

# SIGMA LITHIUM CORPORATION (FORMERLY SIGMA LITHIUM RESOURCES CORPORATION)

# MANAGEMENT'S DISCUSSION AND ANALYSIS

YEAR ENDED DECEMBER 31, 2021

**Registered Office:** 

Suite 2200, 885 West Georgia Street, Vancouver, British Columbia, V6C 3E8.

# Introduction

This management's discussion and analysis (this "**MD&A**") of the financial condition and results of operations of Sigma Lithium Corporation (formerly Sigma Lithium Resources Corporation) (the "**Company**") constitutes management's review of the factors that affected the Company's financial and operating performance for the years ended December 31, 2021, and 2020. This MD&A should be read in conjunction with the audited annual financial statements of the Company for the years ended December 31, 2021, and 2020. This MD&A should be read in conjunction with the audited annual financial statements of the Company for the years ended December 31, 2021, and 2020 together with the notes thereto. Results are reported in Canadian dollars, unless otherwise noted. The Company's financial statements and the financial information contained in this MD&A are prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board and interpretations of the IFRS Interpretations Committee.

In the opinion of management, all adjustments (which consist only of normal recurring adjustments) considered necessary for a fair presentation have been included. Information contained herein is presented as of April 1, 2022, unless otherwise indicated.

For the purposes of preparing this MD&A, management, in conjunction with the Company's Board of Directors (the "**Board**"), considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of the Company's common shares ("**Common Shares**"); (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Unless inconsistent with the context, references in this MD&A to the "Company" are references to the Company and its subsidiaries.

Further information about the Company and its operations is available on the Company's website at <u>www.sigmalithium.ca</u>, at <u>www.sedar.com</u> (SEDAR) and at <u>www.sec.gov</u> (EDGAR).

The information herein should be read in conjunction with the technical report titled "Grota do Cirilo Lithium Project Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Phase 2 (Barreiro) Update of the NI 43-101 Technical Report on Feasibility Study", dated November 22, 2021, and with an effective date of June 2, 2021 (the "**Updated Feasibility Study Report**").

Readers should refer to and carefully consider the sections below titled "Risk Factors", "Cautionary Note Regarding Forward-Looking Information" and "Cautionary Note Regarding Mineral Reserve and Mineral Resource Estimates".

# **Company Business**

The Company, through its indirectly wholly-owned subsidiary Sigma Mineração S.A. ("Sigma Brazil"), is developing, with a strategy focused on environmental sustainability, the largest hard rock lithium deposits in the Americas, located in its wholly-owned Grota do Cirilo Project in Brazil (the "**Project**"). The Project will be vertically integrated, as the Company's own mining operations will supply mineralized spodumene material with exceptional mineralogy to its lithium production and processing plant (the "**Production Plant**"). The Production Plant is designed to be environmentally friendly, fully automated and digitally controlled. It will separate, purify and concentrate the spodumene in an environmentally friendly process to produce high purity 6% battery grade lithium concentrate ("**Battery Grade Green and Sustainable Lithium**"), engineered to the specifications of the Company's customers in the rapidly expanding lithium-ion battery supply chain for electric vehicles ("**EVs**").

The Production Plant is planned to have two separate production lines with similar processing flowsheets, which are projected to share certain elements of a common plant infrastructure. The first phase of production for the Project ("**Production Phase 1**") is the subject of the feasibility study analysis included in the Updated Feasibility Study Report. It will initially utilize feedstock spodumene from the Project's Xuxa deposit (the "**First Mine**"), mining an average 1.50 million tonnes ("**Mt**") per year during approximately 9.2 years of projected mine life. Its detailed design has been completed and the capital expenditures have been confirmed with quotes by each respective supplier to reach FEL-3 stage of precision. Based on the Updated Feasibility Study Report, the Company plans to produce 220,000 tonnes per year of Battery Grade Green and Sustainable Lithium, equivalent to 33,000 tonnes per year of lithium carbonate equivalent ("**LCE**"), in Production Phase 1 and expects to be amongst the world's lowest cost producers.

The next production phase of the Project ("**Production Phase 2**") has been the subject of the preliminary economic assessment (the "**PEA**") included in the Updated Feasibility Study Report and could potentially increase production utilizing feedstock from the Project's Barreiro deposit (the "**Second Mine**"). The Company completed the PEA with the objective of potentially responding to a significant increase in demand from its customers and solidifying its unique market position as a future supplier of Battery Grade Green and Sustainable Lithium. As reflected in the Updated Feasibility Study Report, the PEA projects significant economies of scale for Production Phase 2 (if warranted, following completion of the ongoing pre-feasibility study and a feasibility study), resulting from the low capital expenditure ("**CAPEX**") of adding a second environmentally-friendly lithium processing line and vertically integrating it to the Project, mining an average of 1.68 Mt per year during approximately 12.7 years of projected mine life.

The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be characterized as mineral reserves, and there is no certainty that the PEA will be realized. The Company has not yet made a production decision in respect of the Second Mine. The economic viability of the mineral resources of the Second Mine has not been demonstrated. The Company expects that it will assess the results of a pre-feasibility study and a feasibility study before making a production decision in respect of the Second Mine. All statements regarding mine development or production in respect of the Second Mine in this MD&A are expressly qualified by this statement.

The Company also commenced a further pre-feasibility study for Production Phase 2 contemplating the addition of a second processing line with similar capacity of 220,000 tonnes per year of Battery Grade Green and Sustainable Lithium from Production Phase 1, therefore potentially doubling the Project's total capacity to 440,000 tonnes per year (66,000 tonnes per year of LCE) of Battery Grade Green and Sustainable Lithium. Production Phase 2 is expected to benefit from economies of scale by utilizing most of the Production Plant infrastructure established for Production Phase 1.

This approach is the result of a thorough review of the Company's strategic priorities in light of the significant change in lithium market conditions and aims to significantly increase both the scale of the Project and its commercial and market importance on three fronts: future production, scale of mineral resources and of mineral reserves, all the while maintaining Battery Grade Green and Sustainable Lithium products and the Company's strategic leadership in environmental, social and governance ("**ESG**") in the lithium supply chain.

The Company is accelerating its site exploration activities for the Project with the goal of increasing the Project mine life or potentially increasing production by either expanding production levels in Production Phase 2, if warranted after completing the ongoing pre-feasibility study (and a feasibility study) or studying the potential of a third production expansion phase ("**Production Phase 3**").

The Production Plant has a lithium processing design that is proprietary and includes dense media separation ("**DMS**") technology which does not utilize hazardous chemicals in the separation and purification of the lithium. The Company will apply a customized algorithm developed to contemplate the specificities of the mineralogy in each of the Company's mines to digitally control the dense media levels in the Production Plant.

In addition, the Production Plant will be 100% powered by clean energy and it will use water efficiently, while preserving land ecosystems. As a result of state-of-the-art recirculation and tailings management circuits:

- the tailings will be dry stacked (and therefore will not create an earth-fill embankment tailings dam). Because the DMS technology of the Production Plant does not utilize hazardous chemicals, the drystacked tailings materials could also be entirely recyclable as feed for ancillary industries, such as ceramics; and
- the water utilized in the production process is 100% recirculated to the Production Plant. Approximately 10% of the water is either lost or evaporates, with 90% of water consumed in the production process reutilized back into the Production Plant, achieving a high level of water efficiency.

As reflected in the Updated Feasibility Study Report, SGS Canada Lakefield ("**SGS**") and Primero Group Ltd ("**Primero**") conducted additional metallurgical test work of variability testing with sampled material from the First Mine for the re-validation of the recoveries obtained by DMS for Production Phase 1 reflected in the Updated Feasibility Study Report, including the validation of equipment efficacy in scaling up the capacity of the Production Plant.

Since the fourth quarter of 2018, Sigma Brazil has been producing low carbon high purity lithium concentrate at an on-site demonstration pilot plant and has shipped samples to potential customers for product certification and testing. This demonstration production has been an important part of the successful commercial strategy of the Company for its Battery Grade Green and Sustainable Lithium.

The Company expects to submit a net zero execution plan to achieve its emission reduction targets after its first year of full operations, expected to be in 2024, partly as a result of its strategic decision to decrease emissions through the introduction of biofuels for haulage trucks and other heavy equipment of the mining fleet starting in the second year of production. The Company also plans to pursue generation of carbon credits through "in-setting" strategies such as preserving water streams and developing the agroforestry systems within its regional ecosystem. As part of that strategy, the Company is studying future partnerships with generators of renewable power for self-generation of the electricity required to power the Production Plant.

In order to secure a leading position supplying Battery Grade Green and Sustainable Lithium for the next generation of EV supply chains, the Company has adhered consistently to the highest principles and standards of ESG practices, which were established as part of its core purpose at inception in 2012. As a result, the Company has undertaken an ESG-centric management strategy, whereby its environmental and social sustainability purposes determine its strategic steps.

The Company commissioned an assessment of its net carbon footprint, conducting an independent ISO 14000 compliant audit of its life cycle analysis together with an independent expert validation of its carbon credits generated by its internal preservation, reforestation, and compensation forestry programs as well as its renewables generation plans. The Company expects to complete this workstream during 2022.

# Lithium Properties and Location

The Project comprises four properties owned by Sigma Brazil: Grota do Cirilo (the area of the Project where the First Mine and Second Mine are located), and the Sao Jose, Genipapo and Santa Clara properties. The Project consists of 27 mineral rights (which include mining concessions, applications for mining concessions,

exploration authorizations and applications for mineral exploration authorizations) spread over 191 km<sup>2</sup>. Within the Project area there are nine past producing lithium mines and 11 first-priority development targets.

The Project is located in the northeastern part of the state of Minas Gerais, in the municipalities of Araçuaí and Itinga, approximately 25 km east of the town of Araçuaí and 600 km northeast of Belo Horizonte, the state capital. The Project is approximately 500km from the Port of Ilheus, from where samples have been shipped for product certification and testing and from where future production concentrates are planned to be shipped.

# **Highlights of Project Development and Operations**

The Company is pleased to report significant advancement on construction of the Production Plant, establishing operational readiness, and supporting ongoing operations:

- Completed earthworks necessary for construction of the foundations for the Production Plant on budget and on schedule.
- Commissioning forecasted to begin at the end of 2022.

On December 6, 2021, the Company announced the commencement of construction on site to build the foundation and infrastructure installation for its greentech DMS Production Plant. The strategy adopted for the construction phase of the Production Plant was to divide the scope into the following workstreams, all currently in progress:

- Sitewide bulk earthworks encompassing site leveling, protective drainage, preparation of access roads, paving, fencing and gating for all of the site's installations;
- Civil works involving direct foundations for equipment, structures, and buildings;
- Relocation of a 138kV transmission line that overlays the north pit of the Project;
- Construction of a high voltage substation to provide the Project site with connection to the CEMIG (the relevant Brazilian power authority) grid;
- Electromechanical assembly of raw water supply piping and installations and equipment builds including tanks assembled at this site and installation of electrical equipment and instrumentation; and
- Commissioning activities and pre-operation to support the Production Plant operation start-up.

The earthworks for construction of the foundations for the Production Plant are complete. The construction team is currently focused on the construction of the First Mine protective drainage (channels and pipes) and construction of the bypass of the municipal road around the Project site. These two workstreams are expected to be concluded as planned on schedule and budget.

The ROM pad construction is expected to commence in April 2022, and it will be followed by the construction of the haul road linking the First Mine to the Production Plant and widening of the municipal access road.

There are currently a total of 73 heavy construction units on site, including: mobile concrete mixer trucks, hydraulic excavators, backhoe loaders, track and tire tractors, crawler tractors, road rollers, dump trucks, water trucks, pickup trucks and utility and ambulance vehicles.

Detailed engineering of the engineering, procurement and construction management ("**EPCM**") for the Production Plant (including civil works) has been led by Primero and has been progressing as indicated in the two tables below. The Company prioritized the engineering completion of the following aspects of the Production Plant: process design, mechanical, structural/foundations and concrete. This sequencing had two main objectives:

- further refining the flowsheet of the DMS circuit; and
- conducting trade-off analysis for critical equipment, such as the DMS ultrafines circuits, the environmental dry-stacking, and water recirculation circuits.

# **Detailed Engineering Progress Summary**

Discipline	Progress
Concrete	36%
Process Design	71%
Mechanical	52%
Structural	34%
Electrical & Instruments	27%
Platework	20%
Piping	5%
Controls	2%

# **Detailed Engineering Progress Across Key Disciplines**

Key Discipline	Detailed Progress Activities
Mechanical	Progressed cast in vault chutes ready
(52% complete)	<ul> <li>Continued with general platework 2D drawings across all areas</li> </ul>
	Coarse Ore Bin platework 2D drawing progressed
	Coarse Ore Bin Discharge Chute drawing progressed
	<ul> <li>Scalping screening 2D platework drawings progressed</li> </ul>
	<ul> <li>Secondary and Tertiary Crusher 2D platework drawings progressed</li> </ul>
	Feedbox calculations
	ROM Bin calculations
	Line sizing and P&ID mark-ups
	Wet plant area platework drawings (DMS Sizing Area, Primary DMS)
Process	<ul> <li>Continued Process Control and Process Control Tables</li> </ul>
(71% complete)	HAZOP Actions
	Thickener test complete on a 25m diameter unit
	<ul> <li>Belt filter test work complete choosing a 25m<sup>2</sup> unit</li> </ul>
	Dry plant (Area 200) P&IDs
	Wet plant area P&IDs
Electrical /	Remote IO panel
Instrumentation	Crushing Switchroom Equipment & Cables List
/ Controls	DMS Switchroom Equipment & Cables List
(27% complete)	DMS MCC 2 Schematics AFC
Civil / Structural	ROM Wall concrete design
(36% complete)	<ul> <li>Secondary and Tertiary Crusher Vault drawings</li> </ul>
	Primary Crusher steelwork and vault 2D drawings
	Scalping Screening concrete 2D drawings
	<ul> <li>Engineering continued for the dynamic analysis of the Secondary and Tertiary Crusher steelwork</li> </ul>
	<ul> <li>Continue feed bin preparation area structural engineering and foundation design confirmation</li> </ul>
	Continued stacker concrete design
	Started Primary DMS footing design

# Offtake Agreements for Future Lithium Production

On October 5, 2021, the Company announced the signing of a binding term sheet for an offtake agreement on a "take or pay" basis (the "**LGES Offtake**") for the sale of up to 100,000 tonnes per year of Battery Grade Green and Sustainable Lithium to LG Energy Solution, Ltd ("**LGES**"), one of the world's largest manufacturers of advanced lithium-ion batteries for EVs.

The six-year LGES Offtake starts with 60,000 tonnes per year in 2023 (during Production Phase 1) and is expected to increase to 100,000 tonnes per year from 2024 to 2027 (the "Guaranteed Take-or-Pay Quantity"), subject to the Company and LGES executing mutually acceptable definitive documentation to implement the LGES Offtake. The Company and LGES are also to negotiate each year an additional optional supply of Battery Grade Green and Sustainable Lithium (the "Optional Offtake Quantity"), not otherwise committed by the Company in other offtake arrangements, as per the table below.

	2022	2023	2024	2025	2026	2027
Guaranteed Quantity (in dry metric tonnes)	-	60,000	100,000	100,000	100,000	100,000
Optional Quantity (in dry metric tonnes)	15,000 (1)	15,000	50,000	50,000	50,000	50,000

(1) Would apply only if production has commenced in 2022.

The purchase price for the Battery Grade Green and Sustainable Lithium under the LGES Offtake will be floating and linked to prevailing prices in the industry for long term supply contracts of high purity lithium hydroxide during its term.

On March 26, 2019, the Company entered into a binding heads of agreement with Mitsui & Co. Ltd. ("**Mitsui**") under which Mitsui would prepay the Company US\$30,000,000 in anticipation of revenue for the right to purchase 80,000 tons of battery grade lithium concentrate annually (the "Mitsui Pre-Payment") for a floating price set by Asia Metals spot over six years, extendable for another five years at the option of Mitsui.

An initial tranche payment of US\$3,000,000 (\$4,007,100) was received by the Company on April 4, 2019, while the receipt of the remaining tranches is subject to certain conditions, including the execution of related definitive offtake agreements with Mitsui (for either the prepayment arrangement of another mutually acceptable role for Mitsui, depending upon whether Sigma ultimately determines to accept the balance of the prepayment) and other customary conditions.

Other than the initial tranche payment described above, the Company did not request or receive any funds from Mitsui in 2020 or in 2021.

#### **Operational Workstreams Overview**

In 2021, the Company reached major milestones towards engineering and construction, despite challenging circumstances created by the COVID-19 pandemic. The Company successfully completed several workstreams involved in the pre-construction of the Production Plant within its schedule and budget parameters.

The Company is managing three interconnected workstreams aimed to develop the Project as a whole:

- 1) the completion of Front-End Engineering and Design ("**FEED**") and commencement of execution and management of construction activities for Production Phase 1 and the Production Plant;
- 2) the completion of a pre-feasibility study of Production Phase 2, aimed at a potential production expansion; and
- 3) the continued exploration and expansion of the Project's estimated mineral resources, with the objective of increasing the Project's mine life and/or a potential Production Phase 3 expansion scenario.

In relation to the Production Phase 1 workstream, the FEED was finalized in December 2021. The CAPEX budget with a Project Execution Plan ("**PEP**") was also completed in December 2021. The Company issued letters of intent ("**LOIs**") for long lead items to vendors in order to start vendor design and detailing design by Primero and Promon Engenharia Ltda. ("**Promon**").

Following the successful conclusion of the first phase of FEED, Promon and Primero will remain engaged by the Company and continue to focus on negotiating and securing long lead items for the construction of the Production Plant. The Company is currently negotiating an agreement for the EPCM of the Production Plant and associated infrastructure with both engineering firms. The Company is also in negotiations with two finalist mining contractors to build and operate the First Mine.

The Company continued to demonstrate the unique extent and high-purity quality of its hard rock lithium mineralization for the Project and its commercial and market relevance by having significantly advanced its strategic goals on three fronts: short term production scheduled for 2023, the viability of a near-term production expansion contemplated for 2024, and the determination of the ultimate extent of mineral resources at the Project, all while maintaining its strategic leadership in ESG in the lithium supply chain.

# Detailed Engineering Progress Activities for the Production Plant

The FEED work progressed well and was finalized in the fourth quarter of 2021. Detailed project engineering started in December 2021 and has been progressing well with some important achievements, including:

- Issuance of civil engineering drawings such as rebar concrete, foundation drawings, architecture drawings. for construction and steel structure documents for purchase.
- Issuance of electrical plant, typical details and specifications for purchase.
- Piping route and equipment layout issuance.
- 3D Model 60% progress review completed for the DMS plant, crushing circuit and utility area.
- Implementation of constructability strategy on Master Schedule, including procurement and contractors activities and in accordance with construction sequence criteria, and definition of Baseline Master Schedule.
- Definition of platework and steel structure suitability to Brazilian standards and norms strategy with vendors.
- Definition of plant control system supplier.

Promon held kick-off meetings with all vendors to which LOIs were issued and started expediting vendor documents in order to monitor and obtain initial documentation for detailed design.

This workstream is currently being led by the Company's project management team, Promon and TSX Advisors Ltda. ("**TSX Advisors**"), a consulting company specializing in domestic and global procurement, including equipment and import logistics to Brazil.

#### Production Plant EPCM

The Company is in contract negotiations to engage Promon as the EPCM contractor for project execution and Primero to provide engineering services for the Production Plant, equipment and field services during the construction phase.

The work breakdown outlining the division of engineering and design between Promon and Primero during the project execution stage is to be as follows:

DIVISION OF RESPONSIBILITIES						
WBS* ITEM	AREA	DESCRIPTION	DETAIL ENGINEERING			
100	SITE WIDE	Bulk Earthworks	PROMON			

DIVISION OF RESPONSIBILITIES					
WBS* ITEM	AREA	DESCRIPTION	DETAIL ENGINEERING		
		Civil/Concrete	PRIMERO		
		Structural Steel	PRIMERO		
		Mechanical Equipment	PRIMERO		
200	CRUSHNG	Piping	PRIMERO		
		Platework	PRIMERO		
		Elect, Instr & Control	PRIMERO		
		Communications	PROMON		
		Civil/Concrete	PRIMERO		
		Structural Steel	PRIMERO		
		Mechanical Equipment	PRIMERO		
300	WET PLANT	Piping	PRIMERO		
		Platework	PRIMERO		
		Elect, Instr & Control	PRIMERO		
		Communications	PROMON		
600	INFRASTRUCTURE	Power/Water/Buildings/Etc.	PROMON		
700	MINING	Mining General	MINING CONTRACTOR		
700	WIINING	Mining Facilities	MINING CONTRACTOR		

\*Work Breakdown Structure

Detailed engineering is completed in collaboration of Promon and Primero. The detail engineering is progressing according to priority and both companies started issuing construction drawings according to the schedule baseline.

Procurement services considered under the EPCM contractor's scope encompass the phases of supplier list definition (together with the Company): request for quotation, tabulation of commercial proposals, commercial negotiations and issuance of purchase recommendation, kick-off meeting with the chosen supplier, expediting of supplier documentation during the project period and management of the company contracted by the Company expediting and inspecting the supplies and receiving on the field, as detailed in the activities below.

The following items describe the activities to be developed by the Company, in conjunction with Promon's construction and safety management team, throughout the execution of construction:

- manage the execution and certify the quality of the execution of the project;
- analyze, critique and propose containment, prevention and correction measures, continuously and proactively, for the management of the entire implementation of the project (covering all aspects of health & safety, environment, quality, schedule, costs and scope);
- manage the expediting of supply processes, to be executed by a specialized company to be hired by the Company;
- manage the quality of project implementation;
- co-ordination of commissioning activities, together with assembly contractors and equipment and systems suppliers, testing and delivery of the project; and

• manage, supervise and enforce labor, social security and tax standards and the Company's and contractor's specific corporate standards including: occupational safety and health, environmental, technical, and other standards.

# Commissioning and Startup

Primero's scope includes the project's future commissioning and startup management, with the support of the Company's operational team, equipment suppliers and assembler, which will including the following activities:

- preparation of commissioning and testing procedures of the implemented facilities and systems;
- monitoring of commissioning tests and analysis of the respective issued reports;
- identification, registration and communication of non-conformities related to commissioning and tests procedures;
- monitoring and updating the backlog;
- control of commissioning test reports issuance;
- expediting, together with the contractors, the sending of the data-books, available for the pre-operational phase; and
- coordination of interfaces between contractors.

Promon will assist in the commissioning of the Production Plant.

# Capex Estimation (IPA Front End Loading FEL-3)

Promon has concluded a comprehensive CAPEX estimation at FEL-3 level of confidence for the Production Plant (with FEED documentation), including overall planning of the project, 3D models, the bulk site earthworks and site layouts. As part of this process, Promon designed the following items: (i) ROM pad, including retaining wall structures; (ii) settlement ponds; (iii) site wide bulk earthworks, including the following areas: greentech process circuits and infrastructure, crushing facility, and water intake; and (iv) general site drainage.

#### <u>Mining</u>

The responsibility for the development of detailed engineering of mining related infrastructure will be divided between the mining engineering subconsultant and mining contractor, who will also be responsible for haul roads design.

Promon is to complement this scope, developing the engineering and design of: (i) mining general - access roads; (ii) mining infrastructure and services - fire hydrants; and (iii) fuels storage and distribution.

#### Pre-Construction Outlook for First Mine (Production Phase 1)

The First Mine will supply 100% of the feedstock for the Production Plant during Production Phase 1, creating a fully integrated and low-cost operation. The Company and GE21 Consultoria Mineral ("**GE21**") have completed a final ultimate pit mine design for the First Mine to supply the Production Plant for approximately nine years, potentially integrating with an eventual Second Mine (should a feasibility study so warrant) as the feedstock for the production of Battery Grade Green and Sustainable Lithium.

The Company has successfully completed several critical workstreams involved in the pre-construction of the First Mine within the scheduled and budgeted parameters. This includes all activities required for the geotechnical validation at detailed engineering level, as well as critical hydrogeological analysis and validation (including the installation of 12 piezometers for ongoing monitoring).

The Company has finalized the mining plan with two pit layouts (North and South Xuxa pits) including preparation of detailed mine production sequencing.

These validations at detailed engineering confidence levels were initiated as a result of the Company's ESGcentered strategy. A key element of the environmental strategy for Production Phase 1, as detailed in the Updated Feasibility Study Report, was the decision to open the First Mine as two separate pits to preserve the Piauí river's seasonal "stream" and its surrounding ecosystems (collectively, the "**Piauí**"). This decision was a result of the Piauí's pivotal role in providing the only source of freshwater for the surrounding communities for four to five months of the year during the rainy season (the Project is located within a semi-arid region with extended dry season).

The following workstreams of the pre-construction for the First Mine have been completed:

- Completed 100% of geotechnical workstreams and refined North and South pit designs and pit wall slopes of the First Mine. Completed 100% of geotechnical modeling and analysis. All planned additional geotechnical holes were successfully drilled with core orientations targeting all wall orientations (i.e. hanging wall, end walls, and footwall).
- The Company, GE21 and MDGEO Hidrogeologia e Meio Ambiente ("MDGEO") completed 100% of hydrogeological workstreams. The Company decided to conduct a hydrogeology detailed assessment and complete a model of groundwater pathways to increase confidence that, <u>in the scenario of climate change</u> <u>substantially altering rainfall patterns in the region (increasing seasonal water flows at the Piaui)</u>, the Company would be equipped with information to determine the most suitable pit dewatering methodology. Piezometers were installed for ongoing analysis of data for subsequent geo-hydrogeological modelling during the first year.
- The Company and GE21 have completed a final and ultimate mine design for the First Mine. It has the benefit of enhancing the life cycle analysis of the Project by substantially decreasing its carbon footprint by: (i) decreasing the vegetation suppression of trees in the construction of the pit to less than 50 hectares; and (ii) the segregation of mine waste piles and processed tailings with the goal of future recycling as feed for ancillary industries, promoting a circular economy.

The following pre-construction activities have been concluded for the First Mine:

- Completed the strategic monthly mining sequencing plan for the first three years of the life of mine, then quarterly for year four and annually for the remaining years.
- Completed the design of final pit (with final operating parameters: berm, ramp, ultimate wall slope angles).
- Developed a comprehensive grade control program utilizing geostatistical methods to ensure feed grades are maintained within the expected range. The proposed grade control system will be designed to minimize schist waste rock dilution with the pegmatite ore recovery in pit.
- Finalized of the waste piles design.
- Designed the ROM pad for Production Phase 1 together with Promon.

Ongoing discussions regarding mine operation costs (including capital and operational expenditures) with potential suppliers that have submitted proposals are ongoing and suppliers should be selected in the coming months.

# Preliminary Economic Assessment, Pre-Feasibility and Feasibility Studies for Increased Scale in Production Phase 2

The Company continues to advance multiple Project workstreams in geology, geotechnical, metallurgical, environmental and regulatory permitting with the objective of preparing for Production Phase 2 after 2023. The Company completed the PEA for the Second Mine and Production Phase 2, filing the Updated Feasibility Study Report on November 22, 2021. The PEA contemplated utilizing spodumene feed from the Second Mine with the objective of significantly increasing production.

The Company has engaged SGS, Primero and GE21 to build on the results of the PEA and conduct prefeasibility and feasibility studies for Production Phase 2, adding to the Production Plant a second similar DMS processing line with capacity of 220,000 tonnes per year (33,000 LCE) of Battery Grade Green and Sustainable Lithium. The results of the various workstreams are planned to be completed in stages. Following the PEA, the pre-feasibility study is to be completed during the second quarter of 2022.

The PEA demonstrated the significant cost benefit of vertically integrating a second production line and utilizing spodumene feed from the Second Mine, potentially mining an average of 1.68Mt per year during a 12.7 year mine life.

- The Second Mine is believed to be one of the Project's largest deposits. It is a high-purity, high-grade lithium deposit, with estimated 19.58Mt of measured and indicated mineral resources at 1.43% Li2O and 1.76Mt of inferred mineral resources at 1.45% Li2O suitable for open pit mining.
- Additional drilling continues, seeking to both increase the mineral resource and to strengthen the geological data for the mineral resource model.

The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be characterized as mineral reserves, and there is no certainty that the PEA will be realized. The Company has not yet made a production decision in respect of the Second Mine. The economic viability of the mineral resources of the Second Mine has not been demonstrated. The Company expects that it will assess the results of a pre-feasibility study and a feasibility study before making a production decision in respect of the Second Mine.

The Company and Primero completed all the metallurgical and variability test work at SGS laboratories with the aim of customizing a flowsheet for the processing line of Production Phase 2 with the Second Mine.

- Completed pilot scale DMS metallurgical testing, which achieved approximately 60% Li2O recovery producing a battery grade concentrate of 6.11% Li2O.
- The processing and metallurgy tests achieved good lithium recoveries in an environmentally friendly DMS plant, with similar flowsheet (and capital costs) to the first production line, without requiring a more capital-intensive and less environmentally friendly flotation process.
- These DMS recoveries are a result of the Second Mine having a similar exceptional mineralization to the First Mine.

The Company completed all field work for the preparation of a Second Mine pre-feasibility study, including geotechnical drilling and hydrogeology test work. Following the completion of the additional drilling program, GE21 will complete the mining plan, geotechnical program and modelling of the Second Mine. The field work required for the hydrogeological section of the pre-feasibility study has been completed, as all groundwater level measurements have been completed.

The following further workstreams have been completed:

- further drilling campaigns and review of the block model developed by SGS;
- revision of the final pit based on the new block model;
- review of mine sequencing based on the new pit;
- fleet sizing review based on new sequencing;
- review of the sterile pile in a location closer to the pit, reducing the average transport distance and costs; and
- mine operational expenditures review based on sequencing, fleet and waste pile

# Environmental Impact Study for Production Phase 2

The Company conducted detailed environmental impact studies for the fauna and the flora in the area of the Second Mine where the pit and waste piles will be located. These studies started in the dry season of the second quarter of 2020 and continued throughout the wet season during the third and fourth quarters of 2020.

The environmental impact studies as well as a comprehensive environmental and social impact assessment report ("**EIA/RIMA**") are ongoing by the Company.

The design proposed by the Company in the EIA/RIMA for the area directly impacted by the Project (the "**Project Impacted Area**") has followed the Company's ESG-centric approach to minimize distances by combining the minimization of greenhouse gas emissions of diesel in mining trucks with a minimization of semi-arid bush and vegetation suppression. Therefore, the Company contemplates the location of its processing tailings dry stacking piles in the vicinity of the Production Plant. As a result, the life cycle analysis of the Company is substantially enhanced, decreasing environmental and carbon footprints.

Once the EIA/RIMA is approved by regulators, a permit for the construction and installation of the Second Mine (LP/LI) as well as operation permits from environmental authorities will be required.

# Exploration & Development of Other Deposits in the Project Area

The Company is accelerating its site exploration activities for the Project with the goal of potentially increasing the Project mine life at the expanded production levels of 440,000 tonnes of Battery Grade Green and Sustainable Lithium per year when including Production Phase 2 or potentially increasing production output through Production Phase 3 should EV penetration growth continue to accelerate, and lithium demand forecasts continue to demonstrate strength. The objective of the exploration program is to increase estimated mineral resources during the second quarter of 2022.

The Company's dedicated geological teams and SGS Canada are carrying out an exploration program to determine the ultimate extent of the property mineralization and more rapidly increase the scale of estimated mineral resources, while demonstrating the uniqueness of the high-purity quality of its hard rock lithium mineralization.

- The Company has continued to conduct a campaign to diamond drill the remaining 10,000 meters (in a campaign targeting 20,000 meters) to further define current mineralized structures validated in the Updated Feasibility Study Report, increasing the scale of known deposits
- In addition, it has focused on five other targets, previously identified by historical mining and surface trenching

This geology workstream did not impact the Production Phase 1 pre-construction workstreams, as it is managed by a separate geological team.

- Additionally, the Company's geological teams continued to evaluate the potential of known deposits that were not included in the mineral resource estimate in the Updated Feasibility Study Report. Two deposits with significant potential were targeted with diamond drilling campaigns
- The Company's focus for the 2021/2022 drilling campaign is an area with pegmatite surface exposure that returned promising results in the 2018-2019 drilling program. This regional exploration program, of drilling designed to test the target object was very positive, totaling 21,116m in 129 positive holes. An additional 10,000m of drilling will be made, totaling 31,116 m by the end of 2022.
- During the campaign carried out on the Second Mine target to close the sections and confirm pegmatitic zones, 42 holes were drilled, totaling 6,750 meters and all holes were used for new mine sequencing studies and operating costs for pre-feasibility study.
- Concurrent with the detailing work, the technical team carried out work to survey new pegmatite bodies through trenches, totaling 350m of trenches and 180m of intercepted pegmatite, opening two new bodies for future reverse circulation drilling.
- The NDC (Nezinho do Chicão) target was the main objective of the drilling to date with approximately 1.5 km, so far 96 holes have been positive. The pegmatite remains open to the south, where it will be the result of future prospecting throughout 2022. The expectation is to start modeling and measuring the volume and average content of the body in the coming months.
- For the coming months, the detailing of another target called Murial is also planned. A total of 6,550 meters and a total of 44 holes to the north of the known pegmatite are planned.

#### ESG & Sustainability

#### Social Programs

As a result of the ESG-centered strategy of the Company, sustainability considerations and actions are incorporated into the various workstreams.

The Company, as part of its ESG-centric strategy of shared gains and value creation with the communities around the Project, has determined as a core social objective United Nations Sustainable Development Goals ("**UN-SDGs**") #8 of "*decent work and economic growth*". The Company is committed to strengthening of the regional socioeconomic environment for the two municipalities where it operates in the Vale do Jequitinhonha. The Company has a strong working relationship with the municipalities of Itinga and Araçuaí (where the Company has activities) and their communities and conducts regular and meaningful engagement and consultation with them.

The Company is contributing to the sustainable development of the region as it advances the construction of the Production Plant towards commercial production. The Company has been executing the following ESG initiatives:

- Zero Hunger Action: The Company has extended humanitarian relief action for an additional 10 months, pledging 7,000 more food baskets, which is expected to enable approximately 2.4 million meals. This is in addition to the 7,000 food baskets already delivered over the last 10 months at the height of the COVID-19 pandemic for the vulnerable families in the Vale do Jequitinhonha region.
- Homecoming Employment Program (Volta Ao Lar): Over 300 people are currently employed on site, with approximately 72% coming from the Vale do Jequitinhonha region, setting the stage for significant social economic impact in a destitute region. The Company is reuniting families through its "Homecoming Program" (Volta Ao Lar)", bringing back home qualified workers that had migrated out of the region, due to lack of employment opportunities.
- Education Program for Mining Technicians: The Company's Chief Sustainability Officer organized an educational partnership between the UFVJM (Campus Janauba) and the Federal Institute of Education of Araçuaí, creating the first program to prepare mining technicians in the region.
- OMICRON COVID-19 Prevention Program: The Company has also expanded its "OMICRON COVID-19 Prevention Program" in the Vale do Jequitinhonha region delivering an additional 6,000 liters of sodium hypochlorite and 3,225 liters of gel alcohol, together with the Company's COVID-19 prevention education booklet. In aggregate, the program provided necessary supplies for sixteen institutions, administering over 20,000 medical appointments per month (over 240,000 appointments per year). Additionally, the Company also provided sodium hypochlorite for disinfection of six public places essential to the local community, such as the municipal food market.
- Re-Opening of Childcare Centers Initiative: The Company sponsored an initiative to support the reopening of two childcare centers serving 560 children in the municipalities where the Company operates. The Company launched a program for the sponsorship of two-day childcare facilities, one in each of the municipalities where the Project is located. The objective of the program is to assist 560 children in need over a year. The campaign totaled 217 liters of liquid soap, 543 liters of shampoo, 490 toothbrushes, 29,700 diapers and 62,600 napkins.
- Disaster Relief During Floods: The Company has provided first response disaster relief supplying food and water for 400 victims who lost their homes as a result of the floods in the Vale do Jequitinhonha region during the unusually rainy season throughout New Year holidays and the month of January. Since the fourth quarter of 2021, the Company distributed over 11,000 liters of potable water to serve the distressed towns of Araçuaí and Itinga due to the unusual floods in the region. This action helped 5,000 families (more than 20,000 people) who did not have, or had only partial, access to potable water.

Also, following the principles of UN-SDG #17 "*partnership for the goals*", the Company inaugurated the independent agency for private investment promotion and economic diversification of the region (the "**Sustainability Council**") in partnership with the towns of Itinga and Araçuaí, on the week of the 150<sup>th</sup> anniversary of the town of Araçuaí.

The Sustainability Council aims to transform the territory with organized activities to stimulate development, contributing to the diversification of the business environment through the attraction of investments to the two municipalities.

The Company has successfully obtained institutional support for this initiative from the State of Minas Gerais and its various development bodies, including the secretary of special development ("**SEDE**"), the State investment agency (formerly "**INDI**", renamed "**Invest Minas**"). Since May 2021, the Company has been working with TSX Advisors, a specialist consulting firm, to lead the project to structure and implement the Sustainability Council. The consultant has a successful track record of executing similar projects for Brazil's largest mining companies.

Methodological challenges to address socio-economic impact matters in a way that converges with the Company's strategy and core business will be addressed by applying the methodology proposed by the World Bank for similar Sustainability Council globally, with the Company acting as broader development catalyst (not as principal). This workstream was approached as follows

- Definition of the framework for the Sustainability Council, including: (i) mapping and approaching stakeholders; (ii) evaluation of the region's "maturity" and "economic engagement" indices; (iii) definition of the Agency Model for the region; (iv) consolidation of governance and management models; (v) modulation of the economic sustainability plan; and (vi) defining priority sustainability areas to receive investments.
  - Workstreams (i), (ii), and (iii) have been completed and the remaining ones are expected by early 2022
  - Workstream (v) has been achieved with the participation of the towns of Aracuai and Itinga at COP26 in person in Glasgow. Each town appointed a technical external representative to join the Company in Glasgow and participate in the Investment COP (sponsored by the World Climate Summit), amongst other various ESG educational seminars around the COP26
    - Considering that both towns will have representatives on the Sustainability Council's board of directors, their participation was considered critical in order to be exposed to the latest developments in climate change as they will participate in the agency's planning on a sustainable basis
  - Workstream (vi) is intended to be completed by first half of 2022, once all members of the Sustainability Council have been appointed.

In line with UN-SDGs #3 (Good Health and Well Being), the Company continues to follow strict COVID-19 protocols, as previously disclosed, and no new cases were reported at the Project site during the fourth quarter of 2021.

# Corporate Governance

The Company has elevated Ana Cabral-Gardner from her role as Chief Strategy Officer to a new role of co-CEO with Calvyn Gardner. In that capacity, she oversees the Company's entire breadth of ESG-centric activities, heavily centered of achieving the key social sustainability goals. Moreover, she will be focusing on implementation for the environmental and corporate goals to achieve net zero by 2024. Ana will continue to work in close partnership with the Company's Chief Sustainability Officer, Maria Salum, in environmental strategy, community relations and impact investing in the Vale do Jequitinhonha region, as part of the Company's comprehensive social responsibility program. Ana will also maintain her previous duties, including overseeing the commercial, business development, corporate finance, regulatory and legal areas.

Calvyn Gardner, co-CEO, is based full time at the Project site where he continues his pivotal role leading the successful execution of the upcoming construction of the Project as well as ensuring its continued

development, with the execution of the workstreams for a potential Production Phase 2 and Production Phase 3, if further validated by respective feasibility studies.

The Company also appointed Felipe Peres to the role of Chief Financial Officer.

# Creation of Environmental Sustainability and Social Impact Board Committee

An ESG Committee was created to assist the Board with its ESG centric strategy. The committee has been specifically renamed "Environmental Sustainability and Social Impact". Ana Cabral-Gardner and Marcelo Paiva were appointed as co-Chairs of the ESG Committee. Maria Salum, Chief Sustainability Officer acts as senior advisor to the ESG committee.

The purpose of the committee is to advise and support co-CEOs Ana Cabral and Calvyn Gardner in determining and implementing the Company's wide range of environmental and social sustainability initiatives, based on the selected sustainable development goals (the "**Mission Critical SDGs**") for each of the two aspects of ESG: "E" environmental and "S" social. There are two key initiatives that will be the focus of the committee:

- Establishing the Sustainability Council which encompasses the coordination of the social programs of the Company.
- Overseeing strategy and coordinating with the Board's Technical Committee to drive the Company to its ambitious net zero 2024 targets (measured as emissions minus carbon credits), within this Decade of Action and 26 years ahead of United Nations' 2050 targets.

# COP26 Participation

The Company's Co-CEO, Ana Cabral-Gardner, was nominated by a national focal point (NFP) as a representative to the United Nations Convention on Climate Change. She actively participated in the event as a speaker, including a panel on the theme "Circular Economy and the 21st Century City: Unlocking the Social & Environmental Benefits of the Sustainable City," presenting the Company's project to recycle tailings from its greentech plant and the ensuing economic development impact for the region. Ana also spoke at the main event/Blue Zone regarding "The Future of ESG Investing: Enabling the Energy Transition to a Net Zero World."

The Company brought to COP26 in Glasgow, a delegation from Vale do Jequitinhonha, where the Company's operations are located, to participate in person as guests in the investment track of COP26, hosted by the World Climate Fund from Denmark. Vale do Jequitinhonha has one of the lowest Human Development Indexes (HDI) in Brazil (0.66 compared to the national average of 0.76). The mission of the delegation was to disseminate to the communities the key environmental and social learnings from the COP-26, as well as to create a plan, in conjunction with the Sustainability Council, for the regional cities of Araçuai and Itinga to achieve: (i) environmentally sustainable development; and (ii) net zero by 2040.

The Company also joined (via remote connection) the United Nations High Level Dialogue for Energy Transition that took place in tandem with the General Assembly opening week on September 24<sup>th</sup> in New York.

# Life Cycle Analysis and Net Zero Strategy

The Company has engaged Minviro Ltd. for the preparation of an independent ISO 14000 compliant life cycle assessment ("**LCA**"). The Company has engaged BeZero Carbon Ltd for the assessment of the Company's internal carbon offsetting projects ("in-setting projects") and advice on a portfolio of carbon additional in-setting projects and initiatives which the company may undertake in order to deliver its plans to make a robust net zero declaration by 2024.

The objectives of both workstreams are to understand the greenhouse gas emissions associated with the positive activities of carbon sequestering undertaken by the Company, link the results to the overall carbon footprint of existing and planned operations, create an in-setting and offsetting plan for residual emissions and provide an evidence-based assessment for the Company's net zero targets. The Company will take responsibility for all of its expected scope 1, 2, and 3 emissions, as is the expectation in today's international

carbon accounting environment for maximizing the robustness and defensibility of the Company's strategy. Net zero targets will be undertaken in two phases: (i) net zero by 2023: incorporating scope 3 emissions from mine to port of shipment in Brazil; and (ii) deliver its plans to make a robust net zero declaration by 2024: incorporating scope 3 emissions at port of delivery.

The study and the audit are contemplating its production route of Battery Grade High Purity Sustainable Lithium with spodumene mining and lithium purification and concentration production in Brazil. The final ISO 14000 audit report is ongoing and will include: (i) a cradle to grave life cycle inventory and impact assessment to generate impact data for climate change, water consumption, land use, waste management and certain impact categories selected by the Company; and (ii) a complete contribution analysis outlining the major inputs contributing to the impact categories.

The Company expects to publish results from the LCA in 2022, including its carbon in-setting and off-setting strategies. The Company plans to adapt to the most up to date norms in the industry, as this is an important pillar of the Company's plans to develop and maintain a net zero strategy, while the expectations and norms for offsetting and emissions reporting continue to evolve.

# Environmental Programs

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The Company has ongoing comprehensive environmental and social programs in process, consistent with its leadership role in ESG in the lithium sector and its commitment to sustainable mining.

The social and environmental mitigation programs already initiated in the implementation phase, and that will continue throughout the construction phase, aim to establish actions to proactively mitigate, prevent, control and compensate for the environmental impacts that could be caused by the mining and processing activity to be carried out by the Company once it enters the production phase. These programs and actions, which are described below, are linked to one or more UN-SDGs:

- Ongoing programs and actions initiated in 2020:
  - Solid waste management program
    - Uses the 5Rs: reuse, rethink, reduce, refuse and recycle
    - Activities performed:
      - Installation of selective collections
      - Environmental education
      - Control
      - Final destination
- Plan for the re-utilization of waste and tailings:
  - The plan entails the characterization of the tailings and the search for potential partners in ancillary industries that may have an interest in its use
- Environmental education program:
  - Given the pandemic situation, the Company has been working to reorganize this activity, including a thorough review of its scope in preparation for the operational phase. The program is expected to resume in the second quarter of 2022
  - The program will focus on presenting to the communities several aspects related to environmental issues including selective collection, water and sewage treatment, and climate change
  - In an effort to disseminate the program in the community despite pandemic limitations, the Company promoted training for its employees, through lectures and distribution of educational booklets, covering topics such as environment and work safety (ways to minimize environmental impacts, environmental preservation and work safety)
- Prioritization and professional qualification program for local suppliers:
  - Aims to prepare and train personnel to perform functions during the implementation and operation of the project, prioritizing local labor. Select courses include:

- Loader Operation: Theory and Practice
- Operation of Tractors: Theory and Practice
- Basic Instrumentation and Programmable Logic Controller Operation
- Processing Plant Operation Process, Equipment and Safe Operation Concepts
- Industrial Mechanical Maintenance
- Industrial Electrician
- Qualification in Welding Process
- Sigma Integration: Safety, Health and Environment
- Given the "hands-on" nature of the courses mentioned above, all other courses were suspended given the global pandemic except for a course on Forest Nursery and driving earthworks equipment
- Accident prevention and public health program:
  - Work hygiene
  - o Emergency Plan
  - Traffic Plan
  - Fire Plan Rock Shredder
  - Respiratory Protection Program
  - Hearing Conservation Program
  - Occupational Health Medical Control Program
  - o Since the inception of the program, the Company has not had any incidents reported
- Social communications program:
  - o Inform the community about the implementation and operations of the Project
  - o Educate about socioeconomic and environmental impacts
  - Identify the community's concerns and anxieties regarding the impacts of the Project, preventing and guiding the handling of any adverse situations and procedures
  - o Strengthen the relationship and communication channels with the community
  - Disseminate to the internal public the procedures and activities aimed at establishing a harmonious and non-conflicting relationship with the communities located in the vicinity of the site
  - Publicize the environmental control and monitoring programs
- Maintenance and conservation program for permanent preservation areas and legal reserves:
  - Maintenance and conservation of the program areas located in the Project Impacted Area must be carried out during the implementation, operations and closure stages of the mine, by applying the following measures:
    - Isolation / enclosure of the area
    - Installation of proper signaling
    - Implementation of the drainage system in the mine area
    - Implementation of the environmental education program for workers
    - Conservation of local fauna and flora
    - Restoration of vegetation in anthropogenic areas that are part of the Permanent Protection Area
    - Monitoring of work carried out
- Environmental management and supervision plan:
  - Environmental management and supervision must cover all phases of the project, from implementation to operations respecting the following:
    - Monitoring, management and permanent environmental control of environmental projects, plans, programs and proposals during activities.
    - Execution of the environmental commitments assumed in the licensing, aiming to comply with all plans, projects and programs of an environmental nature that may directly or indirectly affect and/or protect the physical, biotic and socioeconomic environments in which the enterprise will be inserted.
    - Monitoring of vegetation removal and disposal of wood residue, which is donated to the municipality of Itinga for social works

- Monitoring of atmospheric emissions, noise pollution, and start of a vibrations control program so as not to impact surrounding communities
- Planted vegetation monitoring program:
  - Target for planting 150,000 seedlings of native species, adopting procedures to ensure the conservation of Permanent Preservation Areas and Environmental Compensation areas within the Project. To date, approximately 6,000 seedlings have been planted
  - The Company is carrying out a mining compensation program in the dark forest (rebio), an Atlantic Forest protection area of 286 hectares
  - The Company will recover an additional 75 hectares in areas surrounding the Project
- Specific programs for the conservation and monitoring of endangered species:
  - The Fauna Rescue Program aims to prevent the mortality of local fauna and allow for them to continue to occupy the region.
- Submission of terms of agreement for project and/or actions between the entrepreneurs and the municipalities of Itinga and Araçuaí:
  - The creation of the Sustainability Council was signed by the mayors of both municipalities
    - Surface and groundwater quality monitoring program:
      - The Company carries out water quality monitoring at strategic points upstream and downstream with the following objectives:
        - Characterize the water before use
        - Demonstrate that the Company's activities do not cause an impact on the watercourse
      - O Data collected prior to the implementation of the program identified that the Piauí creek has several water quality parameters that do not comply with current legislation, including thermotolerant coliforms. This data reveals the lack of basic sanitation structures in the region since the banks of the creek are heavily occupied by housing. In its operation, the Company is guaranteeing that it will not increase the problems that already exist in Piauí creek. The Company will monitor the quality of the watercourse, obtaining sufficient subsidies to identify the need to adopt measures to minimize environmental problems. Water resources will be a permanent theme in environmental education actions, helping to expand the community's knowledge and to develop a systemic vision regarding the capture, use, conservation and maintenance of water resources.

#### Environmental Licensing and Permitting

In August 2020, the Company filed at SUPPRI (the Priority Projects Superintendence of Minas Gerais) a complementary environmental impact study and environmental mitigation plan (the "**Supplementary EIA/RIMA**") to the Company's current LP/LI Environmental License. The objective was to increase the scope area (*Area Diretamente Afetada*) of its current construction and installation license to include the south pit of the First Mine.

The Supplementary EIA/RIMA contemplates the simultaneous mining of both north and south pits of the First Mine, potentially also supplying the spodumene ore for the first few years of Production Phase 2. Additionally, the Supplementary EIA/RIMA includes a detailed dry stacking tailing plan separating rock waste and tailings piles in order to allow for the potential recycling of 100% of the tailings to ancillary industries, such as ceramics.

Subsequently in May 2021, the Company filed at SUPPRI an update of the Supplementary EIA/RIMA. In November 2021, SUPPRI conducted the environmental site visit for the Supplementary EIA/RIMA. In January 2022, SUPPRI issued the final request for complementary information ("Complementary Information Request") which was fully responded to by the Company ("Complementary Information Reply") within the allotted period in March 2022.

The Complementary Information Reply included the submission to SUPPRI of the following environmental studies:

• Estudo Sismográfico (seismic study)

- Projeto de Drenagem de todo o sistema de lavra (drainage project for mining pit, when and if necessary)
- Medidas Drenagem Cava (measurement of the potential quantity of water to be drained in the mining pit, when and if necessary)
- Balanço Hídrico (water balance)
- Estudo Hidrogeológico (hydrogeology study)
- Programa de Educação Ambiental Cava Norte (program of environmental education North Pit)
- Plano de Tráfego (updated traffic plan)
- Mapa Desvio Estrada Municipal (map and plan for deviation of municipal road)
- Relatório Campanhas de Monitoramento (monitoring campaigns report)
- Relação de Comunidades (itemization and description of each community affected)
- Programa de Monitoramento das Águas Superficiais (surface water monitoring program)
- Programa de Monitoramento das Águas Subterrâneas (underground water monitoring program)
- Informações Não Contempladas no PCA (additional information non-contemplated at PCA)
- Caracterização Hidrológica do Córrego Taquaral (hydrogeology study of Taquaral seasonal stream)
- Prospecção Espeleológica (report of any existing caves in the area)
- Plano de Reaproveitamento do Rejeito (tailings recycling plan)
- Drenagem Pilhas de Disposição de Rejeito/Estéril (drainage plan for tailings piles)
- Implicações Inventário Vegetaçao (vegetation inventory)
- Programa de Resgate de Espécies da Flora Ameaçadas e Endêmicas (program for rescue of eventual endangered species of vegetation)
- Licença de Pesca Científica (license for scientific fishing)
- Pontos de Monitoramento da Herpetofauna (monitoring points of reptile animals of the region)

The south pit of the First Mine is being designed to have the lowest possible environmental impact and greatest socioeconomic return. The simultaneous mining of the north pit and the south pit by the Company to feed the Production Plant will allow the municipality of Araçuaí (where the south pit is located) to receive royalties from mining ("**CFEM**"), previously restricted to the municipality of Itinga, where the north pit is located, spreading financial prosperity to both municipalities, meeting SDG # 16 (Peace, Justice and Strong Institutions).

The LP/LI Environmental License is required for construction and installation (which comprises pre-operation and commissioning of the production plant, including pre-stripping and all mining required for commissioning). An operating license ("LO") is required for the commercial operations, when external sales of the products are conducted. The LO can be granted once the construction and installation of the Project is completed as it follows a final inspection by SUPPRI of both First Mine and Production Plant. Therefore, as the project is in construction the Company does not yet have an LO.

The Company obtained the required environmental licenses for both construction ("LP") and installation and commissioning ("LI") of the Production Plant from the environmental authority of the State of Minas Gerais (the "LP/LI Environmental License"), the Council of Environmental Policy (Conselho Estadual de Politica Ambiental or "COPAM") in Brazil. On 3 June 2019, COPAM issued a dual LP and LI Certificate No. 281, for a period of six years expiring on May 31, 2025. The LP/LI Environmental License permits the Company to build the First Mine and Production Plant and to install the plant, conduct trial mining, testing and commissioning of the DMS beneficiation process of spodumene ore into Battery Grade Green and Sustainable Lithium building a reserve stockpile for future sale.

The Company's mining easement request ("**Servidão Mineral**") was published in the Official Gazette of the Federal Government on July 29, 2020. This is an important step towards obtaining the operational license (*Licença Operacional*, LO) required after commissioning for the Project to enter full scale Production Phase 1. It contemplates the mining and processing activities of the First Mine.

The Company has a definitive water usage license for the construction of the Production Plant, which was granted by ANA (Agência Nacional de Águas), the Federal Government's water agency, in February 2019. The water usage license is valid for 10 years, which is expected to be sufficient for the life-of mine (LOM) requirements for mining and product processing from Production Phase 1, as currently planned by the Company. The water usage license received should also be sufficient to process lithium ore at the planned

rate of production of an expected 440,000 tonnes of Battery Grade Green and Sustainable Lithium as well as additional production phases contemplated, subject to confirmation by feasibility studies.

# Corporate Finance

- As of April 1, 2022, the Company has \$141.9 million (US\$111.9 million) in cash, which compares to the \$154.3 million (US\$122.1 million) as at December 31, 2021.
- On December 23, 2021, the Company announced the closing of a private placement (the "December 2021 Offering") of 11,634,137 Common Shares at a price of \$11.75 per Common Share for aggregate gross proceeds of \$136.7 million (approximately US\$106 million). Given strong investor interest, the December 2021 Offering was twice-upsized, first by approximately 42% and then subsequently by an incremental 60%. As part of the December 2021 Offering, funds and accounts managed by BlackRock purchased 4,372,766 Common Shares for an aggregate subscription price of approximately Cdn\$51.4 million. Additionally, BlackRock purchased 1,093,191 Common Shares at the same offering price on a secondary basis from the largest shareholder of the Company, A10 Investimentos Fundo De Investimento De Acces Investimento No Exterior (the "A10 Fund"), for an aggregate purchase price to the A10 Fund of approximately Cdn\$12.8 million. The net proceeds of the December 2021 Offering are expected to be used as follows:
  - o to fully fund the construction of the Production Plant and First Mine;
  - o to further development of the Second Mine and study the potential Production Phase 3; and
  - o for general corporate purposes.
- On December 1, 2021, the Company filed a short form base shelf prospectus (the "Canadian Base Shelf") to qualify the distribution, from time to time over a 25-month period of up to US\$250 million of the Company's debt and equity securities. The Canadian Base Shelf was filed in each province and territory of Canada, other than the Province of Quebec. The Company also filed a corresponding shelf registration statement on Form F-10 (the "U.S. Base Shelf") with the U.S. Securities and Exchange Commission (the "SEC") under the Multijurisdictional Disclosure System. The U.S. Base Shelf became effective as of December 2, 2021.
- On September 13, 2021, trading of the Common Shares commenced on Nasdaq under the new ticker symbol "SGML".
  - This U.S. listing decision followed the United States Department of State and Brazil Ministry of Mines and Energy launching the U.S. – Brazil bilateral cooperation in Critical Minerals, including lithium, adding to the Company's current potential offtake relationships in Japan, South Korea and specialist chemical tolling partners in China.
- Debt financing has been arranged with Société Generale, and is subject to completion of due diligence, credit approval, the negotiation of definitive documentation, and other customary drawdown conditions

#### New Long Term Performance Awards for the Co-CEOs (the "Co-CEOs Performance Awards")

- Calvyn Gardner and Ana Cabral-Gardner had never been awarded any equity compensation and had not
  participated in the Company's Equity Incentive Plan (the "Plan"). The co-CEOs Performance Awards were
  created based on C-Suite compensation strategies adopted by leading companies listed in the United
  States in the technology and EV industries, aligning the compensation of founders and CEOs to value
  creation for the stakeholders of these companies in the form of share performance
- The co-CEOs Performance Awards also introduced a clear environmental goal of net zero ahead of the United Nations Decade of Action in 2030, in the forefront of the industry
- Calvyn Gardner and Ana Cabral-Gardner will not receive guaranteed performance compensation of any kind neither cash bonuses nor any equity compensation that would vest simply by the passage of time
  - Instead, such compensation will be 100% at-risk performance awards, which ensures that they will be compensated only if the Company and all of its shareholders do extraordinarily well and the Company achieves its ambitious ESG targets for the benefit of all of its stakeholders. As most

of the compensation of the Company's management and the Board is equity based, this also means that the co-CEO compensation is tied to the success of everyone at the Company

- Calvyn Gardner and Ana Cabral-Gardner have successfully steered the Company through the bottom of the cycle of the lithium industry and through the COVID-19 pandemic to date, while several of its peers failed
  - Calvyn Gardner had forsaken all compensation for his services to the Company during seven out of the ten years he served as CEO. Recently, during the onset of COVID-19, he yet again waived his compensation during most of 2020
  - Ana Cabral-Gardner has forsaken any and all compensation for her services to the Company for six out of the seven years
- Details of co-CEOs Performance Award:
  - The performance awards consist of a five-year total grant of restricted stock units ("**RSUs**") in four tranches to vest only if certain market capitalization targets are met and the grant of an aggregate 1,000,000 RSUs to the Co-CEOs of the Company will vest upon Board approval and successful execution of a net-zero plan. If none of the four milestones described below is achieved, the co-CEOs will not receive any performance compensation of any kind
  - Market Cap Milestones:
    - For the first milestone, the Company's market cap must increase to C\$1.3 billion. In that event 500,000 RSUs will vest for each of the co-CEOs
    - For the second milestone, the Company's market cap must increase an additional C\$250 million to C\$1.55 billion. In that event, a further 500,000 RSUs will vest for each of the co-CEOs
    - For the third milestone, the Company's market cap must increase an additional C\$250 million to C\$1.8 billion. In that event, a further 500,000 RSUs will vest for each of the co-CEOs
    - For the fourth and last milestone, the Company's market cap must increase to C\$2.0 billion. In that event, a further 1,000,000 RSUs will vest for each of the co-CEOs
  - o If all four milestones are achieved, a total of 2,500,000 RSUs will vest for each of the co-CEOs
  - Net Zero Environmental Milestone (Non-Market Condition Milestone):
    - If the Company's Board of Directors approve the co-CEOs plan to reach Net Zero and they successfully execute it, a total of 500,000 RSUs will vest for each of the co-CEOs.

# Regulatory Framework Updates in Brazil

- On February 11, 2022, decree nº 10.965/2021 was issued by the federal government of Brazil to modify the decree that regulates the Mineral Code ("Código de Mineração"), as well the Code itself. The most important alteration involves new principles added in Article 5, expanding environmental, labor and health responsibilities. Not only that, to enforce the responsibilities indicated above, Article 53° explicitly states that fines now will surpass values from R\$2.000,00 (two thousand reais) up to R\$ 1.000.000.000,00 (one billion reais).
- On February 7, 2022, resolution n° 94 was issued by Agência Nacional de Mineração ("ANM") to establish
  a new regulatory mark regarding the classification of mineral reserves, tied to international concepts. In
  this regard, Article 5° disciplines the Public Declaration of Results of Mineral Exploration, as well Mineral
  Reserves, establishing that despite not being mandatory, these Declarations serve as a tool for
  transparency and cannot be utilized with any fraudulent intent or so, otherwise, Article 13° classifies these
  intents to be taken in account in criminal, civil and administrative responsibility.
- On December 2, 2021, resolution n° 85 was issued by Agência Nacional de Mineração to establish a new
  regulatory mark regarding the use of mineral waste and tailings, allowing the use by companies. The norm
  states that mineral waste and tailings do not require authorization by the ANM to be utilized. Nonetheless,
  there are certain rules required in order to do so, such as envisage structures for storage, as well the
  association with an Economic Utilization Plan ("PAE").

- On October 25, 2021, decree nº 10.846/2021 was issued by the federal government of Brazil to establish the National Green Growth Program ("Programa Nacional de Crescimento Verde"). The program will be supported by the Committee on Climate Change and Green Growth to provide the technical and administrative assistance necessary for the implementation of the National Green Growth Program. The Company believes it is eligible to benefit from the National Green Growth Program
- The National Green Growth Program's main objectives are to:
  - Combine economic growth and development with sustainable initiatives
    - o Create green jobs
    - Reduce greenhouse gas emissions, to facilitate the transition to a low-carbon economy
- On March 21, 2021, decree nº 10.657/2021 was issued by the federal government of Brazil to streamline the overall permitting process for mining investments and projects in critical strategic minerals, including lithium ("Pro-Minerais Estrategicos"). The Company believes it is eligible to apply for this program.
- On December 14, 2020, decree nº 10.577/2020 was issued by the federal government of Brazil, renewing until December 2030 decree nº2.413/1997, in place since 1997 (and expired on December 31, 2020) requiring lithium exporters to obtain annual authorization from the nuclear commission (CNEN - Comissão Nacional de Energia Nuclear)
  - The Company does not foresee any difficulties in obtaining annual export authorizations as a result of the magnitude of its high grade measured mineral reserves filed at the Agencia Nacional de Mineracao. Nevertheless, it met with the appropriate bodies of government at Ministry of Mines and Energy and CNEN requesting the potential elimination of the requirement to obtain these annual authorizations, streamlining the export process
  - On April 12, 2021 The Company received a formal "informative note" (Nota Informativa N.7/2021/DTTM/SGM) from the Ministry of Mines and Energy stating that it has prepared a report to CNEN suggesting possibilities for regimenting decree nº 10.577/2020 with a resolution ("Resolucao CNEN") exempting exports
- On November 10, 2020, the Department of State of the United States and the Ministry of Mines and Energy
  of Brazil announced the establishment of a U.S.-Brazil Critical Minerals Working Group to advance bilateral
  cooperation on critical minerals essential to both countries' mutual security, sustainable development and
  future prosperity, including lithium. The working group intends to support the advancement of bilateral
  diplomatic engagement and technical cooperation on critical minerals, including: improving critical
  minerals security in the United States and Brazil, promoting economically viable mining and production
  streams, stimulating investments, promoting technological innovation and increasing U.S.-Brazil
  interconnectivity throughout supply chains for critical minerals
  - This announcement catalyzes the possibility for the Company to become a global participant in the EV supply chain, as it opens the United States market to the Company, adding to its customer base in Japan, South Korea in alliance with Mitsui's specialist chemical tolling partners in China

#### Surface Rights and Other Permitting

Certain surface rights in the Production Phase 1 area, the current primary focus of the Company's activity, are held by two companies, Arqueana Empreendimentos e Participações S.A. ("**Arqueana**") and Miazga Participações S.A. ("**Miazga**"), in which the Co-CEOs of the Company have an indirect economic interest. The Company has entered into right-of-way agreements with these companies to support its exploration and development activities within the Grota do Cirilo property, as well as with third-party surface owners in the Project area.

The Company has a mining easement (Servidão Mineral) with a total of 413.3 hectares and aims to cover the areas of waste and tailings piles, Production Plant, all access roads (internal), electrical substation, installation of fueling station and support structures. The Servidão Mineral was published in the Official Gazette of the Federal Government. It contemplates the mining and processing activities of the First Mine (ANM Process No. 824.692/1971).

The Company also obtained a key approval for Production Phase 2 plan with the Agência Nacional de Mineração approving its economic feasibility study ("Plano Econômico de Avaliação" - PAE). This approval advanced the Production Phase 2 permitting process to the mining concession request stage ("Requerimento de Concessão de Lavra").

The Company holds approved economic mining plans (Plano de Aproveitamento Econômico or PAE) over the Xuxa, Barreiro, Lavra do Meio, Murial, and Maxixe deposits within the Grota do Cirilo property. The Brazilian government levies a royalty on mineral production: Compensação Financeira pela Exploração de Recursos Minerais (CFEM). Lithium production is subject to a 2.0% CFEM royalty, payable on the gross income from sales. The Project is also subject to two third-party royalties, one on the net income from sales and the other on a net smelter return (NSR), of 1% each.

# **Lithium Industry Trends**

# Supply-Demand Outlook

Lithium's demand growth profile increased dramatically in 2021, driven by the structural changes in the automotive industry with manufactures increasingly transitioning towards EVs. Recent examples of this shift include Tesla, Inc.'s continued execution (delivering 936,172 vehicles in 2021 vs. 499,500 in 2020) and Ford Motor Company announcing its intention to split into electric and gas divisions in March 2022 and spend \$50 billion on EVs between 2022 and 2026 (up from \$30 billion). Subsequently, lithium's end-use demand is now primarily comprised of rechargeable lithium-ion batteries used in EVs where demand is influenced by a combination of factors including macroeconomics, EV policy targets, emissions mandates and alignment with international treaties on climate change (vs. 'traditional' end-uses such as ceramics and greases which are tied to GDP growth).

Lithium's demand outlook is expected to remain robust with Bank of America Research forecasting lithium demand growth of 27% in 2022 and 30% in 2023 with total LCE demand reaching 1.25 Mt by 2025. This strong growth is expected to be driven by Bank of America Research's forecast of a 28% compound annual growth rate from of EV-related lithium demand from 2021-2025, with EV sales reaching 20 million vehicles by 2025.



# Lithium Demand Forecast

Source: Bank of America Research, February 2022

The supply-demand conditions for lithium remains tight with limited supply forecasted to meet strong demand growth. Bank of America Research forecasts that the lithium market will be in a deficit by 2024 and by 2030, the cumulative demand will amount to >60% of the currently known reserves of lithium. The forecasted undersupply of lithium reflects a lack of historic investment resulting from a weaker lithium price environment in 2018 to 2020 driven by delays in EV adoption combined with a number of large lithium projects coming onstream.

# Lithium Supply-Demand Forecast



Source: Bank of America Research, February 2022





Source: Bank of America Research, February 2022

# **Price Outlook**

Tight market supply combined with rapidly improving demand for lithium chemicals is expected to put continued strong upward pressure on prices. Benchmark Mineral Intelligence's ("**Benchmark**") base case forecast expects prices to continue to rise through 2023 as demand outstrips supply with real lithium hydroxide and spodumene 6% prices hitting US\$26,200/t and US\$1,750/t in 2023, respectively. Benchmark then expects prices to stabilize at higher levels in 2024 and begin to decline to more stable levels in a balanced supply-demand market in 2025. However, this balanced market forecast would require substantial new supply, including new projects coming onstream (which are subject to delays and in some cases do not yet have production targets).

# Lithium Chemical Price Forecast



Source: Benchmark Mineral Intelligence Lithium Forecast, Q4-2021 Note: Shading indicates the area between bullish and conservative cases

# **Selected Annual Financial Information**

The following table provides a brief summary of selected financial data derived from the audited financial statements of the Company as at and for the years ended December 31, 2021, December 31, 2020 and December 31, 2019.

		Year Ended December 31, 2021		Year Ended December 31, 2020		Year Ended December 31, 2019
Net loss	\$	33,892,398	\$	1,548,191	\$	5,074,967
Net loss per share ( basic and diluted)	\$	0.39	\$	0.02	\$	0.07
		Year Ended December 31, 2021		Year Ended December 31, 2020		Year Ended December 31, 2019
Total assets	\$	Year Ended December 31, 2021 193,779,314	\$	Year Ended December 31, 2020 33,197,998	\$	Year Ended December 31, 2019 20,927,198
Total assets Total liabilities	\$ \$	Year Ended December 31, 2021 193,779,314 8,716,272	\$ \$	Year Ended December 31, 2020 33,197,998 11,440,650	\$ \$	Year Ended December 31, 2019 20,927,198 12,187,923

Year End December 31, 2021 as compared to Year End December 31, 2020

- The net loss increase in 2021 compared to 2020 of \$32,344,207 resulted from changes in: non-cash effect in stock-based compensation of \$26,043,544; general & administrative expenses of \$4,378,774 driven by \$915,983 in salaries and benefits, legal fees of \$534,660, business development and investor relations expenses of \$851,418, and auditing fees of \$844,425.
- The variation in total assets that occurred in 2021 is mainly the result of the Company receiving proceeds of the December 2021 Offering, resulting in an increase of \$160,581,316 as compared to 2020. Total assets also include: (i) exploration and evaluation assets of \$7,883,512 (December 31, 2020 - \$18,354,148), this reduction was impacted by the transfer of \$22,071,906 to property and equipment in 2021 that were expenditures related to the Grota do Cirilo project; and (ii) property and equipment of \$30,689,166 (December 31, 2020 - \$686,308).
- Working Capital variation of \$143,665,299, occurred mostly due to the Company receiving proceeds of the December 2021 Offering, for an aggregate amount of \$136,701,110 as compared to 2020.

The Company does not generate cash from mining operations. To fund its exploration work and administrative activities, the Company is dependent upon financing through the issuance of shares or debt sources.

On December 23, 2021, the Company completed a non-brokered private placement of 11,634,137 Common Shares at a price of \$11.75 per Common Share for aggregate gross proceeds of \$136.7 million. In connection with the offering, A10 Serviços Especializados de Avaliação de Empresas Ltda. (**\*A10 Advisory**"), a related party who was part of the Company's financial advisors engaged in such non-brokered private placement, received \$5,972,478 of such placement agent fees.

On February 12, 2021, the Company completed a non-brokered private placement of 9,545,455 Common Shares at a price of \$4.40 per share for aggregate gross proceeds of \$42 million. In connection with the offering, the Company paid aggregate placement agent fees of \$2,619,845 and issued 562,860 Common Share purchase warrants having an exercise price of \$4.40 per share and exercisable until February 12, 2022. In connection with this offering A10 Advisory, a related party, who was part of the Company's financial advisors

engaged in such non-brokered private placement, received \$2,344,584 of such placement agent fees and 532,860 of such warrants.

# Selected Quarterly Information

Selected quarterly financial information is presented as follows:

		20	21			202	0	
	Q4 <sup>(8)</sup>	Q3 <sup>(7)</sup>	Q2 <sup>(6)</sup>	Q1 <sup>(5)</sup>	Q4 <sup>(4)</sup>	Q3 <sup>(3)</sup>	Q2 <sup>(2)</sup>	Q1 <sup>(1)</sup>
	\$	\$	\$	\$	\$	\$	\$	\$
Total Sales	-	-	-	-	-	-	-	-
Net loss	15,588,096	10,910,032	1,019,116	6,375,154	813,731	329,727	141,595	263,138
Net loss per share <sup>(9)</sup>	0.18	0.12	0.01	0.08	0.01	0.00	0.00	0.00

<sup>(1)</sup> The net loss for the three months ended March 31, 2020 of \$263,138 resulted from (i) general and administrative expenses of \$425,041 (including stock-based compensation of \$124,270); (ii) accretion and interest on note payable of \$28,241; (iii) interest on amounts drawn on a credit facility and accounts payable to suppliers of \$93,075; (iv) a foreign exchange gain of \$300,384; and (v) depreciation of \$17,165.

<sup>(2)</sup> The net loss for the three months ended June 30, 2020 of \$141,595 resulted from (i) general and administrative expenses of \$445,626 (including stock-based compensation of \$87,079); (ii) accretion and interest on note payable of \$79,919; (iii) interest on amounts drawn on a credit facility and accounts payable to suppliers of \$22,335; (iv) fair value adjustment loss on note payable of \$124,109; (v) a foreign exchange gain of \$544,846; and (vi) depreciation of \$14,452.

<sup>(3)</sup> The net loss for the three months ended September 30, 2020 of \$329,727 resulted from (i) general and administrative expenses of \$330,834 (including stock-based compensation of \$67,646); (ii) accretion and interest on note payable of \$51,547; (iii) interest on amounts drawn on a credit facility and accounts payable to suppliers of \$87,787; (iv) fair value adjustment gain on note payable of \$39,029; (v) a foreign exchange gain of \$115,307; and (vi) depreciation of \$13,895.

<sup>(4)</sup> The net loss for the three months ended December 31, 2020 of \$813,731 resulted from (i) general and administrative expenses of \$ 20,404 (including stock-based compensation of \$344,971); (ii) accretion and interest on note payable of \$106,601; (iii) interest on amounts drawn on a credit facility (\$58,635); (iv) fair value adjustment loss on note payable of \$114,132; (v) a foreign exchange loss of \$500,887; and (vi) depreciation of \$13,635.

<sup>(5)</sup> The net loss for the three months ended March 31, 2021 of \$6,375,154 resulted from (i) general and administrative expenses of \$6,092,243 (including stock-based compensation of \$5,451,016); (ii) accretion and interest on note payable of \$37,822; (iii) interest on amounts drawn on a credit facility and accounts payable to suppliers of \$67,929; (iv) a foreign exchange loss of \$163,814; and (v) depreciation of \$13,346.

<sup>(6)</sup> The net loss for the three months ended June 30, 2021 of \$1,019,116 resulted from (i) general and administrative expenses of \$855,184 (including stock-based compensation of \$60,136); (ii) accretion and interest on note payable of \$5,460; (iii) interest on amounts drawn on a credit facility of \$57,732; (iv) a foreign

exchange loss of \$87,011; and (v) depreciation of \$13,729.

<sup>(7)</sup> The net loss for the three months ended September 30, 2021 of \$10,910,032 resulted from (i) general and administrative expenses of \$11,150,053 (including stock-based compensation of \$10,085,055); (ii) accretion and interest on note payable of \$5,823; (iii) interest on amounts drawn on a credit facility of \$19,479; (iv) a foreign exchange gain of \$279,968; and (v) depreciation of \$14,645.

The net loss for the three months ended December 31, 2021 of \$15,588,096 resulted from (i) general and administrative expenses of \$3,099,405; (ii) accretion and interest on note payable of \$5,550; (iii) a foreign exchange gain of \$1,616,653; (iv) depreciation of \$15,893; and (v) stock-based compensation of \$10,792,308.

<sup>(9)</sup> Per share amounts are rounded to the nearest cent. Aggregrating quarterly amounts may not reconcile to year-to-date per share ammounts.

# Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

The following table summarizes the items that resulted in the loss increase for the year ended December 31, 2021 compared to the year ended December 31, 2020:

	Year ended December 31				
	2021	2020	Change		
	\$	\$	\$		
General and administrative expenses	5,600,679	1,221,905	4,378,774		
Stock-based compensation	26,388,515	344,971	26,043,544		
Fair value adjustment on note payable	-	(29,052)	29,052		
Accretion and interest on note payable	54,655	266,308	(211,653)		
Interest on amounts drawn on a credit facility	145,140	144,562	578		
Foreign exchange loss	1,645,796	(459,650)	2,105,446		
Depreciation	57,613	59,147	(1,534)		
Net loss	33,892,398	1,548,191	32,344,207		

The Company's net loss totaled \$ 33,892,398 for the year ended December 31, 2021, with basic and diluted loss per share of \$0.39. This compares with a net loss of \$1,548,191, with basic and diluted loss per share of \$0.02, for the year ended December 31, 2020. The increase in net loss of \$32,344,207 principally resulted from:

 Non-cash effect of stock-based compensation of which an aggregate of 5,000,000 RSUs awarded to the Co-CEOs will vest in four tranches subject to the achievement of the specified market capitalization targets described below. An additional aggregate 1,000,000 RSUs will vest (500,000 RSUs per Co-CEO) upon approval by the Board of Directors of the plan to achieve a net zero carbon target and its subsequent successful execution.

Tranche	No.RSUs	Marketing Condition Vesting Milestone
	4 000 000	
I	1,000,000	Increase of market cap to C\$ 1.3 billion
II	1,000,000	Increase of market cap to C\$ 1.55 billion
III	1,000,000	Increase of market cap to C\$ 1.8 billion
IV	2,000,000	Increase of market cap to C\$ 2 billion
	5,000,000	

• An increase of \$4,378,774 in general and administrative expenses due to the increase of activities in the Company during 2021, resulting additions to the administrative staff including engineering

procurement, planning, scheduling, budgeting, legal, financial and human resources personnel in support of pre-construction and construction activities.

Increases of \$26,043.544 in Stock-based compensation non-cash effect; General & Administrative Expenses of \$4,378,774 driven by salaries and benefits (100% salaries payments instead of 50% paid in 2020 due to COVID19 impact); Legal in \$534,660; Business development and investor relations expenses in \$851,418; and auditing fees in \$844,425.

# Three Months Ended December 31, 2021 Compared to Three Months Ended December 31, 2020

The following table summarizes the items that resulted in the loss increase for the three months ended December 31, 2021 (Q4 2021) compared to the three months ended December 31, 2020 (Q4 2020):

	Three months ended December 31				
	2021	2020	Change		
	\$	\$	\$		
General and administrative expenses	3,099,405	20,404	3,079,001		
Stock-based compensation	10,792,308	344,971	10,447,337		
Fair value adjustment on note payable	-	(114,132)	114,132		
Accretion and interest on note payable	5,550	106,601	(101,051)		
Interest on amounts drawn on a credit facility	-	(58,635)	58,635		
Foreign exchange loss	1,674,939	500,887	1,174,052		
Depreciation	15,893	13,635	2,258		
Net loss	15,588,096	813,731	14,774,365		

The increase in net loss for the three months ended December 31, 2021 of \$ 14,774,365 resulted mainly from (i) non-cash effect of stock-based compensation of \$10,447,337 and (ii) general and administrative expenses of \$3,079,001

- An increase of \$10,447,337 in stock-based compensation expenses reflects the non-cash impact of accruals of the RSUs awarded to the co-CEOs for the period.
- An increase in \$3,079,001 in general and administrative expenses due to the escalation of activities in the Company during the period, resulting additions to the administrative staff including engineering procurement, planning, scheduling, budgeting, legal, financial and human resources personnel in support of pre-construction and construction activities
- Per share loss amounts were \$0.17. Aggregating quarterly amounts may not reconcile to year-to-date per share amounts.

Cash flow highlights	Year ended D		
	2021	2020	Change
	\$	\$	\$
Cash (used in) operating activities	(4,261,435)	(2,418,768)	(1,842,667)
Cash (used in) investing activities	(18,600,759)	(1,352,660)	(17,248,099)
Cash provided by financing activities	165,153,553	17,617,034	147,536,519
Effect of foreign exchange on cash	(1,529,339)	(406,222)	(1,123,117)
Change in cash	140,762,020	13,439,384	127,322,636
Cash - beginning of the period	13,543,024	103,640	13,439,384
Cash - end of the period	154,305,044	13,543,024	140,762,020

As at December 31, 2021, the Company had cash and of \$154,305,044 and working capital of \$150,784,006, compared to cash and of \$13,543,024 and working capital of \$7,118,707 as at December 31, 2020.

On December 23, 2021, the Company completed a non-brokered private placement of 11,634,137 Common Shares at a price of \$11.75 per share for aggregate gross proceeds of \$136.7 million. In connection with the offering, the Company paid placement agent fees of \$5,972,478 to A10 Advisory, a related party who was the Company's financial advisors engaged in such non-brokered private placement.

On February 12, 2021, the Company completed a non-brokered private placement of 9,545,455 Common Shares at a price of \$4.40 per share for aggregate gross proceeds of \$42 million. In connection with such offering, the Company paid aggregate placement agent fees of \$2.6 million and issued 562,860 Common Share purchase warrants (having an exercise price of \$4.40 per share and exercisable until February 12, 2022) to a consortium of financial advisors. In connection with this offering, A10 Advisory, a related party who was part of such consortium, received \$2,344,584 of such placement agent fees and 532,860 of such warrants.

#### Liquidity and Capital Resources

The Company continuously monitors its cash outflows and seeks opportunities to minimize all costs, to the extent possible, especially general and administrative expenses.

The Company's use of cash is currently, and is expected to continue to be, focused on funding its general corporate expenditures and the development of the Project.

As of March 30, 2022, the Company has \$141.9 million (US\$111.9 million) in cash, which compares to the \$154.3 million (US\$120.6 million) in December 31, 2021. The cash and cash equivalent reduction of \$12.4 million (US\$9.7 million) is mainly related to construction activities of \$5.5 million (US\$4.3 million), drilling activities of \$2.4 million, (US\$1.9 million), project development of \$2.2 million (US\$1.7 million), engineering activities of \$2.2 million (US\$1.7 million), salaries of \$1.3 million (US\$1 million), environmental activities of \$346,553 (US\$273,369), G&A expenses of \$124,259 (US\$98,019), other expenses of \$298,312 (US\$235,316), Legal expenses of \$169,359 (US\$133,594), ESG/ Social activities of \$35,631 (US\$28,106) and \$997,354 of foreign exchange gain.

The Company's total current liabilities of \$4,330,437 as at December 31, 2021 consist mostly of accounts payable of \$3,554,347.

The Company's shareholders' equity as at December 31, 2021, was \$185,063,042, as a result of share capital of \$224,819,592, contributed surplus of \$30,881,425, accumulated other comprehensive loss of \$3,519,185 and a deficit of \$67,118,790.

As a result of the completion of the December 2021 Offering the development of Production Phase 1 of the Project is fully funded to construction completion. However, further financing would be required to continue to develop the Company's other deposits at the Project and its additional properties. See "Risk Factors".

# August 2020 Private Placement

The following chart includes a reconciliation of the manner in which the proceeds from the August 2020 non-brokered private placement were used by the Company through December 31, 2021, as disclosed in the Issuer's press release dated August 13<sup>th</sup>, 2020.

Disclosure in August 2020	Use of Proceeds (as of December 31, 202	1)
The Issuer intends to use the	Category	Amounts (\$ Thousands)
net proceeds of the Offering	Detailed engineering and pre-construction	10,737
for the engineering,	Funding of construction savings account <sup>(1)</sup>	1,507
procurement and construction	Environmental and Social Sustainability	2,346
(the "EPC") of the Project and	General Corporate administrative expenses	665
for general corporate	Financing service costs and advisory	107
purposes".	Public company costs	70
	Sales and Commercial expenses	188
	Audit accounting and Insurance	905
	Transaction cost (Brokers and Legal)	1,289
Total \$17,813,000	Total	<u>17,813</u>
	Remaining proceeds to date	<u>0</u>

# February 2021 Private Placement

The following chart includes a reconciliation of the manner in which the proceeds from the February 2021 non-brokered private placement were used by the Company through December 31, 2021, as disclosed in the Issuer's press release dated February 12<sup>th</sup>, 2021. A relevant portion of the proceeds of the private placement was allocated to fund Phase 1 pre-construction activities in a such segregated into a construction savings account with approximately USD 15 million as demonstrated below.

Disclosure in February 2021	Use of Proceeds (as of December 31, 202	21)
The Issuer intends to use the net proceeds of the Offering as	Category	Amounts (\$ Thousands)
outlined below:	Feasibility and development of project expansion	3,884
Preparation of a definitive	Funding of construction savings account (1)	17,678
feasibility study and	General Corporate administrative expenses	2,147
the development of the	Financing service costs and advisory	5,185
project	Public company costs	1,046
<ul> <li>Further exploration</li> </ul>	Sales and Commercial expenses	300
drilling for Phase 3 of the	Audit accounting and Insurance	396
<ul><li>Project and</li><li>General corporate</li></ul>	Construction	2,475
purposes.	Transaction cost (Brokers and Legal)	2,620
Total 42,000,000	Total use of proceeds	<u>35,732</u>
	Remaining proceeds to date	<u>6,268</u>

Note (1): As per the Issuer's ongoing disclosures this amount represents the equity contribution of up to US\$15 million (\$19.185 million) required to satisfy the bank project finance facility's total funding of up to US\$60 million (\$76,740 million). As per note 2 "Basis of preparation" in the Issuer's Financial Statements.

# December 2021 Private Placement

The following chart includes a reconciliation of the manner in which the proceeds from the December 2021 non-brokered private placement were used by the Company through December 31, 2021, as disclosed in the Issuer's press release dated December 23<sup>rd</sup>, 2021.

Disclosure in December 2021	Use of Proceeds (as of December 31, 20	021)
The Issuer intends to use the net proceeds of the	Category	Amounts (\$ Thousands)
To fully-fund the	Transaction cost (Brokers and Legal).	6,395
<ul> <li>construction of its phase 1 production plant and mine,</li> <li>To further development of phases 2 and 3 of its wholly owned Grota do Cirilo Project, and</li> </ul>		
For general corporate purposes.		
Total 136,700	Total use of proceeds	<u>6,395</u>
	Remaining proceeds to date	<u>130,305</u>

# **Disclosure, Controls & Procedures**

The Co-Chief Executive Officer and the Chief Financial Officer of the Company are responsible for establishing and maintaining disclosure controls and procedures ("DC&P") for the Company as defined under Multilateral Instrument 52-109 issued by the Canadian Securities Administrators. The Co-CEO and the CFO have designed such DC&P, or caused them to be designed under their supervision, to provide reasonable assurance that information required to be disclosed by the Company in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in the securities legislation and include controls and procedures designed to ensure that information required to be disclosed by an issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is accumulated and communicated to the Company's management, including its certifying officers, as appropriate to allow timely decisions regarding required disclosure. As at December 31, 2021, the Co-CEO and CFO evaluated the design and operation of the Company's DC&P. Based on that evaluation, the Co-CEO and CFO concluded that the Company's DC&P were not effective as at December 31, 2021 due to the material weaknesses in internal controls over financing reporting described below.

# Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of its consolidated financial statements in accordance with IFRS. Management has evaluated the design and operation of the Company's internal controls over financial reporting as of December 31, 2021, and has concluded that such controls over financial reporting were not effective as of December 31, 2021 due to material weaknesses in internal controls over financing reporting described below.

A material weakness is a deficiency, or a combination of deficiencies, 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 on a timely basis. Management has identified, as a material weakness, that

an insufficient number of trained financial reporting and accounting personnel with the appropriate skills and knowledge and with assigned responsibility and accountability related to the design, implementation and operating effectiveness of financial reporting.

The insufficient number of personnel described above contributed to an ineffective risk assessment process necessary to identify all relevant risks of material misstatement and to evaluate the implications of relevant risks on financial reporting. Notwithstanding this material weakness, management has concluded that the consolidated financial statements for the year ended December 31, 2021 present fairly, in all material respects, the financial position of the Company and our external auditors have issued an unqualified opinion on our consolidated financial statements as of and for the year ended December 31, 2021.

The Company is working to remediate the material weakness and is taking steps to strengthen internal control over financial reporting through the continued hiring of additional appropriately skilled finance and accounting personnel with the requisite technical knowledge and skills. With the additional skilled personnel, the Company is taking appropriate and reasonable steps to remediate this material weakness through the implementation of appropriate segregation of duties, formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. The Company will not be able to fully remediate these control deficiencies until these steps have been completed and have been operating effectively for a sufficient period of time. Specifically, the Company has taken the following remediation actions:

- Since September 2021, in preparation to be listed on Nasdaq, the company commissioned an
  upgrade of its financial reporting systems for the closed ERP SAP Business One system to be run
  by the Canadian Parent and by its 2 Brazilian subsidiaries.
  - The Company selected B2Finance, an independent accounting and enterprises resource planning system consultant that specializes in implementing SAP accounting systems.
  - This services will build a roadmap for the digital transformation of the Company's financial department, including the full range of technical accounting support, business process transformation, risk management, implementation of internal control processes and systems
  - The Company is also planning to commission a North American based accounting firm to supplement the services provided by B2Finance, with the following objectives:
    - Support certification of internal control for the purposes of section 404 and continued internal controls and risk management
    - Process improvement during the preparation of financial statements and financial disclosures

Other than the above, there were no changes in the Company's internal control over financial reporting during the period beginning on January 1, 2021 and ending on December 31, 2021, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Management will continue to review and make necessary changes to the overall design of the Company's internal control environment, as well as policies and procedures to improve the overall effectiveness of internal control over financial reporting. The material weakness will not be considered remediated, however, until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

# **Related Party Transactions**

The company's related parties include:

Related Party	Nature of relationship
A10 Group	A10 Group is composed of A10 Advisory and the A10 Fund. Both companies are owned by one Co-CEO and one director of the Company.
Miazga	Miazga Participações S.A is a land administration company, in which two Co-CEOs of the Company have joint control.
Arqueana	Arqueana Empreendimentos e Participações S.A. is a land administration company, in which two Co-CEOs of the Company have joint control.
Key management personnel	Includes the directors of the Company, executive management team and senior management at Sigma Lithium.

# a) Transactions with related parties

The related party transactions are recorded at the exchange amount transacted as agreed between the Company and the related party. All the related party transactions have been reviewed and approved by the independent directors of the Company.

**Cost sharing agreement ("CSA"):** The Company has a CSA with A10 Group where A10 Group is reimbursed for secondment staff 100% allocated to the Company, including legal, financial and business development personnel and 50% of shared secretarial administrative personnel.

**Revolving credit facility:** The Company had a revolving credit facility agreement with A10 Group which allows the Company to raise short-term financing debt increasing its liquidity . This revolving credit facility was fully repaid on August 29, 2021

**Leasing Agreements:** The Company has land lease agreements with Miazga and Arqueana (note 12). Part of these leases gets offset by the prepaid land lease

Share purchase agreement ("SPA"): The Company owes a note payable related to the SPA with Arqueana.

**Commission fees**: The Company has an agreement with A10 Advisory for acting as the financial advisor to locate equity investors in non-brokered private placements, conducted as part of a consortium of financial advisors. The Company paid finders' fee of up to 7% of the gross proceeds received from these investors and issued 532,860 warrants for a total of \$2,344,584.

#### b) Outstanding balances and expenses with related parties

Year ended December 31,		2021			2020	
	Pre- payments	Accounts Payable/ Debt	Expenses/ Payments	Pre- payments	Accounts Payable/ Debt	Expenses/ Payments
	\$	\$	\$	\$	\$	\$
A10 Group						
Cost Sharing Agreement	-	-	188,891		-	126,189
Revolving credit facility	-	-	2,755,906	-	2,683,880	228,997
Commission fees	-	-	8,317,062	-	-	948,573

Warrants			826,584			-
Miazga						
Lease agreements	-	81,956	49,653	-	82,514	53,757
Prepaid land lease offset	103,697	-	11,532	123,153	3 -	10,873
Arqueana						
Lease agreements	-	168,296	1,390	-	169,686	26,404
Note Payable	-	270,125	1,933,920	-	2,204,045	653,736
Management and Directors						
Travel cost reimbursement	-	-	-	-	72,127	-

#### c) Key management personnel:

Year ended December 31,	2021	2020
Stock-based compensation, included in general and administrative expenses	<b>\$</b> 20,871,739	<b>\$</b> 248,205
Salaries, benefits and director's fees, included in general and administrative expenses	1,115,778	303,679
Salaries, benefits and stock-based compensation capitalized in exploration and evaluation assets	5,513	765,255
Total compensation	21,993,030	1,317,139

#### **Risk Factors**

The Company is subject to numerous risk factors at any given time (many of which are beyond its control) which could materially adversely impact upon its business, financial condition, results of operations, cash flows, ability to obtain financing and prospects and, as a result, the trading price of the Common Shares. The following are risk factors that the Company's management believes are most important. The below described risks is not an exhaustive description of all risks.

#### **Risks Related to Resource Development**

#### Development of the Project

The Company's business strategy depends in large part on developing the Project into a commercially viable mining operation. Whether a mineral deposit will be commercially viable depends on numerous factors, including: (i) the particular attributes of the deposit, such as size, grade and proximity to infrastructure; (ii) commodity prices, which are highly volatile; and (iii) government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals, environmental protection and capital and operating cost requirements. The development of the Project is subject to the Company securing the necessary funding and other resources and is also subject to numerous development and operational risks. Accordingly, there can be no assurance that the Company will ever develop the Project into a commercial mining operation.

#### Market Prices

Lithium is not a traded commodity like base and precious metals. Sales agreements are negotiated on an individual and private basis with end-users or intermediaries. In addition, there are a limited number of producers of lithium compounds, and it is possible that these existing producers will try to prevent newcomers from entering the chain of supply by increasing their production capacity and lowering sales prices. Other

factors, such as supply and demand of lithium-based end-products (such as lithium hydroxide), pricing characteristics of alternative sources of energy, industrial disruption and actual lithium market sale prices, could have an adverse impact on the market price of lithium and as such render the Project uneconomic. There can be no assurance that such prices will remain at current levels or that such prices will improve.

# Growth of Market for Lithium-Ion Batteries

The success of the Company and our ability to develop lithium operations is largely dependent on the adoption of lithium-ion batteries for EV and other large format batteries. The market for EV and other large format batteries currently has limited market share and no assurance can be given that it will develop further (or at what rate this market will develop, if at all). To the extent that such markets do not develop in the manner or according to the timeline contemplated by the Company, the long- term growth in the market for lithium products will be adversely affected, which would inhibit the potential for development of the Project and its potential commercial viability.

# Risks Relating to Changes in Technology

Lithium and its derivatives are preferred raw materials for certain industrial applications, such as rechargeable batteries and liquid crystal displays (LCDs). Many materials and technologies are being researched and developed with the goal of making batteries lighter, more efficient, faster charging and less expensive. Some of these technologies could be successful and could adversely affect demand for lithium batteries in personal electronics, electric and hybrid vehicles and other applications. The Company cannot predict which new technologies may ultimately prove to be commercially viable and on what time horizon. In addition, alternatives to such products may become more economically attractive as global commodity prices shift. Any of these events could adversely affect demand for and market prices of lithium, thereby resulting in a material adverse effect on the economic feasibility of extracting any mineralization the Company discovers and reducing or eliminating any reserves it identifies.

#### Competition in the Lithium Markets

In recent years, new and existing competitors have increased the supply of lithium hydroxide and lithium carbonate, which has affected its price. Further production increases could negatively affect prices. There is limited information on the status of new lithium hydroxide production capacity expansion projects being developed by current and potential competitors and, as such, the Company cannot make accurate projections regarding the capacities of possible new entrants into the market and the dates on which they could become operational. If these potential projects are completed in the short term, they could adversely affect market lithium prices, thereby resulting in a material adverse effect on the economic feasibility of extracting any mineralization the Company discovers and reducing or eliminating any reserves it identifies.

#### Achieving and Managing Growth

The Project is at development stage and will require a substantial increase in skilled personnel and operational support as the Project transitions to a more advanced development and then operating stage. The Company's ability to succeed in progressing through development to commercial operations will depend on a number of factors, including management's ability to manage this transition, the availability of working capital, and the ability to recruit and train additional qualified personnel (and, where appropriate, to engage third party contractors with qualified personnel).

# Risks Relating to Operating in Brazil

Investments in emerging markets like Brazil generally pose a greater degree of risk than investments in more mature market economies because the economies in the developing world are more susceptible to destabilization resulting from domestic and international developments and exposes the Company to heightened risks related to prevailing and changing political and socioeconomic conditions. Changes in mining, investment or other applicable policies or shifts in political attitude in Brazil may adversely affect the Company's operations or profitability and may affect the Company's ability to fund its ongoing expenditures. Regardless of the economic viability of the Company's properties, such political changes, which are beyond the Company's

control, could have a substantive impact and prevent or restrict (or adversely impact the financial results of) mining of some or all of any deposits on the Project.

The Brazilian economy has been characterized by frequent, and occasionally material, intervention by the Brazilian federal government, which has often modified monetary, credit and other policies intending to influence Brazil's economy. The Brazilian government's actions to control inflation and effect other policy changes have involved wage and price controls, changes in existing, or the implementation of new, taxes and fluctuations of base interest rates. Actions taken by the Brazilian federal government concerning the economy may have important effects on Brazilian companies or companies with Brazilian assets and on market conditions and the competitiveness of Brazilian products abroad. In addition, actions taken by the Brazilian state and local governments with respect to labor and other laws affecting operations may have an effect on the Company.

The Company's financial condition and results of any future operations may also be materially adversely affected by any of the following, and the Brazilian federal government's actions, or failure to act, in response to them:

- currency depreciations and other exchange rate movements
- monetary policies
- inflation rate fluctuations
- economic and social instability
- environmental regulation
- energy shortages or changes in energy prices
- interest rates
- disasters at third party mineral projects
- corruption or political scandal
- exchange rate controls and restrictions on remittances abroad
- liquidity of the domestic capital and lending markets
- tax policy, including international tax treaties
- other political, diplomatic, social and economic policies or developments in or affecting Brazil

Uncertainty over whether the Brazilian federal government will implement changes in policy or regulation affecting these or other factors in the future may contribute to economic uncertainty in Brazil and to heightened volatility in the market value of securities issued by Brazilian companies or companies with Brazilian assets.

The Brazilian government has frequently implemented changes to tax laws, tax treaties and other regulations, including modifications to tax rates. Any such changes, as well as changes in the interpretation of such tax laws and regulations, may result in increases to the Company's overall tax burden, which would negatively affect its profitability.

Political instability or changes in government policy (which may be arbitrary) may result in changes to laws affecting the ownership of assets, mining activities, taxation, rates of exchange, environmental regulations and labor relations. This may affect both the Company's ability to undertake exploration and development activities in respect of present and future properties in the manner currently contemplated, as well as its ability to continue to explore, develop and operate those properties in which it has an interest or in respect of which it has obtained exploration and development rights to date. The possibility that a future government may adopt substantially different policies cannot be ruled out.

Brazil's long-term foreign and local currency debt is rated sub-investment grade. Brazil's ratings or outlooks may be downgraded further or placed on watch by the various rating agencies in the future. Downgrades of Brazil's sovereign credit ratings could limit access to funding and/or raise the cost of funding for the Company. Downgrades of Brazil's sovereign credit ratings could also heighten investors' perception of the risk of having operations in Brazil.

These and other future developments in the Brazilian economy and governmental policies may materially adversely affect the Company.

# Corruption in Brazil and Anti-Corruption, Anti-Bribery and Anti-Money Laundering Laws

Brazilian markets have historically experienced heightened volatility due to the uncertainties generated by corruption and bribery allegations and investigations of certain senior politicians, including congressmen and officers and directors of some of the major state-owned and private companies in Brazil. In addition, certain media posts and reports of corruption, or allegations of corruption, in Brazil may have an adverse effect on the public perception and reputation of Brazilian companies and may adversely affect the trading price of the Common Shares. The Company's value and share price could also be adversely affected by illegal activities by others, corruption or by claims, even if groundless, implicating the Company in illegal activities.

The Company is subject to anti-corruption, anti-bribery and anti-money laundering laws and regulations in various jurisdictions, including Canada and Brazil. In addition, it is subject to economic sanctions regulations that restrict dealings with certain sanctioned countries, individuals and entities. There can be no assurances that the internal policies of the Company will be sufficient to prevent or detect all inappropriate practices, fraud or violations of such laws, regulations and requirements by its employees, directors, officers, partners, agents and service providers or that any such persons will not take actions in violation of its policies and procedures. Any violations of anti-bribery and anti-corruption laws or sanctions regulations could have a material adverse effect on the Company's business, reputation, results of any future operations and financial condition.

The Company has not purchased any "political risk" insurance coverage and currently has no plans to do so.

# Governmental and Regulatory Requirements

Government approvals and permits are required in connection with the Company's activities. Any instances where such approvals are required and have not been obtained, the Company may be restricted or prohibited from proceeding with planned exploration, development or operational activities. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing development or operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or other remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may be liable for civil or criminal fines or penalties imposed for violations of applicable laws or regulations. Amendments to current laws, regulations and permitting requirements, or a more stringent application of existing laws, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs, reductions in the levels of production at producing properties or require abandonment or delays in the development of the Project.

In Brazil, the ANM regulates the conduct of exploration, development and mining operations. The ANM requires: (i) certain fee payments for exploration authorizations (known as the Annual Fee per Hectare), (ii) certain royalty payments to be made to the federal government for the mining concessions (known as Financial Compensation for the Exploitation of Mineral Resources - "CFEM") and (ii) royalty payments to be made to the landowner if the surface rights are not held by the holder of the mineral rights. There is also a monthly inspection fee related to the transfer and commercialization of certain minerals in some Brazilian states. Royalties, taxes and fees related to the exploration authorizations and mining concessions may change or increase substantially in the future.

In Brazil, failure to demonstrate the existence of technical and economically viable mineral deposits covered by an exploration authorization for a period of at least one year may lead to the authorization being required to be returned to the federal government. The federal government may then grant the exploration authorization to other parties that may conduct other mineral prospecting activities at said area. In addition, mining concessions and exploration authorizations may not be granted due to changes in laws and regulations governing mineral rights. Accordingly, retrocession requirements, loss of mineral rights, or the inability to renew concessions, authorizations, permits and licenses may materially adversely affect the Company.

Tailings dam failures involving other mining companies in Brazil, and the resultant loss of life and damage, have resulted in (and could in the future result in further) increased requirements, delays in licensing and other material consequences to all mining companies, even if the circumstances of the Project or the Company's

development and operational methodologies are significantly different then such other companies and projects.

The regulatory framework applicable to the Brazilian mining industry could be subject to further change, which may result in limitations on the Company's business and activities, including in connection with some existing mineral rights, and an increase in expenses, particularly mining royalties, taxes and fees.

The Company's operations are also subject to Brazilian regulations pertaining to the use and development of mineral properties and the acquisition or use of rural properties by foreign investors or Brazilian companies under foreign control, and various other Brazilian regulatory frameworks.

# Environmental Regulation

All phases of operations are subject to numerous environmental laws and regulations in Brazil on the federal, state and municipal levels, including laws and regulations relating to specially protected areas, air emissions, wastewater discharge and the use, manufacture, handling, transportation, storage, disposal, remediation of waste and hazardous substances. Environmental hazards may exist which are unknown to the Company at present which may have been caused by previous owners or operators of the Project. In the event of an accident or exposure to hazardous materials, environmental damages may occur and trigger the obligation to remediate the environmental conditions, which may result in significant costs. The victim of such damages or whoever the law so authorizes (such as public attorneys' office, foundations, state agencies, state-owned companies and associations engaged in environmental protection) is not compelled to sue all polluting agents to redress damages.

Environmental liability may be litigated in civil, administrative and criminal courts, with the application of administrative, civil and criminal sanctions, in addition to the obligation to redress the damages caused. The lack of a conviction or a finding of liability in one proceeding does not necessarily preclude the finding of liability in other proceedings. Accordingly, in respect of environmental compliance matters, there could be unexpected interruptions to operations, fines, or penalties as well as third-party claims for property damage or personal injury or remedial or other costs, which may have a material adverse effect on the Company's operations. Municipal, state and federal governments may revise and impose stricter environmental regulations in the future. There can be no assurance that environmental regulation will not adversely affect development or operations, with increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. The cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations.

#### Climate Change Considerations

Climate change is increasingly perceived as a broad societal and community concern. Stakeholders may increase demands for emissions reductions and call upon mining companies to better manage their consumption of climate-relevant resources. Physical climate change events, and the trend toward more stringent regulations aimed at reducing the effects of climate change, could impact the Company's decisions to pursue future opportunities, or maintain existing operations, which could have an adverse effect on its business and future operations. The Company can provide no assurance that efforts to mitigate the risks of climate changes will be effective and that the physical risks of climate change will not have an adverse effect on its operations and profitability.

#### No Production Experience

The Company does not have any experience in the construction and operation of a mine, processing plants and related infrastructure, as it has not previously been involved in the development of a mining project. Although certain of its officers, directors and consultants have such experience, the Company itself does not have any experience in taking a mining project to production. As a result, it is more difficult to evaluate the Company's prospects, and the Company's future success is more uncertain than if it had a more proven history of developing a mine.

# Uncertainty Relating to Future Production Estimates

The Company has prepared estimates and projections of future production for the Project. Any such information is forward-looking and no assurance can be given that such estimates will be achieved. These estimates are based on existing mine plans and other assumptions which change from time to time. The Company's actual production may vary from estimates for a variety of reasons, including: actual ore mined varying from estimates of grade, tonnage, dilution and metallurgical and other characteristics; revisions to mine plans; unusual or unexpected orebody formations; risks and hazards associated with mining; natural phenomena, such as inclement weather conditions, water availability, floods, and seismic activity; and unexpected labour shortages, strikes, local community opposition or blockades. The economic analysis for the Project is based in part on achieving at least the contemplated minimum operating and production levels.

# Delays and Construction Cost Overruns

It is common in new mining operations to experience unexpected costs and cost overruns, problems and delays during construction, development and mine start-up. A number of factors could cause such delays or cost overruns, including (among others) permitting delays, construction pricing escalation, changing engineering and design requirements, the performance of contractors, labour disruptions, adverse weather conditions and challenges in obtaining financing. Even if commercial production is achieved, equipment and facilities may not operate as planned due to design or manufacturing flaws, which may not all be covered by warranty. Mechanical breakdown could occur in equipment after the period of warranty has expired, resulting in loss of production as well as the cost of repair. Any delay, or cost overrun, may adversely impact the Company's ability to fully fund required expenditures, or alternatively, may require the Company to consider less attractive financing solutions. Accordingly, the Company's activities may not result in profitable mining operations at its mineral properties, including the Project.

# Capital and Operating Cost Estimates

Capital costs, operating costs, production and economic returns and other estimates may differ significantly from those anticipated by current estimates, and there can be no assurance that the actual capital, operating and other costs will not be higher than currently anticipated. Actual costs and revenues may vary from estimates for a variety of reasons, including (among others): lack of availability of resources or necessary equipment; unexpected construction or operating problems; lower realized lithium prices; revisions to construction plans; risks and hazards associated with mineral production; natural phenomena; floods; unexpected labour shortages or strikes; general inflationary pressures; and interest and currency exchange rates.

# **Operational Risks**

The Company's operations are subject to all of the risks normally incidental to the exploration for, and the development and operation of, mineral properties. Mineral exploration and exploitation involves a high degree of risk. Operations can be affected by such factors as permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations, work interruptions, fires, power outages, shutdowns due to equipment breakdown or failure, unexpected maintenance and replacement expenditures, human error, labour disputes, flooding, explosions, releases of hazardous materials, tailings impoundment failures, cave-ins, landslides, earthquakes and the inability to obtain or properly maintain adequate machinery, equipment or labour. The Company expects to rely on third-party owned infrastructure in order to develop and operate its projects, such as power, utility and transportation infrastructure. Any failure of this infrastructure without adequate replacement or alternatives may have a material impact on the Company.

#### Insurance Risks

In the course of exploration, development and production of mineral properties, certain risks (in particular, risks related to operational and environmental incidents) may occur. Although the Company maintains insurance to protect against certain risks associated with its business, insurance may not be available to insure against all such risks, or the costs of such insurance may be uneconomic. The Company may also elect not to obtain

insurance for other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the Company. The Company maintains liability insurance in accordance with industry standards, however, the nature of these types of risks is such that liabilities could exceed policy limits and the Company could incur significant costs that could have a material adverse effect on its business, results of operations and financial condition. Losses from uninsured and underinsured liabilities have the potential to materially affect the Company's financial position and prospects.

#### Mineral Tenure

There can be no assurance the Company's property mineral tenure interests, or that such title interests will ultimately be secured. No assurance can be given that applicable governments will not revoke or significantly alter the conditions of the applicable exploration and mining authorizations nor that such exploration and mining authorizations will not be challenged or impugned by third parties. The Company's property interests may also be subject to prior unregistered agreements or transfers or other land claims, and title may be affected by undetected defects and adverse laws and regulations.

The Company cannot guarantee that title to its properties will not be challenged. A successful challenge to the precise area and location of the Company's mineral claims could result in the Company being unable to develop its mineral properties or being unable to enforce its rights with respect to its mineral properties.

While the Company has the surface rights ("Servidão Mineral") for Production Phase 1, as described above, there can be no assurance that the Company will obtain such rights for Production Phase 2 or thereafter.

# Highly Competitive Industry

The mining industry is competitive in all of its phases and requires significant capital, as well as technical and operational resources. Competition is also intense for mining equipment, supplies and qualified service providers, particularly in Brazil where mining personnel are in high demand and short supply. If qualified expertise cannot be sourced and at cost effective rates within Brazil, the Company may need to procure those services outside of Brazil, which could result in additional delays and higher costs to obtain work permits, particularly during the COVID-19 pandemic. Because of the high costs associated with exploration, the expertise required to analyze a project's potential and the capital required to develop a mine, larger companies with significant resources may have a competitive advantage over the Company. The Company faces strong competition from other mining companies, some with greater financial resources, operational experience and technical capabilities. As a result of this competition, the Company may be unable to maintain or acquire financing, personnel, technical resources or attractive mining properties on terms it considers acceptable.

# Health and Safety Risks

The mineral exploration, development and production business carries inherent risk of liability related to worker and surrounding population health and safety, including the risk of government-imposed orders to remedy unsafe conditions, potential penalties for contravention of health and safety laws, licenses, permits and other approvals, and potential civil liability. Compliance with health and safety laws (and any future changes) and the requirements of licenses, permits and other approvals remain material to the Company's business, and will continue to remain material at all stages of the development and operation of the Project. The Company may become subject to government orders, investigations, inquiries or other proceedings (including civil claims) relating to health and safety matters. Mining, like many other extractive natural resource industries, is subject to potential risks and liabilities due to accidents that could result in serious injury or death. The impact of such accidents could affect the profitability of the operations, potentially result in fines, penalties or other prosecutions, cause an interruption to operations, lead to a loss of licenses, affect the reputation of the Company and its ability to obtain further licenses, damage community relations and reduce the perceived appeal of the Company as an employer. The occurrence of any of these events or any changes, additions to or more rigorous enforcement of health and safety laws, licenses, permits or other approvals could have a significant impact on development or operations and result in additional material expenditures. As a consequence, no assurances can be given that additional workers' health and safety issues relating to presently known or unknown matters will not require unanticipated expenditures, or result in fines, penalties or other consequences (including changes to operations) material to its business and operations.

# Mineral Resource and Mineral Reserve Estimates

The Company's mineral resource and mineral reserve estimates are estimates only. No assurance can be given that any particular level of recovery of minerals will in fact be realized or that identified mineral resources or mineral reserves will ever be mined or processed profitably. In addition, the grade of mineralization which may ultimately be mined may differ from that indicated by drilling results and such differences could be material. By their nature, mineral resource and mineral reserve estimates are imprecise and depend, to a certain extent, on analyses of drilling results and statistical inferences that may ultimately prove to be inaccurate. These estimated mineral resources and mineral reserves should not be interpreted as assurances of certain commercial viability or of the profitability of any future operations. Investors are cautioned not to place undue reliance on these estimates.

Mineral Resources are not Mineral Reserves and have a greater degree of uncertainty as to their feasibility and prospects for economic extraction. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources that are in the Inferred category are even more risky. An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to any other category of Mineral Resource. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. However, the estimate of Inferred Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

The PEA relating to the Second Mine is preliminary in nature, and includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized. The Company has not yet made a production decision in respect of the Barreiro deposit. The economic viability of the Mineral Resources of the Second Mine has not been demonstrated. The Company expects that it will assess the results of a preliminary feasibility study and a feasibility study before making a production decision in respect of the Second Mine.

#### Community Relations

The Company's relationships with host communities are critical to ensure the success of its existing operations and the construction and development of new operations. There is an increasing level of public concern relating to the perceived effects of mining activities on the environment and on host communities due to events that happened with other companies in the recent past. The evolving expectations related to human rights, indigenous rights, and environmental protection may result in opposition to the Company's current and future operations or further development of the Project. Such opposition may be directed through legal or administrative proceedings or expressed in public opposition such as protests, roadblocks or other forms of expression against the Company's activities, and may have a negative impact on the Company's reputation and operations.

Opposition by any of the aforementioned groups to the Company's operations may require modification of, or preclude the operation or development of, the Company's projects or may require the Company to enter into agreements with such groups or local governments with respect to the Company's projects, in some cases causing increased cost and considerable delays to the advancement of the Company's projects. Further, publicity adverse to the Company, its operations or extractive industries generally could have an adverse effect on the Company and may impact relationships with the communities in which the Company operates and other stakeholders. While the Company is committed to operating in a socially responsible manner, there can be no assurance that its efforts in this respect will mitigate this potential risk.

The Project may also be impacted by relations with various community stakeholders, and the Company's ability to develop related mining assets may still be affected by unforeseen outcomes from such community relations.

# Counterparty Risks

The Company is exposed to various counterparty risks including, but not limited to: (i) financial institutions that hold the Company's cash and short-term investments; (ii) companies that are expected to have payables to the Company; (iii) third-party contractors engaged for the development of the Project; (iv) the Company's insurance providers; and (v) the Company's lenders. The Company seeks to limit counterparty risk by entering into business arrangements with high credit-quality counterparties, limiting the amount of exposure to each counterparty, and generally monitoring the financial condition of counterparties. The risks associated with doing business with several counterparties, including any defaults or other breaches of any agreements entered into by the Company with such counterparties, may impact the Company's operations and financial condition.

# Foreign Subsidiary

The Company conducts operations through subsidiaries, including a foreign subsidiary located in Brazil. Accordingly, any limitation on the transfer of cash or other assets between the parent corporation and such entities, or among such entities, could restrict the Company's ability to fund its operations efficiently. Any such limitations, or the perception that such limitations may exist now or in the future, could hurt the Company's valuation and stock price.

# Dependence on the Expertise of Consultants

The Company has relied on and is expected to continue to rely on, consultants and others for mineral exploration and exploitation expertise. The Company believes that those consultants are competent and that they have carried out their work by internationally recognized industry standards. However, if the work conducted by those consultants is ultimately found to be incorrect or inadequate in any material respect, the Company may experience delays or increased costs in developing its properties.

# **Risks Related to the Company's Business and Securities**

#### Public Health Crises

The Company faces risks related to pandemics and epidemics, such as the outbreak of COVID-19 that surfaced in December 2019 in Wuhan, Hubei Province, China and has spread to other countries around the world, including Canada, the United States, and Brazil, which could significantly disrupt the Company's operations and may materially and adversely affect its business and financial condition. The full extent to which COVID-19 impacts the Company's business, including its operations and the market for its securities, will depend on future developments that are highly uncertain and will depend on numerous evolving factors that the Company may not be able to accurately predict or assets, including, but not limited to the duration. severity, the availability of approved vaccines and the timing for completion of vaccine distribution programs around the globe, and the continued governmental, business and individual actions taken in response to the pandemic. Moreover, the actual and threatened to continue or spread of COVID-19, especially in Brazil, could materially and adversely impact the Company's business, including without limitation on the regional economies in which the Company operates, employee health, workforce productivity, increased insurance premiums, and medical costs, restrictions on travel by the Company's personnel and by the personnel of the Company's various service providers, guarantine, the availability of industry experts and personnel, and other factors that will depend on future developments beyond the Company's control, all or some of which may have a material adverse effect on the Company's business, financial condition, and stock price.

Government efforts to curtail the spread of COVID-19 may also result in temporary or long-term suspensions or shut-downs of the Company's operations. Given the unforeseen conditions resulting from the ongoing evolution of the COVID-19 pandemic and its global impact, there can be no assurance that the Company's future response and business continuity plans will continue to be effective in managing the pandemic, and changing conditions could result in a material adverse effect on the Company's business, financial condition and/or results of operations. Travel restrictions to and from Brazil, currently implemented by governments, as well as quarantine, isolation, and physical distancing requirements during this period, may hurt workforce mobility. Further, the protective measures implemented by the Company may cause higher operating costs, combined with a decrease in workforce productivity, lower production outputs, and in some cases, temporary cessation of mining development, which could have a material adverse effect on the Company's business and financial conditions.

In addition, the outbreak has caused a worldwide health crisis that has adversely affected economies and financial markets resulting in a global economic downturn that has impacted lithium markets and, therefore, been negative for lithium mining companies.

# Current Military Conflict in Ukraine

The military conflict in Ukraine could lead to heightened volatility in the global markets, increased inflation, and turbulence in commodities markets. More recently, in response to Russian military actions in Ukraine, several countries (including Canada, the United States and certain allies) have imposed economic sanctions and export control measures, and may impose additional sanctions or export control measures in the future, which have and could in the future result in, among other things, severe or complete restrictions on exports and other commerce and business dealings involving Russia, certain regions of Ukraine, and/or particular entities and individuals. While the Company does not have any direct exposure or connection to Russia or Ukraine, as the military conflict is a rapidly developing situation, it is uncertain as to how such events and any related economic sanctions could impact the global economy and commodities markets. Any negative developments in respect thereof could have a material adverse effect on the Company's business, operations or financial condition. *Risk of Achieving Profitability and Generating Positive Cash Flows* 

Company has a history of operating losses and it can be expected to generate continued operating losses and negative cash flows in the future while the Company carries out its current business plan to further develop and expand its business. The Company has made significant up-front investments in order to rapidly develop and expand its business. The Company is currently incurring expenditures related to its operations that have generated negative operating cash flows from operations. The successful development and commercialization of these operations will depend on a number of significant financial, logistical, technical, marketing, legal, regulatory, competitive, economic and other factors, the outcome of which cannot be predicted. There is no guarantee that such operating significant revenues in the future or at all. The Company's inability to ultimately generate sufficient revenues to become profitable and have positive cash flows could have a material adverse effect on its prospects, business, financial condition, results of operations or overall viability as an operating business.

#### Risk of Future Losses and Going Concern

The Company's ability to continue as a going concern is dependent upon the ability to ultimately generate future profitable operations and to obtain the necessary financing to meet its obligations and repay its liabilities arising from normal business operations when they come due. The Company has reported net losses and comprehensive losses for the year ended December 31, 2021, and for the year ended December 31, 2020. The Company's business does not currently operate on a self-sustaining basis and until it is successfully able to fund its expenditures from its revenues, its ability to continue as a going concern is dependent on obtaining additional debt financing to fund long-term expenditures related to the construction of the Production plant. Such expenditures were not yet committed as of December 31, 2021. The Company expects to continue to sustain operating losses in the future until it generates revenue from the commercial production of its mineral properties. There is no guarantee that the Company will ever be profitable.

# Dilution of Existing Shareholders from Equity Financings or Increased Financial Risk Through Debt Issuance

There is no assurance that the Company will be able to obtain sufficient financing in the future on terms acceptable to meet the Company's capital requirements. The ability of the Company to arrange additional financing in the future will depend, in part, on prevailing capital market conditions as well as the business performance of the Company. Failure to obtain additional financing on a timely basis may cause the Company to postpone, abandon, reduce or terminate its operations and could have a material adverse effect on the Company's business, results of operations, and financial condition. A likely source of future financing is the sale of additional Common Shares, which would mean that each existing shareholder would own a smaller

percentage of the Common Shares than outstanding. In addition, the Company may issue or grant convertible securities (such as warrants or stock options) in the future under which additional Common Shares may be issued. The exercise of such securities would result in dilution of equity ownership to the Company's existing shareholders.

Alternatively, the Company may rely on debt financing and assume debt obligations that require it to make substantial interest and principal payments and which may be secured against the Company's assets, including the Project. Failure to meet debt obligations as they become due may result in loss of the Project. The Company may also sell additional royalties on the Project, which would mean that the Company's share of returns from the Project would decrease.

#### Indebtedness

The Company's ability to make scheduled payments on or refinance its debt obligations (if necessary) depends on its financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory, and other factors beyond the Company's control, including the market prices of lithium. The Company may be unable to achieve cash flow from operating activities sufficient to permit it to pay the principal, premium, if any, and interest on the Company's indebtedness, or maintain its debt covenants. If the Company's cash flows and capital resources are insufficient to fund its debt service obligations, or there is a contravention of its debt covenants, the Company could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance its indebtedness. The Company may not be able to affect any such alternative measures, if necessary, on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow it to meet its scheduled debt service obligations. The Company's inability to generate sufficient cash flows to satisfy its debt obligations, or to refinance its indebtedness on commercially reasonable terms or at all, would materially and adversely affect its financial position and results of operations and its ability to satisfy its obligations.

#### No History of Dividends

The Company has not paid dividends since incorporation and cannot presently generate earnings as its mineral properties are in the exploration and development stage. If the Project is successfully developed, the Company anticipates that it will retain future earnings and other cash resources for the future operation and development of its business. The Company does not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends is solely at the discretion of the Board, which will take into account many factors, including the Company's operating results, financial condition, and anticipated cash needs. The Company may never pay dividends.

# Obligations as a Publicly Traded Company in Canada and in the United States

As a public company in the United States, the Company will incur additional legal, accounting, Nasdaq, reporting and other expenses. The additional demands associated with being a U.S. public company may disrupt regular operations of the Company's business by diverting the attention of some of its senior management team away from revenue-producing activities to additional management and administrative oversight, adversely affecting the Company's ability to attract and complete business opportunities and increasing the difficulty in both retaining professionals and managing and growing its business. Any of these effects could harm the Company's business, results of operations and financial condition.

If the Company's efforts to comply with new United States laws, regulations and standards differ from the activities intended by regulatory or governing bodies, such regulatory bodies or third parties may initiate legal proceedings against the Company and its business may be adversely affected. As a public company in the United States, it is more expensive for the Company to obtain director and officer liability insurance, and it will be required to accept reduced coverage or incur substantially higher costs to continue its coverage. These factors could also make it more difficult for the Company to attract and retain qualified directors.

In addition to the Canadian securities laws requirements to which the Company has already been subject, U.S. Sarbanes-Oxley Act 2002, as amended (the "U.S. Sarbanes-Oxley Act") requires that the Company maintain effective disclosure controls and procedures and internal control over financial reporting. Pursuant to Section 404 of the U.S. Sarbanes-Oxley Act ("Section 404"), the Company will be required to furnish a report by its management on its internal control over financial reporting ("ICFR"), which, if or when the Company is no longer an emerging growth company, must be accompanied by an attestation report on ICFR issued by the Company's independent registered public accounting firm.

To achieve compliance with Section 404 within the prescribed period, the Company will document and evaluate its ICFR, which is both costly and challenging. In this regard, the Company will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of its ICFR, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for ICFR. Despite the Company's efforts, there is a risk that neither the Company nor its independent registered public accounting firm will be able to conclude within the prescribed timeframe that the Company's ICFR is effective as required by Section 404. This could result in a determination that there are one or more material weaknesses in the Company's ICFR, which could cause an adverse reaction in the financial markets due to a loss of confidence in the reliability of the Company's consolidated financial statements. In addition, in the event that the Company is not able to demonstrate compliance with the Sarbanes-Oxley Act, that its internal control over financial reporting is perceived as inadequate, or that it is unable to produce timely or accurate financial statements, investors may lose confidence in the Company's operating results and the price of its Common Shares may decline. In addition, if the Company is unable to continue to meet these requirements, it may not be able to remain listed on the Nasdaq.

#### Maintenance of Adequate and Appropriate Internal Controls

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, recorded and reported and assets are safeguarded against unauthorized or improper use. A control system, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance with respect to the reliability of financial reporting and financial statement preparation.

# Risks as a Foreign Private Issuer

The Company is a "foreign private issuer" as such term is defined in Rule 405 under the U.S. Securities Act, and is permitted, under a multijurisdictional disclosure system adopted by the United States and Canada, to prepare its disclosure documents filed under the Exchange Act in accordance with Canadian disclosure requirements. Under the Exchange Act, the Company is subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. As a result, the Company will not file the same reports that a U.S. domestic issuer would file with the SEC, although it will be required to file or furnish to the SEC the continuous disclosure documents that it is required to file in Canada under Canadian securities laws. In addition, the Company's officers, directors, and principal shareholders are exempt from the reporting and "short swing" profit recovery provisions of Section 16 of the Exchange Act. Therefore, the Company's shareholders may not know on as timely a basis when its officers, directors and principal shareholders purchase or sell shares, as the reporting deadlines under the corresponding Canadian insider reporting requirements are longer.

As a foreign private issuer, the Company is exempt from the rules and regulations under the Exchange Act related to the furnishing and content of proxy statements. The Company is also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. While the Company expects to comply with the corresponding requirements relating to proxy statements and disclosure of material non-public information under Canadian securities laws, these requirements differ from those under the Exchange Act and Regulation FD and shareholders should not expect to receive in every case the same information at the same time as such information is provided by U.S. domestic companies.

In addition, as a foreign private issuer, the Company has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and

provided that the Company discloses the requirements the Company is not following and describe the Canadian practices it follows instead. As a result, the Company's shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all U.S. corporate governance requirements. If the Company ceases to qualify as a foreign private issuer, it will be subject to the same reporting requirements and corporate governance requirements as a U.S. domestic issuer which may increase its costs of being a public company in the United States.

#### Dependence on Key Individuals

The success of the Company will be largely dependent upon the performance of its key officers, consultants, and employees. Failure to retain key individuals or to attract, and, if attracted, retain additional key individuals with necessary skills could have a materially adverse impact upon the Company's success. The Company has not purchased any "key-man" insurance concerning any of its directors, officers, or key employees and has no current plans to do so.

#### Fluctuations in Exchange Rates; Potential Government Intervention

Business is transacted by the Company primarily in Brazilian, U.S., and Canadian currencies. The majority of the Project's operating costs are denominated in Brazilian currency. Certain costs associated with imported equipment and international supplies and consultants and sales prices for the product are denominated in U.S. dollars. Fluctuations in exchange rates may have a significant effect on the cash flows of the Company. Future changes in exchange rates could materially affect the Company's results in either a positive or negative direction. The Company has not hedged its exposure to any exchange rate fluctuations applicable to its business and is therefore exposed to currency fluctuation risks.

Currently, the Brazilian Real is permitted to float against the US Dollar and allows the purchase and sale of foreign currency and the international transfer of Reais There can be no assurance that the Brazilian Central Bank or the Brazilian government will continue to permit the Real to float freely and not intervene in the exchange rate market through the return of a currency band system or otherwise.

#### Legal Proceedings

Due to the nature of the Company's business and status as a publicly traded entity, it may be subject to a variety of regulatory investigations, claims, lawsuits, and other proceedings in the ordinary course of its business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in litigation, including the effects of the discovery of new evidence or advancement of new legal theories, the difficulty of predicting decisions of judges and juries, and the possibility that decisions may be reversed on appeal. Defense and settlement costs of legal claims can be substantial, even concerning claims that have no merit.

Litigation may be costly and time-consuming and can divert the attention of management and key personnel from business operations. If the Company is unsuccessful in its defense of claims or unable to settle claims in a manner satisfactory to it, it may be faced with significant monetary damages or injunctive relief against it that could have a material adverse effect on its business and financial condition. To the extent the Company is involved in any active litigation, the outcome of such matters may not be currently determinable nor is it possible to accurately predict the outcome or quantum of any such proceedings at this time.

#### Conflicts of Interest for Directors and Officers

Certain directors and officers of the Company are or may become, associated with other natural resource companies which may give rise to conflicts of interest. By the Canada Business Corporations Act, directors who have a material interest in any person who is a party to a material contract, or a proposed material contract, with the Company are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve the contract.

#### Share Price Volatility

The market price of publicly traded shares, especially of a resource issuer such as the Company, is affected by many variables outside of the Company's control and is not necessarily related to exploration or operational successes or failures of the Company. Factors such as general market conditions for resource issuers, the strength of the economy generally, the availability and attractiveness of alternative investments, and analysts' recommendations may all contribute to volatility in the price of the Company's shares, which are not necessarily related to the operating performance, underlying asset values or prospects of the Company. Investors could suffer significant losses if the Common Shares are depressed or illiquid when an investor seeks liquidity. Securities class action litigation has often been brought against companies following periods of volatility in the market price of their securities. The Company may be the target of similar litigation in the future. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

# Risks Relating to Securities or Industry Analysts

The trading market for the Company's Common Shares depends, in part, on the research and reports that securities or industry analysts publish about the Company or its business. The Company does not have any control over these analysts. If one or more of the analysts who cover the Company downgrade its stock or publish inaccurate or unfavorable research about its business, the price of the Company's Common Shares would likely decline. In addition, if the Company's results of operations fail to meet the forecast of analysts, the price of its Common Shares would likely decline. If one or more of these analysts cease coverage of the Company or fail to publish reports on the Company regularly, demand for Common Shares could decrease, which might cause the price and trading volume of Common Shares to decline. *Use of Proceeds from Securities Offerings* 

While information regarding the use of proceeds from the sale of Common Shares or other securities will be described in the applicable prospectus supplement, the Company will have broad discretion over the use of the net proceeds from offerings of its securities. Because of the number and variability of factors that will determine the use of such proceeds, the Company's ultimate use might vary substantially from its planned use. Purchasers may not agree with how the Company allocates or spends the proceeds from an offering of its securities. The Company may pursue acquisitions, collaborations or other opportunities that do not result in an increase in the market value of the Common Shares, including the market value of the Common Shares, and that may increase losses.

# Risks Relating to a Holding of Common Shares

A holding of Common Shares is speculative and involves a high degree of risk and should be undertaken only by holders whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment. A holding of Common Shares is appropriate only for holders who have the capacity to absorb a loss of some or all of their holdings.

# Significant Shareholder Influence

To the Company's knowledge, as of the date hereof, the A10 Fund holds approximately 47.2% of the outstanding Common Shares. For as long as it directly or indirectly maintains a significant interest in the Company, the A10 Fund may be in a position to affect the Company's governance and operations. As a result of its shareholdings, the A10 Fund has the ability, among other things, to approve significant corporate transactions and delay or prevent a change of control of the Company that could otherwise be beneficial to minority shareholders. The A10 Fund generally will have the ability to control the outcome of any matter submitted for the vote or consent of the Company's shareholders. In some cases, the interests of the A10 Fund may not be the same as those of the other minority shareholders, and conflicts of interest may arise from time to time that may be resolved in a manner detrimental to the Company or minority shareholders. The effect of this influence may be to limit the price that investors are willing to pay for Common Shares.

In addition, the potential that the A10 Fund may sell Common Shares in the public market, as well as any actual sales of Common Shares in the public market, could adversely affect the market price of the Common Shares.

# Enforcement of Judgments

The Company is incorporated under the laws of Canada and headquartered in British Columbia, Canada, but a majority of its directors and officers are not citizens or residents of Canada. In addition, a substantial part of the Company's assets is located outside Canada. As a result, it may be difficult or impossible for an investor to (i) enforce judgments against the Company and its directors and officers outside of Canada which may have been obtained in Canadian courts or (ii) initiate court action outside Canada against the Company and its directors and officers in respect of an alleged breach of securities laws or otherwise.

The majority of the Company's assets and all or a substantial portion of the assets of its directors and officers may be located outside the United States. Consequently, it may be difficult for investors who reside in the United States to effect service of process in the United States upon the Company or upon such persons who are not residents of the United States, or to realize upon judgments of courts of the United States predicated upon the civil liability provisions of the U.S. federal securities laws. A judgment of a U.S. court predicated solely upon such civil liabilities may be enforceable in Canada by a Canadian court if the U.S. court in which the judgment was obtained had jurisdiction, as determined by the Canadian court, in the matter. Investors should not assume that Canadian courts: (i) would enforce judgments of U.S. courts obtained in actions against the Company or such persons predicated upon the civil liability provisions of any state within the United States, or (ii) would enforce, in original actions, liabilities against the Company or such persons predicated upon the U.S. federal securities laws or any such state securities or blue sky laws.

In addition, in the event of a dispute involving the foreign operations of the Company, the Company may be subject to the exclusive jurisdiction of foreign courts. The Company's ability to enforce its rights in Canada or locally of judgments from foreign courts could have an adverse effect on its future cash flows, earnings, results of operations, and financial condition.

#### Canada Business Corporations Act

The Company is governed by the Canada Business Corporations Act and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with the Company's constating documents, have the effect of delaying, deferring or discouraging another party from acquiring control of the Company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance. For example, the material differences between the CBCA and the Delaware General Corporation Law (the "DGCL"), the applicable statutory regime for many U.S. companies, that may have the greatest such effect include, but are not limited to, the following: (i) for material corporate transactions (such as mergers and amalgamations, other extraordinary corporate transactions or amendments to the Company's articles) the CBCA generally requires a two-thirds majority vote by shareholders, whereas the DGCL generally requires only a majority vote; and (ii) under the CBCA, holders of 5% or more of the Company's shares that carry the right to vote at a meeting of shareholders can requisition a special meeting of shareholders, whereas such right does not exist under the DGCL.

# Cyber-Security Risks

Threats to information technology systems associated with cyber-security risks and cyber incidents or attacks continue to grow. It is possible that the business, financial and other systems of the Company or other companies with which it does business could be compromised, which might not be noticed for some time. Risks associated with these threats include, among other things, loss of intellectual property, disruption of business operations and safety procedures, loss or damage to worksite data delivery systems, and increased costs to prevent, respond to or mitigate cyber-security events.

# Risks as a Foreign Passive Investment Company

Generally, if for any taxable year 75% or more of the Company's gross income is passive income, or at least 50% of the average quarterly value of the Company's assets are held for the production of, or produce, passive income, the Company would be characterized as a passive foreign investment company ("PFIC") for U.S. federal income tax purposes. Based on the current profile of the Company's gross income, gross assets, the nature of its business, and its anticipated market capitalization, the Company believes that it was likely a PFIC for the 2020 taxable year. While it has not made a determination of expected PFIC status for the current taxable year, there is a risk that it may be a PFIC in the current taxable year and in the foreseeable future. Because PFIC status is determined on an annual basis and generally cannot be determined until the end of the taxable year, there can be no assurance that the Company will not be a PFIC for the current or future taxable years. If the Company is characterized as a PFIC, the Company's shareholders who are U.S. holders may suffer adverse tax consequences, including the treatment of gains realized on the sale of the Common Shares as ordinary income, rather than as capital gain.

# **Critical Accounting Estimates**

The preparation of these consolidated financial statements requires management to make certain estimates, judgments, and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. These consolidated financial statements include estimates which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future periods if the revision affects both current and future periods. These estimates are based on historical experience, current, and future economic conditions, and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

#### Significant accounting judgments and estimates:

Critical accounting estimates:

Significant judgment and assumptions about the future and other sources of estimation uncertainty that management has made at the financial position reporting date, that could result in a material adjustment to the carrying amounts of assets and liabilities, relate to, but are not limited to, the following:

• The inputs used in accounting for share-based payment transactions, including warrants.

Critical accounting judgements:

- Transition from the exploration and evaluation stage to the development stage Judgment is required in determining when an exploration and evaluation project has demonstrated technical feasibility, commercial viability and transitions from the exploration and evaluation stage to the development stage. In assessing the technical feasibility and commercial viability of an asset or CGU, the estimated operating results and net cash flows are determined by estimating the expected future revenues and costs, including the future production costs, capital expenditures, site closure and environmental rehabilitation costs. The estimated net cash flows include cash flows expected to be realized from the extraction, processing and sale of proven and probable reserves as well as mineral resources when there is a high degree of confidence in the economic extraction of those resources
- Management applied judgment in determining the functional currency of the Company as the Canadian Dollar and its subsidiary to be the Brazilian Reais, based on the facts and circumstances that existed during the period;
- Management's judgment of its obligations for the restoration, rehabilitation, and environmental remediation, of the areas it is exposed to based on the facts and circumstances that existed during the period;

#### **Off-Balance-Sheet Arrangements**

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

# Outstanding Share Data

As of the date of this MD&A, the Company has 100,446,542 issued and outstanding Common Shares. In addition, the Company has outstanding warrants exercisable for 30,000 Common Shares; RSUs for 7,797,667 Common Shares (of which an aggregate 5,000,000 RSUs to the CO-CEOs of the Company will vest in four tranches upon the achievement of specified market capitalization targets and the grant of an aggregate 1,000,000 RSUs to the CO-CEOs of the CO-CEOs of a net-zero plan); and stock options exercisable for 50,000 Common Shares.

# **Capital Management**

The Company manages its capital with the following objectives:

- To ensure sufficient financial flexibility to achieve its ongoing business objectives, including funding future growth opportunities, and pursuing accretive acquisitions
- To maximize shareholder returns through enhancing its share value

The Company monitors its capital structure and adjusts according to market conditions to meet its objectives, given the current outlook of the business and industry in general. The Company may manage its capital structure by issuing new shares, repurchasing outstanding shares, adjusting capital spending, or disposing of assets. The capital structure is reviewed by management and the Board on an ongoing basis.

The Company considers its capital to be equity, comprising share capital, contributed surplus, accumulated other comprehensive loss and deficit, which at December 31, 2021, totaled \$185,063,042 (December 31, 2020 - \$21,757,348). The Company's capital management objectives, policies, and processes remained unchanged during the twelve months ended December 31, 2021.

The Company manages capital through its financial and operational forecasting processes. The Company reviews its operating expenditures, and other investing and financing initiatives based on activities related to the Project.

#### **Financial Risk Factors**

The Company's activities expose it to a variety of financial risks: credit risk, liquidity risk, and market risk (including interest rate risk, foreign currency risk, and price risk).

The fair values of cash accounts receivable, accounts payable, note payable and accrued liabilities approximate their carrying values due to the short-term to maturity of these financial instruments.

#### Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to receivables.

#### 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's approach to managing liquidity is to ensure it will have sufficient liquidity to meet liabilities when due. To the extent the Company does not believe it has sufficient liquidity to meet obligations, it will consider securing additional equity or debt funding.

The Company's financial obligations consist of accounts payable, contractual lease payments, revolving credit facility, and note payable. The maturity analysis of financial liabilities as of December 31, 2021, is as follows:

Contractual Obligations	Up to 1 year	1-3 years	4 - 5 years	More than 5 years	Total
	(\$)	(\$)	(\$)	(\$)	(\$)
Accounts payable and other liabilities	3,593,832	-	-	-	3,593,832
Lease liabilities	27,711	48,597	46,081	122,003	244,392
Note payable	270,125	-	-	-	270,125

#### Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

(a) Interest rate risk

The Company has cash balances. The Company's current policy is to invest surplus cash in savings accounts with a Canadian chartered bank with which it keeps its bank accounts. As of December 31, 2021, the Company has \$154,305,044 as cash.

The Company also has debt instruments, as disclosed in note 11. The debt instruments as of December 31, 2021 and December 31, 2020 are exposed to interest as per the CDI (Brazilian Interbank rate).

# (b) Foreign currency risk

The Company's functional and presentation currency is the Canadian dollar and certain purchases, and salaries are transacted in Canadian dollars. The Company also has significant balances in Brazilian Reais and United States dollars that are subject to foreign currency risk.

The Company had the following balances in the prescribed currencies:

	December 31, 2021	December 31, 2020
Brazilian Reais Current assets Current liabilities	4,279,062 (10,286,288)	1,169,783 (3,589,600)
United States Dollar Cash in banks	67,088,680	10,613,332

Cash	December 31,2021			December 31, 2020		
Denominated Currencies:	Amount denominated currency	iı	Equivalent Amount Canadian\$	Amount in denominated currency	Equivalent Amount in Canadian\$	
Deposits in Brazilian Reais	3,050,962	\$	699,288	16,811 \$	4,124	
Deposits in United States Dollars	67,088,680		84,759,838	10,613,332	13,529,876	
Total Cash		\$	85,459,126	\$	13,534,000	

- The Company is exposed to foreign currency risk on fluctuations related to cash, receivables, and accounts payable and other liabilities denominated in Brazilian Reais and US dollars
  - Sensitivity to a plus or minus 10% change in the foreign exchange rate of the Brazilian Reais compared to the Canadian dollar would affect the Company's Consolidated Statements of Comprehensive Loss by approximately \$138,000 with all other variables held constant
  - Sensitivity to a plus or minus 10% change in the foreign exchange rate of the US dollar compared to the Canadian dollar would affect the Company's Consolidated Statements of Comprehensive Loss by approximately \$8,581,000 with all other variables held constant

# **Proposed Transactions**

The Company routinely evaluates various business development opportunities which could entail acquisitions and/or divestitures. In this regard, the Company is currently in discussions with various parties, but no definitive agreements respecting any proposed transactions have been entered into as of the date of this MD&A. There can be no assurances that any such transactions will be concluded in the future.

# Additional Disclosure for Venture Issuers Without Significant Revenue

# General and administrative expenses

Year ended December 31,	2021	2020
Salaries and benefits	\$ 1,232,122	\$ 316,139
Legal	614,944	80,284
Travel	143,329	49,416
A10 - Cost Sharing Agreement	185,167	126,189
Business development and investor relations	1,243,828	392,410
Accounting	106,098	76,230
Auditing	926,708	82,283
Insurance	379,560	30,409
Financial Expenses	37,109	21,417
Interest and Tax	115,476	-
Other general and administration	616,338	47,128
Total general and administrative expenditures	\$ 5,600,679	\$ 1,221,905

# Outlook

Management thinks that the lithium price will be favorable and that the Company will be a low-cost producer.

Notwithstanding, the Company is mindful that the lithium price could fall as a result of the substantial investments deployed in the lithium sector. The Company is monitoring market fundamentals to ensure that it is well-positioned to weather any possible resurgence of a market downturn. See "Risk Factors".

Accordingly, its plans for the near term are to develop Production Phase 1 (Xuxa deposit), advance the feasibility of Production Phase 2 (Barreiro deposits), advance the exploration and evaluation of Production Phase Phase 3.

#### **Qualified Person**

Mr. Wes Roberts, P.Eng., a member of the technical committee of the Company, is the "qualified person" under NI 43-101 who reviewed and approved the technical information disclosed in this MD&A.

# Cautionary Note Regarding Forward-Looking Information

Certain information and statements in this MD&A may constitute "forward-looking information" within the meaning of Canadian securities legislation and "forward-looking statements" within the meaning of U.S. securities legislation (collectively, "Forward-Looking Information"), which involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such Forward-Looking Information. All statements, other than statements of historical fact, may be Forward-Looking Information, including, but not limited to, mineral resource or mineral reserve estimates (which reflect a prediction of the mineralization that would be realized by development). When used in this MD&A, such statements generally use words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate" and other similar terminology. These statements reflect management's current expectations regarding future events and operating performance and speak only as of the date of this MD&A. Forward-Looking Information involves significant risks and uncertainties, should not be read as guarantees of future performance or results, and does not necessarily provide accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the Forward-Looking Information, which is based upon what management believes are reasonable assumptions, and there can be no assurance that actual results will be consistent with the Forward-Looking Information.

In particular (but without limitation), this MD&A contains Forward Looking Information with respect to the following matters: statements regarding anticipated decision making with respect to the Project; capital expenditure programs; estimates of mineral resources and mineral reserves; development of mineral resources and mineral reserves; government regulation of mining operations and treatment under governmental and taxation regimes; the future price of commodities, including lithium; the realization of mineral resource and mineral reserve estimates, including whether mineral resources will ever be developed into mineral reserves; the timing and amount of future production; currency exchange and interest rates; expected outcome and timing of environmental surveys and permit applications and other environmental matters; the Company's ability to raise capital and obtain project financing; expected expenditures to be made by the Company on its properties; successful operations and the timing, cost, quantity, capacity and quality of production; capital costs, operating costs and sustaining capital requirements, including the cost of construction of the processing plant for the Project; and competitive conditions and anticipated trends post-COVID-19 pandemic and the ongoing uncertainties and effects in respect of the COVID-19 pandemic and the military conflict in Ukraine.

Forward-Looking Information does not take into account the effect of transactions or other items announced or occurring after the statements are made. Forward-Looking Information is based upon a number of expectations and assumptions and is subject to several risks and uncertainties, many of which are beyond the Company's control, that could cause actual results to differ materially from those disclosed in or implied by such Forward-Looking Information. With respect to the Forward-Looking Information, the Company has made assumptions regarding, among other things:

- General economic and political conditions (including but not limited to the impact of the continuance or escalation of the military conflict between Russia and Ukraine, and economic sanctions in relation thereto).
- Stable and supportive legislative, regulatory and community environment in the jurisdictions where the Company operates.
- Stability and inflation of the Brazilian Real, including any foreign exchange or capital controls which may be enacted in respect thereof, and the effect of current or any additional regulations on the Company's operations.
- Anticipated trends and effects in respect of the COVID-19 pandemic and post-pandemic.
- Demand for lithium, including that such demand is supported by growth in the electric vehicle ("EV") market.
- Estimates of, and changes to, the market prices for lithium.

- The impact of increasing competition in the lithium business and the Company's competitive position in the industry.
- The Company's market position and future financial and operating performance.
- The Company's estimates of mineral resources and mineral reserves, including whether mineral resources will ever be developed into mineral reserves.
- Anticipated timing and results of exploration, development and construction activities.
- Reliability of technical data.
- The Company's ability to develop and achieve production at the Project.
- The Company's ability to obtain financing on satisfactory terms to develop the Project.
- The Company's ability to obtain and maintain mining, exploration, environmental and other permits, authorizations and approvals for the Project.
- The timing and outcome of regulatory and permitting matters for the Project.
- The exploration, development, construction and operational costs for the Project.
- The accuracy of budget, construction and operations estimates for the Project.
- Successful negotiation of definitive commercial agreements, including off-take agreements for the Project.
- The Company's ability to operate in a safe and effective manner.

Although management believes that the assumptions and expectations reflected in such Forward-Looking Information are reasonable, there can be no assurance that these assumptions and expectations will prove to be correct. Since Forward-Looking Information inherently involves risks and uncertainties, undue reliance should not be placed on such information.

The Company's actual results could differ materially from those anticipated in any Forward-Looking Information as a result of various known and unknown risk factors, including (but not limited to) the risk factors referred to under the heading "Risk Factors" in this MD&A. Such risks relate to, but are not limited to, the following:

- The Company may not develop the Project into a commercial mining operation.
- There can be no assurance that market prices for lithium will remain at current levels or that such prices will improve.
- The market for electric vehicles EVs and other large format batteries currently has limited market share and no assurances can be given for the rate at which this market will develop, if at all, which could affect the success of the Company and its ability to develop lithium operations.
- Changes in technology or other developments could result in preferences for substitute products.
- New production of lithium hydroxide or lithium carbonate from current or new competitors in the lithium markets could adversely affect prices.
- The Project is at development stage and the Company's ability to succeed in progressing through development to commercial operations will depend on a number of factors, some of which are outside its control.
- The Company's financial condition, operations and results of any future operations are subject to political, economic, social, regulatory and geographic risks of doing business in Brazil.
- Violations of anti-corruption, anti-bribery, anti-money laundering and economic sanctions laws and regulations could materially adversely affect the Company's business, reputation, results of any future operations and financial condition.
- The Company is subject to regulatory frameworks applicable to the Brazilian mining industry which could be subject to further change, as well as government approval and permitting requirements, which may result in limitations on the Company's business and activities.
- The Company's operations are subject to numerous environmental laws and regulations and expose the Company to environmental compliance risks, which may result in significant costs and have the potential to reduce the profitability of operations.

- Physical climate change events and the trend toward more stringent regulations aimed at reducing the effects of climate change could have an adverse effect on the Company's business and future operations.
- As the Company does not have any experience in the construction and operation of a mine, processing plants and related infrastructure, it is more difficult to evaluate the Company's prospects, and the Company's future success is more uncertain than if it had a more proven history of developing a mine.
- The Company's future production estimates are based on existing mine plans and other assumptions which change from time to time. No assurance can be given that such estimates will be achieved.
- The Company may experience unexpected costs and cost overruns, problems and delays during construction, development, mine start-up and operations for reasons outside of the Company's control, which have the potential to materially affect its ability to fully fund required expenditures and/or production or, alternatively, may require the Company to consider less attractive financing solutions.
- The Company's capital and operating cost estimates may vary from actual costs and revenues for reasons outside of the Company's control.
- The Company's operations are subject to the high degree of risk normally incidental to the exploration for, and the development and operation of, mineral properties.
- Insurance may not be available to insure against all such risks, or the costs of such insurance may be uneconomic. Losses from uninsured and underinsured losses have the potential to materially affect the Company's financial position and prospects.
- The Company is subject to risks associated with securing title and property interests.
- The Company is subject to strong competition in Brazil and in the global mining industry.
- The Company may become subject to government orders, investigations, inquiries or other proceedings (including civil claims) relating to health and safety matters, which could result in consequences material to its business and operations.
- The Company's mineral resource and mineral reserve estimates are estimates only and no assurance can be given that any particular level of recovery of minerals will in fact be realized or that identified mineral resources or mineral reserves will ever qualify as a commercially mineable (or viable) deposit.
- The Company's operations and the development of its projects may be adversely affected if it is unable to maintain positive community relations.
- The Company is exposed to risks associated with doing business with counterparties, which may impact the Company's operations and financial condition.
- Any limitation on the transfer of cash or other assets between the Company and the Company's subsidiaries, or among such entities, could restrict the Company's ability to fund its operations efficiently.
- The Company is subject to risks associated with its reliance on consultants and others for mineral exploration and exploitation expertise.
- The current COVID-19 pandemic could have a material adverse effect on the Company's business, operations, financial condition and stock price.
- The current military conflict in Ukraine and the economic or other sanctions imposed may impact global markets in such a manner as to have a material adverse effect on the Company's business, operations, financial condition and stock price.
- If the Company is unable to ultimately generate sufficient revenues to become profitable and have positive cash flows, it could have a material adverse effect on its prospects, business, financial condition, results of operations or overall viability as an operating business.
- The Company is subject to liquidity risk and therefore may have to include a "going concern" note in its financial statements.
- The Company may not be able to obtain sufficient financing in the future on acceptable terms, which could have a material adverse effect on the Company's business, results of operations and financial

condition. In order to obtain additional financing, the Company may conduct additional (and possibly dilutive) equity offerings or debt issuances in the future.

- The Company may be unable to achieve cash flow from operating activities sufficient to permit it to
  pay the principal, premium, if any, and interest on the Company's indebtedness, or maintain its debt
  covenants.
- The Company has not declared or paid dividends in the past and may not declare or pay dividends in the future.
- The Company will incur increased costs as a result of being a public company both in Canada listed on the TSXV and in the United States listed on the Nasdaq Capital Market ("Nasdaq"), and its management will be required to devote further substantial time to United States public company compliance efforts.
- If the Company does not maintain adequate and appropriate internal controls over financial reporting as outlined in accordance with NI 52-109 or the Rules and Regulations of the SEC, the Company will have to report a material weakness and disclose that the Company has not maintained appropriate internal controls over financial reporting.
- As a foreign private issuer, the Company is subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to its shareholders.
- Failure to retain key officers, consultants and employees or to attract and, if attracted, retain additional key individuals with necessary skills could have a materially adverse impact upon the Company's success.
- The Company is subject to currency fluctuation risks.
- From time to time, the Company may become involved in litigation, which may have a material adverse effect on its business financial condition and prospects.
- Certain directors and officers of the Company are, or may become, associated with other natural resource companies which may give rise to conflicts of interest.
- The market price for the Company's shares may be volatile and subject to wide fluctuations in response to numerous factors beyond its control, and the Company may be subject to securities litigation as a result.
- If securities or industry analysts do not publish research or reports about the Company's business, or if they downgrade the Common Shares, the price of the Common Shares could decline.
- The Company will have broad discretion over the use of the net proceeds from offerings of its securities.
- There is no guarantee that the Common Shares will earn any positive return in the short term or long term.
- The Company has a major shareholder which owns 47.2% of the outstanding Common Shares and, as such, for as long as such shareholder directly or indirectly maintains a significant interest in the Company, it may be in a position to affect the Company's governance, operations and the market price of the Common Shares.
- As the Company is a Canadian corporation but most of its directors and officers are not citizens or
  residents of Canada or the U.S., it may be difficult or impossible for an investor to enforce judgements
  against the Company and its directors and officers outside of Canada and the U.S. which may have
  been obtained in Canadian or U.S. courts or initiate court action outside Canada or the U.S. against
  the Company and its directors and officers in respect of an alleged breach of securities laws or
  otherwise. Similarly, it may be difficult for U.S. shareholders to effect service on the Company to realize
  on judgments obtained in the United States.
- The Company is governed by the Canada Business Corporations Act and by the securities laws of the province of Ontario, which in some cases have a different effect on shareholders than U.S. corporate laws and U.S. securities laws.

- The Company is subject to risks associated with its information technology systems and cybersecurity.
- The Company may be a Passive Foreign Investment Company, which may result in adverse U.S. federal income tax consequences for U.S. holders of Common Shares.

Readers are cautioned that the foregoing lists of assumptions and risks are not exhaustive. The Forward-Looking Information contained in this MD&A is expressly qualified by these cautionary statements. All Forward-Looking Information in this MD&A speaks as of the date of this MD&A. The Company does not undertake any obligation to update or revise any Forward-Looking Information, whether as a result of new information, future events, or otherwise, except as required by applicable securities law. Additional information about these assumptions, risks, and uncertainties is contained in the Company's filings with securities regulators, including the Company's most recent annual and interim MD&A and annual information form, which are available on SEDAR at www.sedar.com.

# **Cautionary Note Regarding Mineral Reserve and Mineral Resource Estimates**

Technical disclosure regarding the Company's properties included in this document has not been prepared in accordance with the requirements of U.S. securities laws. Without limiting the foregoing, such technical disclosure uses terms that comply with reporting standards in Canada and estimates are made in accordance with NI 43-101. Unless otherwise indicated, all mineral reserve and mineral resource estimates contained in the technical disclosure have been prepared in accordance with NI 43-101 and the CIM Definition Standards.

Under the SEC rules regarding disclosure of technical information, the definitions of "proven mineral reserves" and "probable mineral reserves" are substantially similar to the corresponding CIM Definition Standards, and the SEC recognizes "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" which are also substantially similar to the corresponding CIM Definition Standards. However, there are still differences in the definitions and standards under the SEC rules and the CIM Definition Standards. Therefore, the Company's mineral resources and reserves as determined in accordance with NI 43-101 may be significantly different than if they had been determined in accordance with the SEC rules.