



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

**MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2022**

(EXPRESSED IN THOUSANDS OF CANADIAN DOLLARS)

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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 April 4, 2023 and provides analysis of the Company's financial results for the years ended December 31, 2022 and 2021. The following information should be read in conjunction with the accompanying consolidated financial statements for the years ended December 31, 2022 and 2021 with accompanying notes which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All dollar figures, excluding share prices, are expressed in thousands of Canadian dollars unless otherwise stated. Financial Statements are available at www.sedar.com and the Company's website 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 into 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 Corporation is in the business of battery materials refining and the acquisition and exploration of cobalt-copper resource properties. The Corporation is focused on building a diversified portfolio of assets that are highly leveraged to the battery materials market with assets located in North America, with the intent of providing a North American supply of battery materials. The Common Shares are listed on the TSXV and Nasdaq and trade under the symbol "ELBM" in each case. The Corporation has two significant North American assets:

- (i) a hydrometallurgical refinery located in Ontario, Canada (the "**Refinery**"); and
- (ii) the Iron Creek Project in Idaho, the Corporation's flagship mineral project (the "**Iron Creek Project**").

Electra is a public company listed on the TSX Venture Exchange (TSX-V) and trades under the symbol ELBM. On April 27, 2022, the Company began trading on the 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.

Q4 2022 HIGHLIGHTS AND RECENT EVENTS

Refinery Project Update

As at April 4, 2023, the Corporation has made the following key developments at the project:

- Completed all testing of existing brownfield equipment.
- Completed approximately 90 percent of the erection of the solvent extraction plant.
- Completed construction of the cobalt sulfate loadout facility.
- Increased the project owners' team to 31 personnel, which include tradespeople, engineers, operators, lab technicians, and office support staff.

On February 14, 2023, the Corporation announced while constructing its crystallization circuit, the final stage in the cobalt sulfate refining process, it took delivery of a falling film evaporator vessel that was damaged in transit. The custom-built vessel is used to vaporize water from the cobalt solution before it can be crystallized. A third-party inspection has determined that onsite repairs will be required before it can be commissioned. Additionally, the availability of microchips used throughout the refinery in the process control systems has been impacted by Global supply shortage of microchips causing delays in the development schedule. As a result of the damage to critical equipment and ongoing supply chain disruptions, the Corporation withdrew its guidance issued on August 11, 2022, and November 9, 2022, for its fourth quarter ending December 31, 2022.

Battery Recycling Demonstration Plant

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First launched in December 2022, the Company announced on February 14, 2023, preliminary results from its black mass trial and confirmed that it had completed the first plant-scale recycling of black mass material in North America and recovered critical metals, including nickel, cobalt, and manganese, needed for the electric vehicle (EV) battery supply chain using its proprietary hydrometallurgical process.

On March 13, 2023, Electra announced that it progressed the demonstration plant to recover lithium, a critical mineral needed for the electric vehicle (EV) battery supply chain, in its black mass recycling trial. The recovery and subsequent production of a technical-grade lithium carbonate product in a plant-scale setting validates Electra's proprietary hydrometallurgical process.

All the Corporation's recovered material will be sold to third-party companies for additional processing and re-use in a number of applications.

Convertible Note Offering

On February 14, 2023, the Corporation announced the closing of a previously announced private placement offering under which the Corporation entered into subscription agreements with investors for the issuance (the "**2028 Note Offering**") of an aggregate of US\$51,000 principal amount of 8.99% senior secured convertible notes due February 2028 (the "**2028 Notes**"), led by Cantor Fitzgerald & Co. as the sole placement agent. As part of the 2028 Note Offering, the Corporation also announced that it purchased and cancelled all the outstanding convertible notes ("2026 Notes") at par value, plus accrued and unpaid interest. The net proceeds of the 2028 Note Offering of approximately US\$14,000 will be used for capital expenditures associated with the expansion and recommissioning of the Corporation's cobalt refinery, including buildings, equipment, infrastructure, and other direct costs, as well as engineering and project management costs. The Corporation is the borrower under the 2028 Notes, and the obligations are guaranteed by the Corporation's Canadian, United States, and Australian subsidiaries, as well as any other subsidiary that guarantees the Corporation's obligations from time to time, subject to certain customary exclusions. The 2028 Notes are subject to customary events of default and basic positive and negative covenants. The Corporation is required to maintain a minimum liquidity balance of US\$2,000 under the terms of the 2028 Notes. Additionally the Company must have a United States registration statement providing for the resale of the Common Stock deliverable on conversions of the debenture and warrants by May 15, 2023. Failure to have such a statement by the date is considered an event of default which provides the indenture holders the right to demand repayment of the instrument.

The initial conversion rate of the 2028 Notes is 403.2140 Common Shares per US\$1,000 dollars, (equivalent to an initial conversion price of approximately US\$2.48 per Common Share) subject to certain adjustments outlined in the indenture governing the 2028 Notes, reflecting a premium of approximately 17.5% to the 30-day volume weighted average price of the Common Shares before date hereof.

Noteholders received an aggregate of 10,796,054 Common Share purchase warrants ("**Note Warrants**") exercisable for five years at an exercise price that is the same as the conversion price in connection with the 2028 Note Offering.

The 2028 Notes bear interest at 8.99% per annum, payable in cash semi-annually in arrears in February and August of each year and will mature in February 2028. During the first 12 months of the term of the 2028 Notes, the Corporation may pay interest through the issuance of Common Shares at an increased annual interest rate of 11.125%. In the event the Corporation achieves a third-party green bond designation during the term of the 2028 Note Offering Indenture, the interest rate on future cash interest payments shall be reduced to 8.75% per year and the interest rate of future interest paid through the issuance of Common Shares shall be reduced to 10.75% per year. The initial noteholders also received a royalty of an aggregate of 0.6% of revenues for five (5) years from the commencement of commercial production, subject to certain allowable deductions in the first year of the term.

The 2028 Notes are secured by a first-priority security interest (subject to customary permitted liens) in substantially all the Corporation's assets, and the assets and/or equity of the secured guarantors.

After the second anniversary of the issue date of the 2028 Notes, the Corporation may mandate the conversion of the 2028 Notes at its option in the event the trading price of the Common Shares exceeds 150% of the conversion price of the 2028 Notes at such time for at least 20 trading days, whether consecutive or not, during any consecutive 30 trading day period.

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Upon early conversion of the 2028 Notes, the Corporation will make an interest make-whole payment equal to the lesser of the two years of interest payments or interest payable to maturity, which may be made in cash or shares at the Corporation's election. There are also payments required in the event of a fundamental change, such as a change of control.

Acquisition of New Cobalt Project

On December 14, 2022, the Corporation announced the acquisition of a cobalt property (the "**CAS Property**") in proximity to the Corporation's projects in Idaho. The new cobalt property was acquired for US\$1,500, payable over 10 years upon completion of specific milestones. The underlying claim owner will retain a 1.5% NSR which can be purchased by Electra for US\$500 within one year of commercial production from the CAS Property.

Financing

On November 15, 2022, the Corporation announced the closing of an overnight-marketed public offering of 2,345,000 units of the Corporation (the "**November 2022 Financing Units**") on a best-efforts basis at a price of US\$2.35 per unit for gross proceeds of approximately US\$5,500 (approximately CAD\$7,400) (the "**November 2022 Financing**"), with each unit comprising of one Common Share and one Common Share purchase warrant, with each Common Share purchase warrant entitling the holder thereof to purchase one Common Share at a price of US\$3.10 per share at any time on or before the date that is 36 months after the closing date of the offering.

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

On December 26, 2022, the Company's base shelf prospectus, filed in December 2020 and last amended in December 2021, expired as scheduled after 25 months of the initial acceptance. Following the terms of its initial acceptance, the at-the-market equity program established in Q1 2022 (the "2022 ATM Program"), expired with the expiry of the base shelf. The ATM allowed sales of Common Shares under the program in the United States following the listing on the Nasdaq Capital Market in April 2022. The ATM acted as a supplement to the amended base shelf prospectus, which allowed 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 were made under the terms of the distribution agreement between CIBC Capital Markets. Prior to its expiry and as of the date of this MD&A, April 4, 2023, the Company has issued a total of 720,865 common shares under the 2022 ATM Program at an average price of \$5.13 per share, providing gross proceeds of \$3,701. Commissions and fees of \$92 were paid to CIBC Capital Markets and the Securities Exchange Commissions for these distributions.

Disposal of Exploration and Evaluation Assets

On January 4, 2023, the Company announced it signed an amendment to a 2021 share purchase and option agreement with Kuya Silver Corporation relating to silver and cobalt exploration assets in the Canadian Cobalt Camp. The option was exercised on 31st January 2023 when Kuya delivered shares totalling \$1,000 and entered into a royalty agreement with the Company on net smelter returns from commercial production derived from the transferred assets. Electra also retains a right of first offer to refine any base metal concentrates produced from the patents at the Company's planned refinery.

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 affects relating to COVID-19 to date. Best practice protocols have been developed and implemented for 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 forgoing, global uncertainty related to the pandemic may present other challenges that are not known at the current time – including new supply chain interruptions, cost impacts, or alteration of business plans by the Company's strategic partners.

DETAILED OUTLOOK AND OVERVIEW OF CURRENT PROGRAMS

The Company's vision is to provide sustainable battery materials to the EV industry in North America. 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 has a royalty over several silver and cobalt 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 is advancing the construction and commissioning of the Refinery. The second phase of the Company's strategic plan revolves around 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 cobalt refinery project. The Company commissioned the black mass demonstration plant in 2022 and recovered the first, plant scale, recycled materials in February and March 2023. The Company intends to operate the demonstration plant through June 2023 to continue to advance its flowsheet, collect optimization data and prepare for a feasibility study. The Company has also increased exploration activity in Idaho, purchased new adjacent claims and released an updated 43-101 report for Iron Creek.

The Company's mission is to be one of the most sustainable producers of battery materials and continues to build upon its solid Environmental and Social Governance ("**ESG**") foundation. Cobalt is a key element in fueling the lithium-ion batteries used in electric vehicles and for electric battery storage, both of which are essential technologies in the reduction of global carbon emissions.

The Company strives to be a leader amongst its peer group in ESG. The Company will provide a clean and ethical supply of cobalt for the EV market from large, commercial mining operations that provide ethically sourced cobalt and the highest quality cobalt hydroxide globally. As a member of the Cobalt Institute, the Company will follow the Cobalt Industry Responsible Assessment Framework (CIRAF), an industry-wide risk management tool that helps cobalt supply chain players identify production and sourcing related risks. Electra also committed to the Responsible Minerals Initiative, which will include a third-party audit of the systems in place to responsibly source minerals in line with current global standards.

The Refinery is projected to have a lower quartile carbon intensity cobalt by virtue of hydro powered mining operations supplying its hydrometallurgical refining operation. In October 2020, results were released from an independent Life Cycle Assessment ("**LCA**") which affirmed the low carbon footprint of the Refinery. The report concluded that the environmental impacts associated with refining cobalt at the Refinery will be materially lower than the published impacts of a leading Chinese refiner.

The Company takes a proactive, risk-based approach to environmental management and human rights with robust measures intended to minimize the environmental impact of operations and prevent the use of child labor at any level in the supply chain. Electra believes that these and other ESG practices will help it establish a premium brand of cobalt sulfate for the electric vehicle market. The Company's first sustainability report was published on February 24, 2023.

The 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 determined the Refinery could produce 25,000 tonnes of battery-grade cobalt sulfate annually (equating to approximately 5,000 tonnes of cobalt contained in sulfate), which would represent approximately 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.

Regarding the cobalt refinery project, Electra continues to make progress on the construction, procurement, and commissioning. Through March 15, 2023, Electra's progress can be measured by several key developments, including:

- Completed recommissioning of the analytical lab, feed material handling system (including ball mill and mixing

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- station), leach circuit, filter presses and reagent handling systems.
- Completed 90-95% of all procurement.
- Completed the erection of the solvent extraction building.
- Completed construction of the cobalt sulfate loadout facility.

- Increased the project owners' team to 31 personnel, which include tradespeople, engineers, operators, lab technicians, and office support staff.

While constructing its crystallization circuit, the final stage in the cobalt sulfate refining process, the Corporation took delivery of a falling film evaporator vessel that was damaged in transit. Custom-built for the Corporation, the vessel is used to vaporize water from the cobalt solution before it can be crystallized into cobalt sulfate. The evaporator vessel is valued at approximately US\$600, and measures approximately 60 feet in length and five feet in diameter. While the equipment was deemed suitable for installation, a third-party inspection has determined that onsite repairs will be required before it can be commissioned. The Corporation uses microchips throughout its refinery complex as part of the process control system to regulate equipment and integrate various circuits and systems together. Global supply shortages of microchips have resulted in delays to delivery of several process control system components. Although the Corporation has advanced the construction of its refinery project, it has been unable to progress fully on some work projects pending delivery of the process control components. As a result of the impact of critical equipment being damaged enroute to the Corporation's complex north of Toronto and ongoing supply chain disruptions, the Corporation has withdrawn its guidance issued on August 11, 2022, and November 9, 2022, for its fourth quarter ending December 31, 2022 along with any forward-looking statements previously made on the timing of the commissioning, capital spend and production of its cobalt sulfate refinery.

In conjunction with this the on February 14, 2023, the Corporation announced a review of the refinery project scope, scheduling, and capital expenditures and expects to provide results in the coming weeks. The review is intended to complete detailed engineering and provide critical details to inform construction cost and completion schedules.

The Company is currently incurring significant cash expenditures in the construction of its Refinery. Cash requirements for the Refinery expansion from December 31, 2022, through to the expected completed commissioning are estimated to be significantly higher than the previously estimated amount of \$100,000 - \$105,000. At this time, the Company does not have sufficient financial resources necessary to complete the construction and final commissioning of the Refinery. While the Company is working to finalize updated cost estimates for the construction and final commissioning of the Refinery, the Company will require additional financing in 2023 and 2024 to continue operations, complete the construction of the Refinery, advance its battery recycling strategy, purchase required feedstock as the Refinery enters its operating phase and remain in compliance with the minimum liquidity covenant under the 2028 Notes.

Black Mass Recycling

Black mass is the industry term used to describe the material remaining once expired lithium-ion batteries are shredded and all casings removed. Black mass contains high-value elements, including nickel, cobalt, manganese, copper, lithium, and graphite, that once recovered, can be recycled to produce new lithium-ion batteries.

Established North American battery recyclers have focused on collecting and shredding of batteries with the resulting black mass material primarily treated by a pyrometallurgical smelting process that has a higher carbon footprint and lower metal recoveries than hydrometallurgical processes.

Recycling black mass will increasingly become a key feature of the EV battery supply chain given the strong demand for critical minerals and the looming supply deficit of metals such as nickel and cobalt. According to data from McKinsey & Company, available battery material for recycling is expected to grow by 20% per year through 2040.

Black Mass recycling is the centrepiece of the Company's 2nd phase of the Battery Materials Park strategy. In 2022 the Company invested \$2,132 at toward a projected cost of \$3,000 in the black mass recycling demonstration plant. The operations and activities were completed using existing and new equipment as well as external experts and the Company's employees. The company intends to invest between \$1,000 and \$1,500 related to the operation and continued development of the demonstration plant through the end of June 2023.

In February 2023 the Company completed the first plant-scale recycling of black mass material in North America and recovered critical metals, including nickel, cobalt, and manganese, needed for the electric vehicle (EV) battery supply chain using its proprietary hydrometallurgical process. On March 13, 2023, the Company announced that it progressed the demonstration plant to recover lithium, a critical mineral needed for the electric vehicle (EV) battery supply chain, in its black mass recycling trial. Also, in March 2023 produced mixed hydroxide precipitate (MHP)) at contained metal grades for nickel and cobalt above the quoted market specification and more recently began producing lithium carbonate product. The black mass recycling trial is also recovering copper, graphite, and manganese.

Recoveries within the MHP circuit, the highest value product in the process, are achieving equivalent to and at times above bench scale results. Electra attributes its success to the refinery team continuously optimizing circuit performance as more black mass is processed. A first shipment of MHP to downstream clients for evaluation purposes is anticipated by early Q2 2023.

The Initial results from the black mass trial are extremely encouraging and validates that Electra's proprietary hydrometallurgical process can recover high-value elements from shredded lithium-ion batteries effectively and confirm that the commissioning work completed to date. As a result of successes achieved to date, Electra has elected to extend its black mass trial through to June 2023.

The early success of the plant processing facility has generated interest from downstream battery supply chain companies who are looking for North American battery black mass refining solutions.

Pending completion of the demonstration plant and a review of project economics, success could pave the way towards commercialization and the buildout of a 5,000 tonne per annum black mass processing facility within the Company's battery materials park in Ontario using existing infrastructure, personnel, and lab facility. Combined with Electra's planned production of cobalt, nickel, and manganese sulfates, commercialization of the Company's black mass recycling capabilities may diversify sources of cash flow and its customer base.

All of the Corporation's recovered material will be sold to third-party companies for additional processing and re-use in a number of applications.

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. An updated mineral resources estimate (MRE) was completed in November, 2019 by the company by Ristorcelli and Schlitt.

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The unpatented mining claims included within the Iron Creek Project have no expiration date if the annual claim maintenance fees are paid by August 31 of each year. These fees have been paid in full to September 1, 2023. The patents are not subject to annual claim-maintenance fees, but applicable real and immovable property taxes are payable to Lemhi County annually. The total annual land holding costs are estimated to be US\$68,984. Certain claims within the land package are governed by underlying agreements (Redcastle JV, CAS Option Agreement) which require milestone payments and/or earn in obligations for Electra to maintain their exploration rights on those claims. On January 23, 2023, the Company updated mineral resource for the Iron Creek Project (the “2023 MRE”) as prepared by QPs Martin Perron, P.Eng. and Marc R. Beauvais, P.Eng. of InnovExplo, using all available information. The 2023 MRE includes a new mineral resource estimate based on all drilling conducted through the end of 2022. The new resource was calculated using a net smelter return calculation (NSR) model with assumptions shown in section 14.13 of the technical report. The resulting model calculated an indicated mineral resource of 4.45 million tonnes at 0.19% Co and 0.73% Cu and an inferred mineral resource of 1.23 million tonnes at 0.08% Co and 1.34% Cu. The mineralization remains open along strike and downdip. The resource does not include the Ruby target which has insufficient drilling to effectively calculate a volume and grade of mineralization. Management believes that there is potential to continue to expand the size of the Iron Creek resource and continue drilling at the Ruby target to evaluate the viability of that target. In 2022, the Company commenced drilling with Titan Drilling out of Elko, Nevada using a track mounted LF-70 operating on two 10 hour shifts each day. The Company completed six holes for 1,674 m. One hole was completed on the east side of the Iron Creek Project to infill between the edge of the resource boundary and the drill intercepts in the 2021 step-out program. The remaining 3 collars with two wedges were completed on the Ruby target to evaluate the depth extent of Ruby zone. All holes were collared with HQ diameter core and three were reduced to NQ diameter for core recovery and extensions. All holes intercepted significant cobalt mineralization confirming the depth extent and continuity of the Ruby zone.

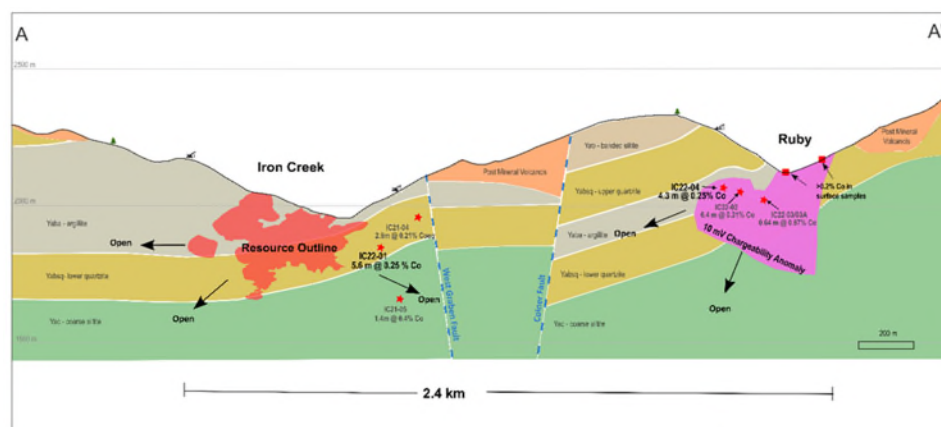


Figure 2. Schematic cross-section of the Iron Creek and Ruby properties using a 100m cutting envelope. Drillholes projected up to 200m into the plain of the section to show relative locations of targeting in 2021 and 2022. IC21-04 and IC21-05 are labeled as reported on May 9, 2022. IC22-02 and IC22-03/3A are labeled as reported on October 5, 2022. IC22-01 and IC22-04 are labeled as reported on December 14th, 2022. Resource outline is based on Ristorcelli and Schmitt (2019) and includes both the indicated and inferred categories. Section has not been updated with the 2023 resource outline.

On December 14, 2022, the Corporation announced the acquisition of a cobalt property (the “CAS Property”) in proximity to the Corporation’s projects in Idaho. The new cobalt property was acquired for US\$1,500, payable over 10 years upon completion of specific milestones. The underlying claim owner will retain a 1.5% NSR which can be purchased by Electra for US\$500 within one year of commercial production from the CAS Property.

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The Cobalt Camp

On December 4, 2022 Electra announced that it disposed of its exploration assets in the Canadian Cobalt Camp through an amended share purchase and option agreement with Kuya Silver. The agreement grants Kuya the right to acquire a 100% interest in the assets for \$1,000 in cash or cash equivalent shares of Kuya Silver on or prior to January 31, 2023. Kuya entered into a royalty agreement with Electra whereby Electra was granted a 2% royalty on net smelter returns from commercial production from certain properties within the Canadian Cobalt Camp described as the remaining assets. Electra also retained the right of first offer to refine any base metal concentrates produced from the assets at Electra's Ontario Refinery. On January 31, 2023 the option to purchase was completed when Kuya delivered \$1,000 worth of common stock to the Company and entered into the required royalty agreement.

EXPLORATION AND EVALUATION ASSETS

The Company is focused on building a North American battery materials 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 March, 2023. The Iron Creek property includes patented and unpatented claims totalling approximately 3,260 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, and vended to Kuya Silver in 2023, the Cobalt Camp properties are shown separately below due to their different geographic location.

	Balance December 31, 2021	Acquisition Costs	Balance December 31, 2022
Iron Creek	\$ 87,661	\$ 32	\$ 87,693
Total	\$ 87,661	\$ 32	\$ 87,693

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

In 2020, the Company reversed a portion of previously recorded impairment charges relating to the Cobalt Camp because of the announced sale transaction with Kuya related to the Keeley Joint-Venture. These assets were reclassified as held for sale as at December 31, 2020 and the sale transaction was completed during 2021. Similarly, in 2022 the Company entered a purchase option with Kuya to sell the remaining Cobalt Camp patents under the Joint-Venture created in 2020. These assets were classified as held for sale as at December 31, 2022 with the sale completing January 3, 2023.

The additions in 2022 relate to the purchase of the CAS right completed in Q1 2022.

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SELECTED ANNUAL INFORMATION

	December 31, 2022	December 31, 2021
	(\$)	(\$)
Financial Position		
Current Assets	13,518	61,935
Exploration and Evaluation Assets	87,693	87,661
Total Assets	187,524	167,611
Current Liabilities	54,109	4,708
Long-term Liabilities	6,906	62,939
Operations		
General and administrative	1,925	488
Consulting and professional fees	2,729	4,309
Exploration and evaluation expenditures	3,428	4,705
Investor relations and marketing	1,000	843
Refinery, engineering and metallurgical studies	2,349	4,442
Refinery, permitting and environmental expenses	128	867
Salary and benefits	3,913	2,804
Share-based payments	1,282	731
Total Operating Expenses	16,754	19,189
Net Income (Loss)	12,551	(34,916)
Income (Loss) per Share	0.38	(1.26)

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2022

The following are highlights from the Company's results of operations for the years ended December 31, 2022 and 2021:

- Included in Net Income for 2022 are unrealized derivative liability gains of \$29,217 related to fair value adjustments associated with declines in the Company's share price at December 31, 2022 compared to previous years and initial recognition dates. The prior year's Net Loss included a loss related to the increased fair value on the derivative liability related to the Company's share price appreciation compared to the value on initial recognition.
- Net Income in 2022 was positively impacted by \$1,338 of impairment reversal resulting from the Company amending the purchase options entered in 2020 with Kuya Silver for the remaining Keeley-Joint-Venture patents. The sale amendment fixed the transfer of the remaining, previously fully impaired patents and environmental obligations to Kuya Silver for \$1,000 paid in shares of Kuya Silver and entering an NSR royalty over the properties. Impairment reversals in the previous year were Nil.
- Exploration and evaluation expenditures were \$3,428 for the year ended December 31, 2022, compared to \$4,705 for the year ended December 31, 2021. The decrease was driven by lower drilling and reduced exploration programs at Iron Creek.
- Refinery, engineering, and metallurgical studies costs were \$2,349 for the year ended December 31, 2022, compared to \$4,442 for the year ended December 31, 2021. The majority of the costs incurred relate to front-end engineering and design costs prior to commencing capitalizing the development costs of the expanded refinery in September 2021. In 2022 all development costs related to the cobalt sulfate refinery are capitalized. Battery recycling, Nickel sulfate and Becancour-related studies and test work is also included in the 2022 expenditure.

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- Salary and benefits were \$3,913 for the year ended December 31, 2022, compared to \$2,804 for the year ended December 31, 2021. The increase is a result of the Company expanding its workforce in 2022.
- Consulting and professional fees were \$2,729 for the year ended December 31, 2022, compared to \$4,309 incurred during the year ended December 31, 2021, due to a higher legal costs, transaction costs and accounting costs in 2021. The legal and transaction costs mainly relate to the expensed portion of the fees paid for the 2026 Notes process completed during 2021 as well as a larger volume of capital and construction contract reviewed conducted in 2021.
- General and administrative expenses were \$1,925 for the year ended December 31, 2022 compared to \$488 for the year ended December 31, 2021. The increase was primarily due to increased insurance costs related to D&O insurance and increased construction policy costs.
- Refinery, permitting, and environmental expenses were \$128 for the year ended December 31, 2022 compared to \$867 for the year ended December 31, 2021. The decrease was the result of onboarding new environmental personnel in 2021 which allowed the Company to reduce the use of external environmental consultants in some areas during the year.

SUMMARY OF QUARTERLY RESULTS

Key financial information for the three months ended December 31, 2022, as well as the quarters spanning the most recent preceding fiscal years, are summarized as follows, reported in thousands of Canadian dollars except for per share amounts.

	December 31, 2022 (\$)	September 30, 2022 (\$)	June 30, 2022 (\$)	March 31, 2022 (\$)
Financial Position				
Current Assets	13,518	25,650	45,601	56,578
Exploration and Evaluation Assets	87,693	87,661	87,661	87,661
Total Assets	187,524	170,919	176,355	171,258
Current Liabilities	54,109	8,684	11,078	6,039
Long-term Liabilities	6,906	50,105	47,094	61,057
Operations				
General and administrative	811	668	377	69
Consulting and professional fees	187	1,024	932	586
Exploration and evaluation expenditures	614	1,336	1,084	394
Investor relations and marketing	203	233	318	246
Refinery, engineering and metallurgical studies	1,381	548	327	93
Refinery, permitting and environmental expenses	64	3	33	28
Salary and benefits	2,038	722	529	624
Share-based payments	259	285	304	434
Total Operating Expenses	5,557	4,819	3,904	2,474
Net Income (Loss)	10,315	(7,628)	7,534	2,330
Income (Loss) per Share	0.31	(0.24)	0.23	0.08

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	December 31, 2021 (\$)	September 30, 2021 (\$)	June 30, 2021 (\$)	March 31, 2021 (\$)
Financial Position				
Current Assets	61,935	64,930	15,295	20,717
Exploration and Evaluation Assets	87,661	87,539	87,539	87,420
Total Assets	167,611	160,837	110,094	113,951
Current Liabilities	4,708	2,115	598	536
Long-term Liabilities	62,939	51,749	1,264	9,297
Operations				
General and administrative	170	162	68	88
Consulting and professional fees	977	2,173	691	468
Exploration and evaluation expenditures	2,931	1,212	416	146
Investor relations and marketing	492	109	127	115
Refinery, engineering and metallurgical studies	436	1,797	1,479	730
Refinery, permitting and environmental expenses	182	299	129	257
Salary and benefits	1,222	606	559	417
Share-based payments	185	189	262	95
Total Operating Expenses	6,595	6,547	3,731	2,316
Net Loss	(15,494)	(10,502)	(6,409)	(2,511)
Loss per Share	(0.55)	(0.37)	(0.23)	(0.11)

RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDED DECEMBER 31, 2022

The following are highlights from the Company's results of operations for the three months ended December 31, 2022 and 2021:

- Included in Net Income for Q4 2022 are unrealized derivative liability gains of \$13,435 related to fair value adjustments associated with declines in the Company's share price at December 31, 2022 compared to prior quarter. Net Loss for Q4 2021 included a loss of \$8,716 related to the increased fair value on the derivative liability related to the Company's share price appreciation compared to the value at Q3 2021.
- Net Income in Q4 2022 was positively impacted by \$1,338 of impairment reversal resulting from the Company amending the purchase options entered in 2020 with Kuya Silver for the remaining Keeley-Joint-Venture patents. The sale amendment fixed the transfer of the remaining, previously fully impaired patents and environmental obligations to Kuya Silver for \$1,000 paid in shares of Kuya Silver and entering an NSR royalty over the properties. Impairment reversals in Q4 2021 were Nil.
- Exploration and evaluation expenditures were \$614 for the three months ended December 31, 2022, compared to \$2,931 for the three months ended December 31, 2021. The decrease was caused by a reduction in drilling expenses and professional fees related to Iron Creek over the same period in the prior year.
- Refinery, engineering, and metallurgical studies costs were \$1,381 for the three months ended December 31, 2022, compared to \$436 for the three months ended December 31, 2021. 2022 costs were primarily study costs associated with nickel sulfate studies and the readying of the black mass demonstration plant. The costs incurred for the three months ended December 31, 2021 mainly relate to detailed engineering for the cobalt refinery, black mass studies and other metallurgical testing.

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- Salary and benefits were \$2,038 for the three months ended December 31, 2022, compared to \$1,222 for the three months ended December 31, 2021. The increase is a result of the Company expanding its workforce and senior leadership team in 2021.
- Consulting and professional fees were \$187 for the three months ended December 31, 2022, compared to \$977 incurred during the three months ended December 31, 2021 due to the expensed portion of the costs relating to finalizing the second tranche of 2026 Notes issued in October 2021.
- Refinery, permitting and environmental expenses were \$64 for the three months ended December 31, 2022, compared to \$182 for the three months ended December 31, 2021. Key work to support permit applications was completed earlier in the year, with fewer active work programs in place during the fourth quarter of 2022.
- General and administrative expenses were \$811 for the three months ended December 31, 2022, compared to \$170 for the three months ended December 31, 2021. These costs have increased due to insurance costs related to D&O and subscription fees associated with the Company's Enterprise Resource Planning software upgrade.

CAPITAL STRUCTURE

As of the date of this MD&A, the Company has 35,428,974 common shares issued and outstanding. In addition, there are outstanding share purchase warrants and stock options for a further 3,464,177 and 1,412,967 common shares, respectively. The Company currently has 520,729 Deferred Share Units (DSUs), 391,698 Restricted Share Units (RSUs) and 63,889 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
January 22, 2021	January 22, 2023	875,917	\$9.00
January 22, 2021	January 22, 2023	105,110	5.58
United States Dollar denominated warrants			
November 15, 2022	November 15, 2025	2,483,150	US\$3.10
		3,464,177	\$8.63 – US\$3.10

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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
\$ 2.40	421,000	3.00	\$ 2.40	-	\$ 2.40
2.52	174,259	1.68	2.52	143,704	1.68
2.61	27,778	2.66	2.61	27,778	2.66
2.88	16,667	1.75	2.88	16,667	1.75
3.21	130,000	4.87	3.21	-	4.87
3.24	55,556	1.14	3.24	55,556	1.14
4.38	30,000	4.48	4.38	-	4.48
4.63	19,444	4.40	4.63	-	4.40
4.90	40,000	4.44	4.90	-	4.44
5.40	190,016	4.05	5.40	-	4.05
5.76	19,444	4.25	5.76	-	4.25
6.21	31,944	3.29	6.21	10,648	3.29
6.48	116,667	2.74	6.48	116,667	2.74
7.29	5,556	2.13	7.29	2,778	2.13
8.82	109,630	0.48	8.82	109,630	0.48
9.32	25,000	0.08	9.32	25,000	0.08
			-		
	1,412,960	2.90	\$ 4.19	508,426	\$ 1.62

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

Type	Outstanding
Deferred Share Units	520,729
Restricted Share Units	391,698
Performance Share Units	63,889

CAPITAL STRUCTURE, RESOURCES & LIQUIDITY

Capital Structure

The Company manages its capital structure to maximize its financial flexibility, adjusting 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 settlement of the 2026 Notes and issuances of the 2028 Notes in February 2023, the Company has increased the debt component of its capital structure with a par value of US\$50,500 outstanding after an early conversion of US\$500 of bonds in March 2023. As of December 31, 2022 the Company had US\$36,000 of convertible bonds.

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 \$5,267 throughout the construction phase of the refinery project with final payments received after construction is complete. 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 will also need working capital funding for the purchase of other consumables before to the startup of operations. Electra is in active discussions with the Government of Canada and the Province of Ontario for an additional \$10,000 in aggregate funding to support the final commissioning of the refinery, which would be in addition to the previous \$10,000 contribution.

Liquidity

The Company was in breach of the minimum liquidity balance requirement per the 2026 Notes agreement at December 31, 2022. The breach of the 2022 liquidity requirement necessitates the 2026 Notes be presented as current debt in the Financial Statements for the year end December 31, 2022. After the closing of the new US\$51,000 2028 Notes and settlement of the existing US\$36,000 2026 Notes, the Company received net proceeds of US\$14,000. The 2028 Notes reduced the minimum liquidity balance requirement under the 2026 Notes from US\$7,500 to US\$2,000. The Company also must have a United States registration statement providing for the resale of the underlying Common Stock deliverable on the conversion of the debenture and warrant indenture by May 15, 2023. Failure to provide a registration statement by the date is considered an event of default under the bond and warrant indenture which provides the indenture holders the right to demand repayment of the instrument.

The Company's objective in managing liquidity risk is to maintain sufficient liquidity to meet operational and asset advancement requirements. The Company has financed its Refinery construction progress with a combination of debt instruments and the sale of share capital.

At December 31, 2022, the Company had cash of \$7,952 (December 31, 2021 - \$\$58,626), and marketable securities of \$433 (December 31, 2021 - \$1,768). The remaining \$5,102 (of the original \$10,000 committed) of Government investments are not included in cash or equivalents.

The Company issued common shares for cash proceeds during the year ended December 31, 2022 as follows:

- On November 15, 2022, the Company completed a best-efforts, overnight-marketed offering by issuing 2,345,000 Units at a Unit price of US\$2.35 per Unit for gross proceeds of \$7,343 (US\$5,511). Each Unit consisted of one common share in the share capital of the Company and one full common share purchase warrant entitling holders to purchase one additional common share at a price of US\$3.10 for a period of three years. The transaction costs associated with the issuance were \$433 (US\$325) in cash and an additional 138,150 Broker Warrants to purchase 138,150 Broker Warrant Units (consisting of one common share and one Warrant) at any time over the next three years after closing date of the Offering.

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- 356,156 common shares from the exercise of warrants, options, deferred share units, restricted share units and performance share units. The total proceeds from the warrant exercises were \$970 at an exercise price of \$3.78, option exercises were \$140 at an exercise price at \$2.52.
- 720,865 common shares at an average price of \$5.13 per share for gross proceeds of approximately \$3,701 under its ATM Program. The transaction costs associated with these issuances were \$92, which reflect commissions paid to CIBC Capital Markets and SEC fee.
- US\$3,500 of 2026 Notes were converted by Noteholders which resulted in the Company issuing a total of 789,103 common shares. The Company also made interest make-whole payments to the Noteholders upon conversion totalling US\$485. There were no significant transaction costs incurred in relation to the conversions. During the year ended December 31, 2022, the Company had also made an interest payment of \$3,183 (December 31, 2021 - \$nil).

During the year ended December 31, 2022, the Company raised a total of, \$7,769 net of transaction costs, from sale and issuance of common shares. Additionally, the company received \$3,898 previously committed Government funding.

After year-end, the Company received additional conversion notices for US\$500 of principal for its 2028 Notes. In line with the conversion terms in the Note Indenture, 201,607 common shares were issued for settlement of bond par value and make-whole interest payments worth US\$90 were settled by issuing 41,390 shares for a total of 242,997 common shares.

The Company is currently incurring significant cash expenditures in the construction of its Refinery. Cash requirements for the Refinery expansion from December 31, 2022, through to the expected completed commissioning are estimated to be significantly higher than the previously estimated. At this time, the Company does not have sufficient financial resources necessary to complete the construction and final commissioning of the Refinery. While the Company is working to finalize updated cost estimates for the construction and final commissioning of the Refinery, the Company will require additional financing in 2023 and 2024 to continue operations, complete the construction of the Refinery, advance its battery recycling strategy, purchase the required feedstock as the Refinery enters its operating phase and remain in compliance with the minimum liquidity covenant under the 2028 Notes. Failure to remain in compliance with the liquidity terms may result in the instrument becoming due before the contractual maturity.

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The Company had the following summarized Cash flows:

	December 31, 2022	December 31, 2021
	(\$)	(\$)
Cash Flows from Operating Activities	(15,845)	(16,876)
Cash Flows from Investing Activities	(43,553)	(8,076)
Cash Flows from Financing Activities	8,484	78,880
Changes in cash during the period	(50,914)	53,928
Effect of exchange rates on cash	240	524
Cash - Beginning of the period	58,626	4,174
Cash - End of the period	7,952	58,626

Cash used in operating activities was \$15,845 during the year ended December 31, 2022, compared to \$16,876 used in operating activities during the year ended December 31, 2021. The decrease in cash used in operating activities was driven primarily by an increased capitalized Refinery spending included in Investing Activities.

Cash used in investing activities was \$43,553 during the year ended December 31, 2022, compared to cash out flows from investing activities of \$8,076 during the year ended December 31, 2021. The cash outflow from investing activities relate to prepayments of solvent extraction and crystalizing equipment, the construction of the solvent extraction facility and installation of related equipment as well as general construction costs and advancement of the cobalt crystallizer unit and facility which will be utilized in the expanded Refinery.

Cash flows provided by financing activities were \$8,484 during the year ended December 31, 2022 compared to the \$78,880. from financing activities during the year ended December 31, 2021. The 2021 inflows were related to proceeds from the Company's 2026 Notes in September and October 2021, the September 2021 equity financing, exercise of warrants, the Company's January 2021 bought deal, and proceeds from the Government Loan. The 2022 inflows were related to proceeds from the Company's ATM program, sale of securities in private placements, government funding and the proceeds for exercises of warrants and options.

There can be no assurances that the Company will be successful in obtaining other sources of funding; failure to obtain additional capital could result in the delay or indefinite postponement of further advancement of the Company's assets.

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COMMITMENTS

The Company's commitments relate to purchase and services commitments for work programs relating to refinery expansion and payments under financing arrangements. The Company had the following commitments as of December 31, 2022:

	2023	2024	2025	Thereafter	Total
Purchase commitments	\$ 13,684	\$ -	\$ -	\$ -	\$ 13,684
Convertible notes payments	3,436	3,445	3,436	51,912	62,229
Government loan payments	-	996	996	2,741	4,733
Lease payable	117	119	122	167	525
Total ¹	\$ 17,237	\$ 4,560	\$ 4,554	\$ 54,820	\$ 81,171

¹ The figures in the above table are as of December 31, 2022 as reported in the notes to the consolidated financial statements. Convertible notes payments amounts are based on contractual maturities of 2026 Notes and assumption that it would remain outstanding until maturity. As discussed above, 2026 Notes were cancelled and replaced with 2028 Notes in February 2023.

The Company has recorded a provision for environmental remediation, reclamation and decommissioning for its Ontario assets. For the Refinery, a liability of \$1,790 has been recorded, linked to the closure plan filed and accepted in March 2022 and updated in November 2022. In relation to 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 in 2023.

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RELATED PARTY TRANSACTIONS

The Company's related parties include key management personnel and companies related by way of directors or shareholders in common.

Key Management Personnel Compensation

During the year ended December 31, 2022 and 2021, the Company paid and/or accrued the following fees to management personnel and directors:

	December 31, 2022	December 31, 2021
Management	\$ 2,751	\$ 1,978
Directors	154	190
	\$ 2,905	\$ 2,168

During the year ended December 31, 2022, the Company had share-based payments made to management and directors of \$620 (December 31, 2021 - \$499). As at December 31, 2022, the accrued liabilities balance for related parties was \$389 (December 31, 2021 - \$786).

OFF BALANCE SHEET ARRANGEMENTS

The Company currently has no off balance sheet arrangements.

FINANCIAL INSTRUMENTS

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 judgement 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 in nature, involving uncertainties and matters of significant judgment, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values.

At December 31, 2022 the Company had the following assets and liabilities measured at Fair Value:

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	Carrying Value		December 31, 2022			Total Fair Value
	Fair value through profit or loss	Amortized cost	Level 1	Level 2	Level 3	
<i>Assets:</i>						
Cash and cash equivalents	\$ -	\$ 7,952	\$ -	\$ -	\$ -	\$ 7,952
Restricted cash	-	938	-	-	-	938
Receivables	-	3,079	-	-	-	3,079
Marketable securities	433	-	433	-	-	433
	\$ 433	\$ 11,969	\$ 433	\$ -	\$ -	\$ 12,402
<i>Liabilities:</i>						
Accounts payable and accrued liabilities	\$ -	\$20,164	\$ -	\$ -	\$ -	\$20,164
Long-term government loan payable	-	3,777	-	-	-	3,558
Convertible notes payable ¹	-	25,662	-	-	-	25,662
Financial derivative liability – Convertible Notes ¹	6,674	-	-	-	6,674	6,674
Other financial derivative liability	1,271	-	-	-	1,271	1,271
	\$ 7,945	\$ 49,603	\$ -	\$ -	\$ 7,945	\$ 57,329

¹ Fair value of convertible notes payable at December 31, 2022 is estimated as \$46,292 utilizing a discounted cash flow calculation based on cash interest and principal payments and a 9% interest rate which the Company would expect to achieve on a standard debt arrangement.

The level 3 liabilities consist of derivatives related to the convertible notes and the US Dollar denominated warrants of the Company's stock.

Financial Derivative Liability – Convertible Notes

The fair value of the embedded derivative on convertible notes as at December 31, 2022 was \$6,674 (December 31, 2021 - \$37,715) and is accounted for at FVTPL. The valuation is derived by a finite difference method, whereby the convertible debt is viewed as a hybrid instrument consisting of two components, an equity component (i.e., the conversion option) and a debt component, each with 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 equity components of the convertible bond. The key inputs in the valuation include risk-free rates, share price, equity 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 on a quarterly basis 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 a 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

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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 December 31, 2022 based on significant unobservable inputs which are equity volatility and credit spread. The Company used an equity volatility of 54% (December 31, 2021 – 60%). If the Company had used an equity volatility that was higher or lower by 10%, the potential effect would be an increase of \$1,708 (December 31, 2021 - \$1,773) or a decrease of \$1,545 (December 31, 2021 - \$1,999) to the fair value of the embedded derivative. The Company used a credit spread of 30.5% (December 31, 2021 – 25.6%). If the Company had used a credit spread that was higher or lower by 5%, the potential effect would be an increase of \$474 (December 31, 2021 - \$1,320) or a decrease of \$352 (December 31, 2021 - \$1,584) to the fair value of embedded derivative.

Other Financial Derivative Liability

The fair value of the embedded derivative on Warrants issued in foreign currency as at December 31, 2022 was \$1,271 (December 31, 2021 - \$nil) and is accounted for at FVTPL. The derivative results from the variability of the fair value of the warrants when translated from US dollars to the Company's reporting currency. The Company uses a Monte Carlo Simulation Model to capture the variability in exercise dates as the warrants can be exercised at a time before expiry. The key inputs in the valuation include risk-free rates and equity volatility. As there are significant unobservable inputs used in the valuation, the financial derivative liability is included in Level 3.

The Company used an equity volatility of 62.85% (December 31, 2021 – nil). If the Company had used an equity volatility that was higher or lower by 10%, the potential effect would be an increase of \$163 (December 31, 2021 - \$nil) or a decrease of \$366 (December 31, 2021 - \$nil) to the fair value of the embedded derivative.

RISK AND RISK MANAGEMENT

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 does not have sufficient financial resources necessary to complete the construction and final commissioning of the Refinery and the Company is going through a planning and budgeting process to update the capital estimates and completion schedule associated with the Refinery. The Company attempts to ensure there is sufficient access to funds to meet ongoing business requirements, considering its current cash position and potential funding sources. Although the Company has historically been successful in obtaining financing in the past, there can be no assurances that the Company will be able to obtain adequate financing in the future. This represents a material uncertainty that casts substantial doubt on the Company's ability to continue as a going concern. The Company has future obligations to pay semi-annual interest payments and the principal upon maturity related to the convertible debt. Starting in 2024 repayment of the interest-free Government loan will begin in 19 equal installments. Upon the issuance of the 2028 Notes and retirement of the 2026 Notes in February 2023, the Company is subject to a minimum cash balance requirement of US \$2,000. Failure to provide a United States registration statement by May 15, 2023 is considered an event of default under the 2028 bond and warrant indenture which provides the indenture holders the right to demand repayment of the instrument. Although the Company has been successful in obtaining such registration statements in the past, there can be no assurances that the Company will be able to obtain qualifying registrations in the future.

Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company's primary exposure to credit risk is on its cash and cash equivalents and restricted cash which are being held with major Canadian banks that are high-credit quality financial institutions as determined by rating agencies.

Interest rate risk

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Interest rate risk is the risk that the fair value of future cash flow of a financial instrument will fluctuate because of changes in market interest rate. The Company's debt with Glencore was extinguished during 2021 and the Company currently does not have any financial instruments that are linked to LIBOR, SOFR, or any form of a floating market interest rate. Therefore, changes in the market interest rate does not have an impact on the Company as at December 31, 2022.

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 2028 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.

Going Concern

As discussed above, the Company will require additional financing in 2023 and 2024 to continue operations, complete the construction of the Refinery, advance its battery recycling strategy, purchase required feedstock as the Refinery enters its operating phase and remain in compliance with minimum liquidity covenant under the 2028 notes. The Company is actively pursuing various alternatives including equity and debt financing to increase its liquidity and capital resources. The Company is also in discussion with various parties on alternatives to finance the funding of feedstock purchases. Although the Company has historically been successful in obtaining financing in the past, there can be no assurances that the Company will be able to obtain adequate financing in the future. This represents a material uncertainty that casts substantial doubt on the Company's ability to continue as a going concern. Financial information presented does not include the adjustments to the amounts and classifications of assets and liabilities that would be necessary should the Company be unable to continue as a going concern. These adjustments may be material.

Financing

The Company has raised funds through grants, 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 had debt service obligations arising from the retired 2026 Notes and continues to have debt obligations under the 2028 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. Additionally, the

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Company is subject to certain covenants related to the 2028 Notes, which include minimum cash and current assets balance of US\$2,000. Should the Company breach a covenant or be unable to service the debt, the assets pledged may be transferred to the lenders.

Global Pandemic

The ability for 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

Political and economic instability (including Russia's 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's mineral exploration operations and 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. The Company has not entered 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 in accordance with industry practice prior to any purchase of resource assets, such reviews do not guarantee that an unforeseen defect in the chain on title will not arise and defeat our title to the purchased assets. If such a defect were to occur, our entitlement to the production from such purchased assets could be jeopardized.

Competition

The Company expects to compete in the burgeoning North American Critical Minerals Industry with the completion of the Cobalt Sulfate refinery. The industry is developing in Canada with new entrants expected in the short term. Many

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of these competitors have substantially longer histories in the industry as well as substantially greater financial, sales and marketing resources than the Company.

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 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 favorable rates of return.

Additional information on risks and uncertainties relating to Electra's business is provided in Electra's Annual Information Form dated April 4, 2023 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 judgment relate 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 has 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 relating to convertible note and US dollar denominated warrants involve significant estimation. The fair value of financial derivative liability was determined at inception and is reviewed and adjusted on a quarterly basis or when conversions take place. Factors considered in the fair value of the financial derivative liability are risk free rate, the Company's share price, equity volatility, and credit spread.
- *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. Significant

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

- *Refinery Asset*

The net carrying value of the Refinery asset is reviewed regularly for conditions that suggest potential indications of impairment. The review requires significant judgment. Factors considered in the assessment of asset impairment include, but are not limited to, whether there has been a significant adverse change in the technological, market, economic or legal environment in which the entity operates; and internal indicators that the economic performance of the asset will be worse than expected.

FUTURE CHANGES IN ACCOUNTING POLICIES AND INITIAL ADOPTION

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 2022, 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 adoption of this amendment is not expected to have a material impact on the Company's consolidated financial statements and related note disclosures.

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 IASB proposed to defer the effective date of the 2020 amendments to no earlier than January 1, 2024. 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.

Other accounting standards issued but not yet effective

The following new and amended standards are not expected to have a significant impact on the Company's consolidated financial statements.

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2) – effective January 1, 2023.
- Definition of Accounting Estimates (Amendments to IAS 8) – effective January 1, 2023.
- Lease Liability in a Sale and Leaseback (Amendment to IFRS 16 Leases) – effective January 1, 2024.

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. From the second quarter 2022, up to and including this disclosure, Management concluded that internal control over financial reporting was not designed effectively as of December 31, 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:

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- 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.
- Control deficiencies in the procurement, payment and receiving processes resulting from a lack of formal processes to ensure adherence to the Company's delegation of authority policy, inconsistent matching of receipts to goods and services to supporting documentation and inconsistent receiving processes affecting the timing of recognition of assets and liabilities at the Company's refinery project.

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. In the third and fourth quarter, Management hired several qualified staff and began to rectify segregation issues. Over the next quarter, Management intends to further these efforts and has engaged external experts to design a process for and perform monitoring controls.

Other than those listed above, there have been no changes in the Company's internal control over financial reporting during the 3 months ended December 31, 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. As disclosed in the previous quarter, 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 December 31, 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 for 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 years ended December 31, 2022:

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	Year-Ended December 31, 2022		
	Refinery	Corporate and Other	Total
Income (loss) before taxes	\$(3,317)	\$15,868	\$12,551
Add back (remove):			
Interest income	(14)	(314)	(328)
Depreciation expense	-	48	48
EBITDA	\$(3,331)	\$15,602	\$12,271

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.