Management is an ongoing exercise upon which the Company spends a substantial amount of time. While it is not possible to eliminate all the risks inherent to the industry, the Company strives to manage these risks, to the greatest extent possible. The following risks are most applicable to the Company.

#### *Financing*

The Company has raised funds through equity financing and debt arrangements to fund its operations and the advancement of the Refinery. The market price of natural resources, specifically cobalt prices, is highly speculative and volatile. Instability in prices may affect the interest in resource assets and the development of and production from such properties. This may adversely affect the Company's ability to raise capital or obtain debt to fund corporate activities and growth initiatives. The completion of the Refinery project is dependent on additional financing.

#### *Technical Capabilities of the Refinery*

The Company's strategic priority is the advancement of the Refinery, with significant engineering studies and metallurgical testing conducted to date. There is no assurance that the final refining process will have the capabilities to produce specific end products. The Company manages this risk by employing and contracting technical experts in metallurgy and engineering to support refinery process decisions.

#### *Ability to meet Debt Service Obligations*

The Company now has debt service obligations arising from the Notes, which include ongoing coupon payments and payment of principal at maturity. In the event, that the refinery construction is not completed as planned or sufficient cash flow from refinery operations is not generated, there is a risk that the Company may not have sufficient available capital to meet its debt obligations. In this event, the assets pledged may be transferred to the lenders.

#### *Global Pandemic*

The ability of the Company to source financing, equipment and construction and operation personnel for its Refinery may be impacted by the COVID-19 global pandemic. At present, the Company has not encountered any adverse consequences. The ultimate impacts of the current pandemic are not known but could have significant impacts on the Company's ability to attract financing and advance its assets.

#### *Macroeconomic Risks*

*(expressed in thousands of Canadian dollars)*

Political and economic instability (including Russia's recent invasion of Ukraine), global or regional adverse conditions, such as pandemics or other disease outbreaks (including the COVID-19 global outbreak) or natural disasters, currency exchange rates, trade tariff developments, transport availability and cost, including import-related taxes, transport security, inflation and other factors are beyond the Company's control. The macroeconomic environment remains challenging and the Company's results of operations could be materially affected by such macroeconomic conditions.

#### *Industry and Mineral Exploration Risk*

Mineral exploration is highly speculative, involves many risks and frequently is non-productive. There is no assurance that the Company's exploration efforts will be successful. At present, the Company's projects do not contain any proven or probable reserves. Success in establishing reserves is a result of several factors, including the quality of the project itself. Substantial expenditures are required to establish reserves or resources through drilling, to develop metallurgical processes, and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Because of these uncertainties, no assurance can be given that planned exploration programs will result in the establishment of mineral resources or reserves. The Company may be subject to risks, which could not reasonably be predicted in advance. Events such as labour disputes, natural disasters or estimation errors are prime examples of industry-related risks. The Company attempts to balance this risk through ongoing risk assessments conducted by its technical team.

#### *Commodity Prices*

The Company is in the business of mineral exploration and as such, its prospects are largely dependent on movements in the price of various minerals. Prices fluctuate daily and are affected by several factors well beyond the control of the Company. The mineral exploration industry in general is a competitive market and there is no assurance that, even if commercial quantities of proven and probable reserves are discovered, a profitable market may exist. Due to the current grassroots nature of its operations, the Company has not entered into any price hedging programs.

#### *Environmental*

Exploration projects or operations are subject to the environmental laws and applicable regulations of the jurisdiction in which the Company operates. Environmental standards continue to evolve and the trend is to a longer, more complete and rigid process. The Company reviews environmental matters on an ongoing basis. If and when appropriate, the Company will make appropriate provisions in its financial statements for any potential environmental liability.

#### *Title of Assets*

Although the Company conducts title reviews by industry practice before any purchase of resource assets, such reviews do not guarantee that an unforeseen defect in the chain of title will not arise and defeat our title to the purchased assets. If such a defect were to occur, our entitlement to production from such purchased assets could be jeopardized.

#### *Competition*

The Company engages in the highly competitive resource exploration industry. The Company competes directly and indirectly with major and independent resource companies in its exploration for and development of desirable resource properties. Many companies and individuals are engaged in this business, and the industry is not dominated by any single competitor or a small number of competitors. Many of such competitors have substantially greater financial, technical, sales, marketing and other resources, as well as greater historical market acceptance than does the Company. The Company will compete with numerous industry participants for the acquisition of land and rights

*(expressed in thousands of Canadian dollars)*

to prospects, and for the equipment and labour required to operate and develop such prospects. Competition could materially and adversely affect the Company's business, operating results and financial condition. Such competitive disadvantages could adversely affect the Company's ability to participate in projects with favourable rates of return.

Additional information on risks and uncertainties relating to Electra's business is provided in Electra's Annual Information Form dated April 8, 2022, under the heading "Risk Factors".

### **CRITICAL ACCOUNTING ESTIMATES**

The preparation of the Company's financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities and contingent liabilities at the date of the financial statements and reported amounts of income and expenses during the reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes may differ significantly from these estimates.

Areas requiring a significant degree of the judgment relating to the recoverability and measurement of deferred tax assets and liabilities, the ability to continue as a going concern and the capitalization of development costs. Actual results may differ from those estimates and judgments.

Areas requiring a significant degree of estimation or judgement that have the most significant effect on the amounts recognized in the Company's consolidated financial statements are as follows:

- *Exploration and Evaluation Assets*  
The net carrying value of each mineral property is reviewed regularly for conditions that suggest potential indications of impairment. This review requires significant judgment. Factors considered in the assessment of asset impairment include, but are not limited to, whether there have been a significant adverse change in the legal, regulatory, accessibility, title, environmental or political factors that could affect the property's value; whether exploration activities produced results that are not promising such that no more work is being planned in the foreseeable future and management's assessment of likely proceeds from the disposition of the property.
- *Financial Derivative Liability*  
The Financial Derivative Liability values involve significant judgment. The FV of financial derivative liability is reviewed and adjusted every quarter. Factors considered in the fair value of the financial derivative liability are risk-free rate, share price volatility, LIBOR, effective interest, and foreign exchange fluctuations.
- *Environmental rehabilitation*  
Management's determination of the Company's decommissioning and rehabilitation provision is based on the reclamation and closure activities it anticipates as being required, the additional contingent mitigation measures it identifies as potentially being required and its assessment of the likelihood of such contingent measures being required, and its estimate of the probable costs and timing of such activities and measures.

*(expressed in thousands of Canadian dollars)*

Significant judgements must be made when determining such reclamation and closure activities and measures required and potentially required.

## **FUTURE CHANGES IN ACCOUNTING POLICIES AND INITIAL ADOPTION**

### Property, Plant and Equipment

An amendment has been issued to IAS 16 – Property, Plant and Equipment, effective January 1, 2022, such that revenue earned prior to the time at which an asset has reached its intended use will be recognized as revenue, and not a reduction to the cost of property, plant and equipment. Any revenue earned prior to the Refinery achieving commercial production (the point at which it would be available for its intended use) will be recognized as revenue. There is no impact on previous reporting periods relating to this amendment.

### Classification of liabilities as current or non-current

In January 2020, the IASB published narrow scope amendments to IAS 1 Presentation of financial statements. The narrow scope amendment clarifies that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date. The amendments are effective for annual periods beginning on or after January 1, 2023 and applied retrospectively. The Company will adopt the narrow scope amendments on the date they become effective and is assessing the impact of these amendments on its consolidated financial statements.

### Deferred tax related to assets and liabilities arising from a single transaction

In May 2021, the IASB published a narrow scope amendment to IAS 12 Income taxes. In September 2021, IAS 12 was revised to reflect this amendment. The amendment narrowed the scope of the recognition exemption so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences such as deferred taxes on leases and decommissioning obligations. The amendment is effective for annual periods beginning on or after January 1, 2023 and applied retrospectively. The Company will adopt the amendment on the date it becomes effective and is currently evaluating the impact of the amendment on its consolidated financial statements.

As at June 30, 2022, there have been no other accounting pronouncements issued by the IASB that would materially affect the Company's consolidated financial statements.

## **INTERNAL CONTROL OVER FINANCIAL REPORTING**

The President and Chief Executive Officer and Chief Financial Officer of the Company are responsible for designing internal controls over financial reporting or causing them to be designed under their supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Management concluded that internal control over financial reporting was not designed effectively as of June 30, 2022, due to material weaknesses in Internal Control over Financial Reporting (ICFR).

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected in a timely basis. Management has identified the following material weaknesses:

*(expressed in thousands of Canadian dollars)*

- An ineffective control environment resulting from the combination of an insufficient number of trained financial reporting and accounting personnel with the appropriate skills and knowledge about the design, implementation and operation of ICFR and inadequate IT tools and resources to ensure the relevance, timeliness and quality of information used in control activities.
- Management has not designed or implemented a control monitoring process necessary to identify control weaknesses and remediations in a timely manner necessary to ensure the reliability of its ICFR.

As a consequence of the above, the Company had ineffective control activities related to the design of process level and financial statement close controls which had a pervasive impact on the Company's ICFR. Over the next 2 quarters, Management intends to hire knowledgeable staff to rectify segregation issues while also implementing a process for monitoring controls.

Other than those listed above, there have been no changes in the Company's internal control over financial reporting during the three months ended June 30, 2022, that have materially affected or are reasonably likely to materially affect, the Company's internal control over financial reporting.

#### **Disclosure Controls and Procedures**

Disclosure Controls and Procedures (DCP) have not been designed to provide reasonable assurance that all relevant information required to be disclosed by the Company is accumulated and communicated to senior management as appropriate to allow timely decisions regarding required disclosure. The Company's President and Chief Executive Officer and Chief Financial Officer note similar weaknesses in the disclosure controls and procedures as in the ICFR. The Company's President and Chief Executive Officer and Chief Financial Officer have concluded, based on their evaluation of the design of the disclosure controls and procedures that because of the material weaknesses in our ICFR described above our DCP were not designed effectively at June 30, 2022.

#### **Limitations of Controls and Procedures**

The Company's management, including the President and Chief Executive Officer and Chief Financial Officer, believes that any internal controls over financial reporting and disclosure controls and procedures, no matter how well designed, can have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance that the objectives of the control system are met.

#### **NON-GAAP FINANCIAL MEASURES**

This MD&A contains "specified financial measures" within the meaning of NI 52-112, specifically, EBITDA which is a non-GAAP financial measure. Management believes that the use of this measure assists analysts, investors and other stakeholders of the Company in understanding and assessing operating performance and planning and forecasting future operating periods. The specified financial measures used in this MD&A do not have any standardized meaning prescribed by IFRS and may not be comparable to similar measures presented by other issuers. Accordingly, these specified financial measures should not be considered in isolation, or as a substitute for, analysis of the Company's recognized measures presented in accordance with IFRS.

EBITDA is calculated as the Company's (Income) Loss before taxes and adding back the impacts of interest expense, depreciation and amortization. EBITDA is a non-GAAP financial measure and can be reconciled as follows for the six months ended June 30, 2022:

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*(expressed in thousands of Canadian dollars)*

	Six months ended June 30, 2022		
	Refinery	Corporate and Other	Total
<b>(Income) Loss before taxes</b>	\$683	\$(10,547)	\$(9,864)
Add back:			
Interest income (expense)	-	89	89
Depreciation expense	-	(5)	(5)
<b>EBITDA</b>	<b>\$683</b>	<b>\$(10,463)</b>	<b>\$(9,780)</b>

The Company was in an EBITDA position of \$9,780 during the six months ended June 30, 2022. This was primarily driven by a \$16,685 gain on the fair value of the embedded derivative liability portion of the convertible debt. The Company's costs associated with the Refinery expansion were capitalized, and as a result operating expenses were reduced, thus producing an earnings position.

**CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

This MD&A contains certain statements that may be deemed "forward-looking statements", including statements regarding developments in the Company's operations in future periods, adequacy of financial resources and plans and objectives of the Company. All statements in this document, other than statements of historical fact, which address events or developments that the Company expects to occur, are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential", "interprets" and similar expressions, or events or conditions that "will", "would", "may", "could" or "should" occur. Forward-looking statements in this document include statements regarding the advancement of the Refinery, future exploration programs, liquidity and effects of accounting policy changes.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include market prices, exploration success, a successful outcome of the work in support of the recommissioning of the Refinery, continued availability of capital and financing, inability to obtain required regulatory or governmental approvals and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Readers are cautioned not to place undue reliance on this forward-looking information.

Forward-looking statements are based on the beliefs, estimates and opinions of the Company's management on the date the statements are made. The Company undertakes no obligation to update these forward-looking statements if Management's beliefs, estimates, opinions or other factors should change except as required by law.

These statements are based on several assumptions including, among others, assumptions regarding general business and economic conditions, the timing of the receipt of regulatory and governmental approvals for the work programs described herein, the ability of the Company and other relevant parties to satisfy stock exchange and other regulatory requirements promptly, the availability of financing for the Company's proposed work programs on its assets on reasonable terms and the ability of third-party service providers to deliver services promptly. The foregoing list of assumptions is not exhaustive. Events or circumstances could cause results to differ materially.