



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

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## GLOSSARY

**3D Alliance®:** Technology developed to transform the three-dimensional structure of the raw materials added to the fertilizer. The materials are subjected to a mechanical process, increasing their specific surfaces and forming microparticles that release nutrients progressively. The fertilizers resulting from the mixture are homogeneous and can be evenly distributed in the soil. The 3D Alliance® technology is used in the BAKS® production process.

**ANM:** See “National Mining Agency”.

**BAKS®:** The Group’s newest product, which is a combination of K Forte® (source of potassium, silicon and magnesium) plus three other nutrients that can be chosen by customers according to their crops’ needs. BAKS® was launched by the Group on December 15, 2020.

**Bio Revolution:** Verde’s technology that enables the incorporation of microorganisms to mineral fertilizers. K Forte® will be the first fertilizer in the world to use Bio Revolution technology. The Group has filed for patent protection of its Bio Revolution technology.

**Cerrado Verde Project (“the Project”):** Located in Minas Gerais state, Brazil, it is a potassium-rich deposit 100% owned by Verde, from which the Group is producing solutions for crop nutrition, crop protection, soil improvement, and increased sustainability. The Project has an NI 43-101 Measured and Indicated Mineral Resource Estimate of 1.47 billion tonnes at a grade of 9.28% K<sub>2</sub>O, which includes a Measured Mineral Resource of 1.85 billion tonnes with an average grade of 8.60% K<sub>2</sub>O. The Pre-Feasibility Study of the Project evaluated the technical and financial aspects of producing 50 Mtpy of the Product divided in three scenarios: “Plant 3 Scenario1” (10 Mtpy); “23Mtpy Scenario” (23 Mtpy) and “50Mtpy Scenario” (50 Mtpy). The Cerrado Verde Project has been in production since 2017.

**CIF (“Cost Insurance and Freight”):** Shipment term used to indicate that the seller is responsible for the goods and costs of insurance and freight from the factory to the buyer’s destination.

**Dust Control:** Technology that promotes a slight aggregation effect on the ultrafine particles of K Forte® and BAKS®, enabling the optimization of crop fertilization by reducing drift during application. The micro-particles are easily dispersed in the soil and their contact is maximized by the ultrafine particle size of Verde’s fertilizers, providing uniform application and efficient nutrition to crops.

**Exploration Authorisation Application (“Requerimento de Pesquisa”):** Claim for the geological exploration of an area. Interested parties must file an application for exploration authorisation with the ANM and state a case for conducting mineral exploration activities. The Exploration Authorisation Applications are analysed in

order of filing date. If the party requesting an exploration authorisation meets the necessary legal requirements and an exploration authorisation has not been previously issued for any part of the area in question, then the ANM will grant the exploration authorisation.

**Exploration Authorisation (“Alvará de Pesquisa”):** Once mineral exploration is completed, a final exploration report must be submitted for ANM’s review and approval. If approved, the next step is to file, within one year, all applications for a mining concession with the Ministry of Mines and Energy (MME). The Exploration Authorisation guarantees to the owner, be it an individual or a legal entity, the power and duty to carry out mineral research work in the entitled area. It grants the rights to conduct exploration activities for a period from two to four years, which may be renewed for an additional period (and potentially additional renewals on a case-by-case basis). An exploration authorisation does not entitle the holder the right to extract mineral substances. During the research work, extraction will only be allowed in exceptional circumstances, with a specific title issued by the ANM (see Mining Permit – “Guia de Utilização”). At the end of the research stage, the holder of the mining right must present a Final Exploration Report with the results obtained from the work.

**Environmental License (“Licença Ambiental”):** The environmental licensing process consists of a three-step system, each step is a separate license contingent upon the prior step. In the state of Minas Gerais there is the possibility of licensing phases simultaneously, depending on the size of the project, according to the Normative Resolution 217/2017. The three phases are, as follows:

- **Preliminary License (“Licença Prévia – LP”):** Granted at the planning stage of the project, this license signals the approval of its location, concept and environmental feasibility. It establishes the basic requirements to be met during the subsequent implementation phases. The maximum term for LPs is five years.
- **Installation License (“Licença de Instalação – LI”):** This license authorises the setup of the works and commencement of construction based on the specifications set forth in the previous license and the approved plans, programs and project designs, including environmental control measures. The maximum term for LIs is six years.
- **Operating License (“Licença de Operação – LO”):** This license authorises the operation contingent upon compliance with the terms of the LO and the LI, including any environmental control measures and operating conditions. The maximum term for LOs is 10 years.

At the federal level, the environmental licenses are regulated by the Brazilian National Council for the Environment (“Conselho Nacional do Meio Ambiente - CONAMA”) Resolution No. 237/1997 and by Complementary Law No. 140/2011; at the state level, the environmental license are regulated by the State Environmental Policy Council (“Conselho Estadual de Política Ambiental – COPAM”).

**Feasibility Study (“Plano de Aproveitamento Econômico – PAE”):** report filed as part of the Mining Concession Application. It demonstrates quantitative geological and technological study of the mineral deposit and as well as demonstrating the technical-economic feasibility of a mine.

**Final Exploration Report (“Relatório Final de Pesquisa”):** At the end of the exploration stage, the holder of the mining right must present a Final Exploration Report with the results obtained from the work, containing a quantitative geological and technological study of the mineral deposit and demonstrate the technical-economic feasibility of a mine. The ANM analyses this report technically through a site visit. If the ANM approves the report based on the potential merits of a future mining operation, the titleholder has a one-year period to prepare and file the Mining Concession Application with the Federal Minister of Mines and Energy.

**FOB (“Free on Board”):** Shipment term used to indicate that the buyer is responsible for the goods and costs of insurance and freight from the seller’s product factory.

**Glauconitic Siltstone:** The source of a naturally occurring potassium silicate rock, which has been used as a natural potassium fertilizer for over 250 years. Glauconitic Siltstone is the raw material for all of Verde’s Products. It is composed by glauconite (40%-80%), K-feldspar (10%-15%), quartz (10%-60%), muscovite-sericite (5%), biotite (2%), titanium oxide (<1%), manganese oxide (<1%), goethite (<1%), barium phosphate and rare-earth element phosphates (trace amounts).

**Group:** Verde AgriTech Ltd (Verde AgriTech Plc to July 29, 2022) and its subsidiaries.

**Hectare:** One hectare is equal to 10,000 square meters and is equivalent to approximately 2.47 acres.

**KCl:** See “Potassium Chloride”.

**K Forte® (“the Product”):** Multinutrient potassium fertilizer brand marketed in Brazil by the Group.

**K<sub>2</sub>O:** Chemical term used in the analysis and marketing of fertilizers that contain different potassium compounds, as a comparison of their relative potassium content when compared to equivalent potassium oxide (K<sub>2</sub>O).

**Kilometer:** Metric unit of measurement approximately equal to 0.62 miles.

**MME:** See “Ministry of Mines and Energy”.

**Micro S Technology®:** The Group’s exclusive elemental sulfur micronization technology, that allows for a larger contact surface. This facilitates the work of microorganisms and oxidation rate increases and so nutrients become available to plants more efficiently. This increases the absorption of sulfur and, consequently,

the development of the plant. Micro S Technology® allows micronized sulfur, one of the additional nutrients most required by farmers, to be added to BAKS®.

**Mine Site:** An economic unit comprised of an underground and/or open pit mine, a treatment plant and equipment and other facilities necessary to produce metals concentrates, in existence at a certain location.

**Mineral Reserve:** A mineral reserve is the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which mineral reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

**Probable Mineral Reserve:** The economically mineable part of an indicated, and in some circumstances, a measured mineral resource. The confidence in the modifying factors applied to a probable mineral reserve is lower than that applied to a proven mineral reserve.

**Proven Mineral Reserve:** The economically minable part of a measured mineral resource. A proven mineral reserve implies a high degree of confidence in the modifying factors.

**Mineral Resource** A mineral resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

- **Indicated Mineral Resource:** That part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An indicated mineral resource has a lower level of confidence than that applied to a measured mineral resource and may only be converted to a probable mineral reserve.

- **Inferred Mineral Resource:** That part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An inferred mineral resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.
- **Measured Mineral Resource:** That part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. A measured mineral resource has a higher level of confidence than that applying to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.

**Mineral Right (“Direito Minerário”):** Authorisation to research and/or prospect a tenement. It is granted by the federal government through the ANM or the MME, depending on their respective competencies.

**Mineralization:** The concentration of minerals within a body of rock.

**Mining Concession Application (“Requerimento de Lavra”):** This application must satisfy certain requirements, including the presentation of the mining Group’s Feasibility Study (“Plano de Aproveitamento Econômico – PAE”). While the ANM reviews the application for a mining concession, the applicant retains the exclusive rights to this area. Mine construction and development activity can only begin after the publication of a mining concession issued by the MME and provided that the respective license is also granted pursuant to applicable Brazilian environmental laws.

**Mining Concession (“Portaria de Concessão de Lavra”):** guarantees to the owner the power and duty to explore the mineral deposit until it is exhausted, without a definite term. The title can only be obtained by mining companies and only after undertaking the authorised exploration through an exploration authorisation and subsequent approval of the Final Exploration Report. One of the essential documents for requesting a mining concession is the Feasibility Study, which must demonstrate the technical and economic viability of the

project and indicate, among other information, the mining method, the planned scale of production and the mine closure plan.

**Mining Permit (“Guia de Utilização”):** exceptional mining permit with predetermined expiration date. It is granted by the ANM and allows the mineral extraction in the area before the grant of a Mining Concession, according to the environmental legislation.

**Ministry of Mines and Energy (“Ministério de Minas e Energia – MME”):** federal government’s branch responsible for making public policy that covers the geological, mineral and energy resources, hydroelectric, mining, and metallurgic energy sectors.

**Mtpy:** Million tonnes per year.

**N Keeper® Technology:** proprietary processing technology for glauconitic siltstone that alters its physical-chemical properties to enable ammonia retention for use as a calibrated additive in Nitrogen fertilizers. N Keeper® leads to the reduction of Nitrogen volatilization loss, which increases the efficiency of crop fertilization and mitigates the impact on the environment and climate changes.

**National Mining Agency (“Agência Nacional de Mineração – ANM”):** federal agency subordinated to the Ministry of Mines and Energy. It is responsible for the management of mining activities and Brazilian mineral resources. Former National Department of Mineral Production (“Departamento Nacional de Produção Mineral - DNPM”).

**NI 43-101:** National Instrument 43-101 - Standards of Disclosure for Mineral Projects within C 1a.

**Open Pit:** Surface mining in which the ore is extracted from a pit. The geometry of the pit may vary with the characteristics of the ore body.

**Ore:** A mineral or aggregate of minerals from which metal can be economically mined or extracted.

**Ore Grade:** The average amount of K<sub>2</sub>O expressed as a percentage.

**P4G”:** See “Paid for Growth”.

**Paid for Growth (“P4G”):** Verde’s cornerstone program aimed at distributing gains to shareholders.

**PFS:** See “Pre-Feasibility Study”.



**Potassium chloride (“KCl”):** The most commonly used source of potash. It is composed of approximately 52% of potassium (“K”) and 47% of Chloride ( $\text{Cl}^-$ ), representing 60% of  $\text{K}_2\text{O}$ . Potassium Chloride’s salinity index is 116. According to the article ‘Effects of Some Synthetic Fertilizers on the Soil Ecosystem’ (HEIDE HERMARY, 2007), applying 1 pound of potassium chloride to the soil is equivalent to applying 1 gallon of bleach. Verde’s Product eliminates the need for Potassium Chloride. KCl is also frequently referred to as muriate of potash (“MOP”).

**Pre-Feasibility Study (“PFS”):** A pre-feasibility study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the mineral resource may be converted to a mineral reserve at the time of reporting. A pre-feasibility study is at a lower confidence level than a feasibility study.

**Product:** Multinutrient potassium fertilizer marketed in Brazil under the brands K Forte® and BAKS® and internationally as Super Greensand®, the production and sale of which is the principal activity of the Group.

**Tonne:** A unit of weight. One metric tonne equals 2,204.6 pounds or 1,000 kilograms.

**tpy:** Tonnes per year.

**Qualified Person:** As defined in NI 43-101, an individual who: (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; (b) has experience relevant to the subject matter of the mineral project and the technical report; and (c) is a member or licensee in good standing of a professional association.

**Super Greensand® (“the Product”):** Multinutrient potassium fertilizer brand marketed internationally by the Group.

## TO OUR SHAREHOLDERS

The following Management's Discussion and Analysis ("**MD&A**") of the operating results and financial condition of Verde AgriTech Ltd and its subsidiaries ("**Verde**" or the "**Group**") covers the year ended December 31, 2022 ("**FY 2022**").

It provides information that management believes is relevant to an assessment and understanding of the consolidated results of operations and financial condition. This MD&A should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2022 ("**FY 2022**"). The audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**") and their interpretations issued by the International Accounting Standards Board ("**IASB**"), as adopted by the United Kingdom and with IFRS and their interpretations issued by the IASB.

Verde AgriTech Plc ("Old Verde") was a public limited company incorporated and domiciled in the United Kingdom that became a wholly owned subsidiary of Verde AgriTech Ltd ("New Verde"), a Group incorporated under the laws of Singapore, by way of a scheme of arrangement effective on July 29, 2022.

As part of the redomicile, Old Verde ordinary shares were exchanged on a one-for-one basis for common shares of New Verde and New Verde will be accounted for as a continuation of Old Verde. Verde AgriTech Ltd's registered office is 16 Collyer Quay, #17-00, Income at Raffles, Singapore, 049318.

New Verde's ordinary shares trade on the Canadian Toronto Stock Exchange ("TSX") under the same symbol as Old Verde, "NPK", and on the OTC Markets ("OTCMKTS") under the symbol "VNPKF".

All amounts herein are expressed in Canadian Dollars unless otherwise stated, and the information is current to March 30, 2023.

On December 31, 2022, the average rate of exchange was 3.97 and the closing rate was 3.90 Brazilian Real ("**R\$**") to the Canadian Dollar. These rates were used to prepare these financial results.

Additional information relating to Verde is available under the Group's profile on SEDAR at [www.sedar.com](http://www.sedar.com) and the Group's website at [www.investor.verde.ag](http://www.investor.verde.ag).

## FORWARD LOOKING STATEMENTS

This MD&A contains forward-looking statements. Although the Group believes that its expectations, reflected in forward-looking information, to be reasonable, such information involves known or unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Group or the Group's projects in Brazil to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such risk factors include, but are not limited to: general business, economic, competitive, political and social uncertainties; the actual results from current development activities; conclusions of economic evaluations; unexpected increases in capital or operating costs; changes in equity markets, inflation and changes in foreign currency exchange rates; changes in project parameters as plans continue to be refined; changes in labour costs; future prices of commodities; possible variations of mineral grade or recovery rates; accidents, labour disputes and other risks of the mineral exploration industry; political risks arising from operating in Brazil; delays in obtaining governmental consents, permits, licenses and registrations; approvals or financing; as well as those factors discussed in the section entitled "Risks" in this MD&A.

Although the Group has attempted to identify important factors that could cause actual actions, events, or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The forward-looking information contained herein, unless stated otherwise, is made at the date of this MD&A and the Group takes no responsibility to update them or to revise them to reflect new events or circumstances, except as required by law.

## GROUP OVERVIEW

Verde is an agricultural technology group of companies that produces potassium fertilizers. The Group's purpose is to improve the health of all people and the planet. Rooting our solutions in nature, we make agriculture healthier, more productive, and profitable.

The Group's ordinary shares trade on the Canadian Toronto Stock Exchange ("**TSX**") under the symbol "NPK", and on the OTC Markets ("**OTCMKTS**") under the symbol "VNPKF".

The principal activity of the Group is the production and sale of a multinutrient potassium fertilizer marketed in Brazil under the brands K Forte® and BAKS®, and internationally as Super Greensand® ("**the Product**").

## GROUP OVERVIEW (CONTINUED)

Cerrado Verde Project, located in the heart of Brazil's largest agricultural market, is the source of a naturally occurring potassium silicate rock from which the Group produces its Products, to supply salinity and chloride free potassium specialty fertilizers directly to farmers for the same cost as conventional fertilizers.

In November 2017, the Company announced the conclusion of a Pre-Feasibility Study ("**2017 PFS**") for the expansion of production. The 2017 PFS evaluated the technical and financial aspects of producing 25 Mtpy of the Product divided in three phases: Phase 1 (0.6Mtpy); Phase 2 (5Mtpy) and Phase 3 (25Mtpy). The proposed scalable development was predicated on production growth being financed largely from expected internal cash flow.<sup>1</sup>

After announcing the start-up of its processing plant in July 2018, the Group concluded Plant 1's expansion project in October 2019, increasing production capacity to 500,000 tonnes per year ("**tpy**") and to 600,000 tpy after that, due to a mill replacement. In October 2020, the Group concluded a new expansion project to Plant 1, enabling the combination of two additional nutrients to the Product according to the specific needs of each customer's crop, enhancing its effectiveness.

In August 2021, the Group started the construction of Plant 2, initially with a 1,200,000 tpy production capacity, as announced by the Group in the press release published on March 03, 2022.<sup>2</sup>

In February 2022, the Group created a Special Committee to evaluate when and how to share profits with shareholders.<sup>3</sup> The Special Committee that conducted the analysis was comprised of independent directors of the Board, consisting of Mr. Michael St Aldwyn (Verde's Lead Independent Director), Mr. Renato Gomes and Mr. Paulo Sérgio Ribeiro.

In April 2022, Bio Revolution, Verde's newest technology that enables the incorporation of microorganisms to mineral fertilizers, was launched by the Group. K Forte® is the first fertilizer in the world to use Bio Revolution technology. *Bacillus aryabhattai*, a bacterial strain widely renowned in agriculture for its multiple benefits, will be the first microorganism to be incorporated into Verde's Product.

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<sup>1</sup> See the Pre-Feasibility Study at: <https://investor.verde.ag/wp-content/uploads/2021/01/NI-43-101-Pre-Feasibility-Technical-Report-Cerrado-Verde-Project.pdf>

<sup>2</sup> See the release at: <https://investor.verde.ag/verde-to-reach-3-million-tonnes-potash-production-capacity-in-2022/>

<sup>3</sup> See the press release at: <https://investor.verde.ag/verde-announces-creation-of-independent-special-committee-of-the-board-of-directors/>

## GROUP OVERVIEW (CONTINUED)

In May 2022, Verde concluded the updated Pre-Feasibility Study (“**PFS**”) for the Cerrado Verde Project, which supplants the Pre-Feasibility Study completed in December 2017, calculating the financial economic potential for the Brazilian agricultural market for potash, sulphur, and the micronutrients zinc, boron, copper and manganese. The PFS contemplates three distinct and independent production scenarios for Verde’s Product with the annual production of 10Mtpy, 23Mtpy and 50Mtpy.<sup>4</sup>

In May 2022, the Group announced its plans for first distribution of gains to shareholders and restructure of the Group, with the re-domicile Verde to Singapore (the “**Re-domiciliation**”) to deliver commercial freedoms and benefits.

In July 2022 the Group concluded its re-domiciliation to Singapore, pursuant to which the new Singaporean Group, Verde AgriTech Ltd, became the holding Group of the UK Group Verde AgriTech Plc. Verde’s trading symbol on TSX did not change, continuing as “NPK”.<sup>5</sup> The Group’s trading symbol on the OTCMKTS is “VNPKE”.

In August 2022, the Group announced the commissioning of its second production plant (“**Plant 2**”), to produce up to 1.2 Mtpy of the Product. It achieved its nameplate capacity in October 2022. In parallel, Plant 2 was undergoing an expansion process to be capable of producing 2.4Mtpy.

In August 2022, the Group announced that it has entered a strategic partnership with Grupo Lavoro, the largest distributor of agricultural inputs in Latin America, to more swiftly open up new markets for the Product in Brazil.<sup>6</sup>

In September 2022, the Group informed that roadworks it was performing for increased truck accessibility to and from its Plant 2 incurred unforeseen groundwater issues,<sup>7</sup> which were rectified in October 2022.<sup>8</sup> As a consequence, Plant 2’s production delivery was limited for approximately 6 weeks during Brazilian agricultural seasonality’s peak demand for Product, thereby negatively impacting the Group’s full year volume.

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<sup>4</sup> See the press release at: <https://investor.verde.ag/verde-announces-pre-feasibility-study/>

<sup>5</sup> See the press release at: <https://investor.verde.ag/verde-announces-completion-of-redomiciliation-process-to-singapore/>

<sup>6</sup> See the release at: <https://investor.verde.ag/verde-announces-strategic-sales-partnership-with-lavoro-latin-americas-largest-distributor-of-agricultural-inputs/>

<sup>7</sup> See the press release at: <https://investor.verde.ag/verde-provides-update/>

<sup>8</sup> See the press release at: <https://investor.verde.ag/verde-concludes-repair-of-road-to-plant-2/>

## GROUP OVERVIEW (CONTINUED)

In September 2022, after serving on Verde's Board of Directors for a combined total of over 24 years, Mr. Getúlio Fonseca, Mr. Paulo Sérgio Ribeiro and Mr. Michael St Aldwyn resigned as Group directors.<sup>9</sup> This was a part of the Group's strategy of Board renewal to better meet the threshold set by certain shareholder advisory firms, which have deemed part of its Board as 'non-independent directors' either because the directors hold too many shares in the Group or the directors have held extensive tenures. Mr. Fonseca, Mr. Ribeiro and Mr. St Aldwyn's resignation was followed by the appointment of Luciana de Oliveira Cezar Coelho, Fernando Prezzotto<sup>10</sup> and Madeleine Lee<sup>11</sup> to act as directors. Ms. Oliveira Cezar Coelho and Ms. Lee were the first women to join the Group's Board.

In October 2022, the Group that Plant 2 achieved its nameplate production capacity of 1.2 Mtpy of Product. Plant 2 was commissioned on August 31, 2022. In parallel, Plant 2 was undergoing an expansion process to be capable of producing 2.4Mtpy.

In November 2022, Verde announced that the expansion of Plant 2 was complete, with production being ramped up from 1.2 Mtpy to 2.4 Mtpy of Verde's Product. Verde's Plant 1 operates at a capacity of 0.6Mtpy; therefore, Verde's current overall production capacity is 3Mtpy, establishing the Company as Brazil's largest potash producer by capacity.

In November 2022, the Brazilian National Mining Agency ("ANM", from *Agência Nacional de Mineração*) issued a set of orders granting Verde multiple easements over lands that will enable the Company to access and build the mines capable of jointly producing up to 23 Mtpy of the Product, as detailed in the PFS.<sup>12</sup> An easement grants a right to cross or otherwise use someone else's land for a specified purpose without the need to own the land. As in most jurisdictions, in Brazil the mineral right is separate from the right to surface land. Verde received multiple favorable decisions from the ANM determining that Verde is entitled to 1,439 hectares of easements, sufficient to enable the Company to implement the 23Mtpy scenario of its PFS, which has a subsequent scenario of 50Mtpy.

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<sup>9</sup> See the press release at: <https://investor.verde.ag/verde-concludes-repair-of-road-to-plant-2/>

<sup>10</sup> See the press release at: <https://investor.verde.ag/luciana-de-oliveira-cezar-coelho-and-fernando-prezzotto-join-verdes-board-of-directors/>

<sup>11</sup> See the press release at: <https://investor.verde.ag/madeleine-lee-joins-verdes-board-of-directors/>

<sup>12</sup> See the NI 43-101 Pre-Feasibility Technical Report for further information: <https://investor.verde.ag/wp-content/uploads/2022/05/NI-43-101-Pre-Feasibility-Technical-Report-for-the-Cerrado-Verde-Project.pdf>

## GROUP OVERVIEW (CONTINUED)

In December 2022, Verde filed a request with the National Land Transport Agency (“**ANTT**”, from *Agência Nacional de Transportes Terrestres*) for authorization to build a railway branch line (the “**Railway**”) to transport up to 50 Mtpy of the Product.<sup>13</sup> The Railway will connect Verde’s facilities in São Gotardo to Ibiá, both municipalities in Minas Gerais state, where there is a railway node, part of the Ferrovia Centro Atlântica (“**FCA**”). FCA is the largest railroad network in Brazil, interconnecting seven states and the Federal District.

## FY 2022 FINANCIAL HIGHLIGHTS

- Revenue increased by 190% in FY 2022, to \$80,271,000 compared to \$27,709,000 in FY 2021.
- Revenue in Brazilian Real (“**R\$**”) increased by 167% in FY 2022, to R\$318,544,000, compared to R\$119,310,000 in FY 2021.
- Sales of Verde's multinutrient potassium products, BAKS® and K Forte® sold internationally as Super Greensand® (the “Product”) by volume increased by 57% in FY 2022, to 628,000 tonnes compared to 400,000 tonnes in FY 2021.
- Gross margin increased to 78% in FY 2022, compared to 74% in FY 2021.
- EBITDA before non-cash events increased by 271% in FY 2022, to \$23,912,000 compared to \$6,450,000 in FY 2021.
- Net profit increased by 405%, to \$17,804,000 in FY 2022 compared to \$3,522,000 in FY 2021.
- Capital expenditures increased to \$41,623,000 in FY 2022 compared to \$2,179,000 in FY 2021.

## Q4 2022 FINANCIAL HIGHLIGHTS

- Revenue increased by 55% in Q4 2022, to \$16,837,000 compared to \$10,851,000 in Q4 2021.
- Revenue in R\$ increased by 43% in Q4 2022, to R\$66,814,000 compared to R\$46,723,000 in Q4 2021.
- Sales by volume decreased by 7% in Q4 2022, to 125,000 tonnes, compared to 134,000 tonnes in Q4 2021.
- Gross margin increased to 76% in Q4 2022, compared to 75% in Q4 2021.
- EBITDA before non-cash events decreased by 47% in Q4 2022 to \$1,293,000, compared to \$2,452,000 in Q4 2021.
- Net loss was \$1,312,000 in Q4 2022, compared to a \$1,878,000 profit in Q4 2021.

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<sup>13</sup> See the press release at: <https://investor.verde.ag/construction-permit-for-railway-to-freight-up-to-55-market-share-requested-by-verde/>

## 2022 OVERVIEW

### Fertilizer demand and commodities market

At the onset of the Ukrainian war, in February 2022, concerns that geopolitical sanctions against Russia would cause significant shortage of potash fertilizers resulted in a 154% surge in the average price of potash between March and July, compared to 2021.<sup>14</sup> However, this fear proved unfounded, as there was actually a glut of potash in the market due to increased availability, resulting in a 45% surge in potash imports by Brazil over the same period, compared to 2021.<sup>15</sup> This oversupply, combined with a 15% drop in potash consumption in Brazil in 2022,<sup>16</sup> contributed to a challenging market for fertilizer producers.

#### Brazil potassium chloride imports ('000 tonnes)<sup>17</sup>

Month	2021	2022	YoY	2023	YoY
January	738	695	-6%	501	-28%
February	977	896	-8%	729	-19%
March	730	855	17%	-	-
April	643	1,181	84%	-	-
May	807	1,413	75%	-	-
June	987	1,552	57%	-	-
July	1,283	1,471	15%	-	-
August	1,454	944	-35%	-	-
September	1,211	663	-45%	-	-
October	1,349	649	-52%	-	-
November	1,409	458	-67%	-	-
December	941	511	-46%	-	-
<b>Year total</b>	<b>12,529</b>	<b>11,288</b>	<b>-10%</b>	<b>N/A</b>	<b>N/A</b>

<sup>14</sup> Acerto Limited Report.

<sup>15</sup> Source: Brazilian Comex Stat, available at: <http://comexstat.mdic.gov.br/en/geral>

<sup>16</sup> Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).

<sup>17</sup> Source: Brazilian Comex Stat, available at: <http://comexstat.mdic.gov.br/en/geral>



## 2022 OVERVIEW (CONTINUED)

The table below compares Brazil's monthly average KCl CFR prices from 2021 to 2023:

**KCl CFR average spot price (US\$)<sup>18</sup>**

Month	2021	2022	YoY	2023	YoY
January	256	772	202%	510	-34%
February	285	781	174%	498	-36%
March	309	1018	229%	473	-54%
April	338	1183	250%	-	-
May	366	1113	204%	-	-
June	449	1030	129%	-	-
July	617	943	53%	-	-
August	680	883	30%	-	-
September	740	711	-4%	-	-
October	780	624	-20%	-	-
November	788	571	-28%	-	-
December	780	513	-34%	-	-

In 2022, the remaining fertilizer stock in Brazil increased by 16% compared to the previous year, while the potash stock saw a 23% increase during the same period. These figures demonstrate a lower overall demand for these products over the year.

**Year-end stock in Brazil ('000 tonnes)<sup>19</sup>**

	2021	2022	YoY
Fertilizers <sup>20</sup>	7,274	8,441	16%
Potassium Chloride	1,740	2,148	23%

**Potassium chloride production, imports and consumption in Brazil ('000 tonnes)<sup>21</sup>**

	2021	2022	YoY
Nacional production	335	290	-13%
Imports	12,529	11,288	-10%
Consumption	12,868	10,948	-15%

<sup>18</sup> Acerto Limited Report.

<sup>19</sup> Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).

<sup>20</sup> Fertilizers include: ammonium sulfate, urea, nitrate, diammonium phosphate, monoammonium phosphate, single superphosphate, triple superphosphate, thermophosphate, natural phosphate, potassium chloride, NPKs and others.

<sup>21</sup> Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).

## 2022 OVERVIEW (CONTINUED)

The price for Brazil's main agricultural commodities has also been following. Coffee and soybeans have fallen 28% and 7%, respectively, from January to December 2022.<sup>22</sup>

### Production capacity

In the first months of 2022, Verde faced record demand for its Product from customers looking to build potash inventories ahead of an expected market shortage. However, despite the expected start date for Plant 2 operations and increase in production capacity, the Group had to halt the sale of its Product for Q3 and Q4 delivery due to anticipated inability to supply the demand.

In addition to that, Verde could not fulfill all the orders in its books during the peak season between Q3 and Q4 due to limited access to and from Plant 2, caused by unforeseen groundwater issues that impacted the new road construction. As agriculture is a seasonal business with a determined period for applying fertilizers for each crop, some of Verde's customers had to cancel their orders. This had an impact on the Group's results, which could have been better if Plant 2 had started producing and delivering on schedule.

### Brazilian Economy and Elections

The presidential election in Brazil brought additional challenges to farmers' purchasing decisions for the 2022/2023 harvests. The fertilizer market was stagnant before the elections, with many customers holding off on purchasing. Following the elections, the market remained stagnant due to concerns and uncertainty surrounding the new government policies.

The Central Bank of Brazil (the “**Bank**”) kept its monetary policy interest rate (“**SELIC**”) unchanged at 13.75% for the fifth consecutive meeting in March 2023. The Bank's Monetary Policy Committee (“**Copom**”) mentioned that global activity and inflation remain resilient, and the monetary tightening continues to advance in major economies. Copom decided to maintain its strategy for a longer period to ensure the convergence of inflation, while won't hesitate to resume the tightening cycle if the disinflationary process does not proceed as expected.

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<sup>22</sup> Economic Research Center of the ESALQ/University of São Paulo. Available at: <https://www.cepea.esalq.usp.br/br/indicador/soja.aspx>

2022 OVERVIEW (CONTINUED)

Most recent economic activity indicators continue to corroborate the deceleration scenario. Annual inflation eased to 5.6% in February 2023, while inflation expectations for 2023 and 2024 have increased to 6.0% and 4.1%, respectively.<sup>23</sup> The table below shows the SELIC rates from 2018 to 2023:

SELIC interest rates<sup>24</sup>

March 2018	March 2019	March 2020	March 2021	March 2022	March 2023
6.50%	6.50%	3.75%	2.75%	11.75%	13.75%

The Brazilian economy closed the year 2022 with an accumulated growth of 2.9%, according to the Gross Domestic Product (“GDP”) data released by the Brazilian Institute of Geography and Statistics (“IBGE”). In the fourth quarter of 2022, Brazilian GDP was negative after five consecutive increases. The decrease was 0.2% in relation to the immediate previous three months, which reflects a scenario of deceleration of economic activity.<sup>25</sup>

Coffee sector impacts

The Brazilian coffee sector experienced significant challenges in 2022 due to adverse climate conditions, following on two years of frost and drought,<sup>26,27</sup> which disrupted global commodity markets and impacted crop productivity for years to come. **As a result, many farmers opted not to apply fertilizers as they anticipated low yields in the next harvests.**

The state of Minas Gerais is the Brazilian state with the highest production of arabica coffee, which represents 69% of the total production of this species in the country.

<sup>23</sup> Copom maintains the Selic rate at 13.75% p.a (Banco Central do Brasil). Available at: <https://www.bcb.gov.br/en/pressdetail/2467/nota>

<sup>24</sup> Source: Banco Central do Brasil. Available at: <https://www.bcb.gov.br/en>

<sup>25</sup> Brazil's GDP Grows 2.9% in 2022 but Retreats 0.2% in 4th Quarter (Folha de São Paulo). Available at: <https://www1.folha.uol.com.br/internacional/en/business/2023/03/brazils-gdp-grows-29-in-2022-but-retreats-02-in-4th-quarter.shtml>

<sup>26</sup> Brazil's Weather-Damaged Coffee Trees Will Take Years to Recover (Bloomberg). Available at: <https://www.bloomberg.com/news/articles/2022-10-04/brazil-s-weather-damaged-coffee-trees-will-take-years-to-recover?leadSource=uverify%20wall>

<sup>27</sup> Coffee prices may face volatility amid unknown harvest figures (Valor Internacional). Available at: <https://valorinternational.globo.com/agribusiness/news/2023/01/04/coffee-prices-may-face-volatility-amid-unknown-harvest-figures.ghtml>

## 2022 OVERVIEW (CONTINUED)

The biennial cycle is a characteristic of coffee trees, which consists of an alternation of a year with a large flowering followed by another with less intensity in July/August. Recently, with the incidence of hail and strong winds in the main coffee-growing regions,<sup>28</sup> it can not only damage current productivity levels but also alter the cycle of the next year, when, despite being a positive biennial crop, it may present reduced productivity levels, as in 2022.

In 2021, a lower production was already expected compared to that observed in 2020 due to the productive biennial cycle of Arabica coffee. However, the 2021 harvest was further affected by negative bienniality due to adverse weather conditions, with the incidence of water scarcity combined with frost during the harvest. These occurrences brought about a significant reduction in productivity levels for this harvest, which had a great impact on next year's harvest.

The national average productivity was 27.7 sacks per hectare ("**scs/ha**"), only 4.8% higher than that of the 2021 harvest, a year of negative bienniality, and 19.3% lower than that recorded in the 2020 harvest, a year of positive bienniality, like 2022.

In Minas Gerais, the largest national producer, the average productivity was 21.6 scs/ha, 4.6% lower than the 2021 harvest, a year of negative bienniality.

The adverse weather conditions recorded before the start of this cycle, as well as throughout this season, affected the crops to some extent. Prolonged periods of drought and cold fronts that even resulted in frost in some areas affected crops in important phenological phases, impacting flowering, load, and fruit "catching," as well as their development. During the harvest, a fruit load well below expectations was noticed, with fewer grains than usual, and their weight below average.

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<sup>28</sup> Source: INMET - National Institute of Meteorology (Brazilian Ministry of Agriculture And Livestock). Status of the Climate in Brazil in 2022. Available at: <https://portal.inmet.gov.br/uploads/notastecnicas/Estado-do-clima-no-Brasil-em-2022-OFICIAL.pdf>

### Coffee productivity report in the Southeast Region states of Brazil<sup>29</sup>

Southeast Region States	2019	2020	YoY	2021	YoY	2022	YoY
ES	34.27	34.87	1.8%	35.4	1.5%	41.5	17.4%
RJ	20.92	31.00	48.2%	20.7	-33.1%	28.1	32.4%
SP	21.55	30.67	42.3%	20.2	-34.1%	22.0	8.5%
SUL	25.83	26.40	2.2%	26.5	0.4%	18.4	-30.7%
<b>MG</b>	<b>24.96</b>	<b>33.27</b>	<b>33.3%</b>	<b>22.6</b>	<b>-32.1%</b>	<b>21.6</b>	<b>-4.6%</b>
<b>Brazilian average productivity</b>	<b>27.20</b>	<b>33.48</b>	<b>23.1%</b>	<b>26.4</b>	<b>-21.2%</b>	<b>27.7</b>	<b>4.8%</b>

The coffee sector is a major consumer of Product during the last quarter of the year and Verde has a competitive geographical advantage thanks to its proximity to major coffee growers in Brazil, reducing freight costs and boosting margins. Therefore, the decline in Product sales in the coffee sector had an outsized impact on the Group's Q4 2022 results.

In 2021, Verde's sales to the coffee sector in Q4 represented 9% of total sales in the quarter and in 2022, 5% of total sales in the quarter. The total sales volume of the Group decreased by 7% in Q4 2022 compared to Q4 2021, but the sales volume made to the coffee sector had a decline of 43% in the same period, as can be seen in the table below:

### Percentage of sales made to the coffee sector in the fourth quarter

Year	Q4 total sales (tonnes of K Forte)	Q4 sales made to the coffee sector (tonnes of K Forte)	Sales made to the coffee sector (% of total sales in Q4)
<b>2018</b>	29,648	4,131	14%
<b>2019</b>	32,221	6,953	22%
<b>2020</b>	56,585	14,149	25%
<b>2021</b>	134,000	11,952	9%
<b>2022</b>	125,000	6,757	5%
YoY	-7%	-43%	-4%

<sup>29</sup> Source: Brazilian National Supply Group (CONAB), Ministry of Agrarian Development and Family Agriculture. 4th Survey of the Coffee Harvest (December). Available at: [2020](#), [2021](#) and [2022](#).

## 2022 OVERVIEW (CONTINUED)

The total number of Verde's customers in the coffee sector decreased from 98 in Q4 2021 to 49 in Q4 2022. Despite that, the percentage of the clients' total purchase potential (in tonnes of Product) that was supplied by Verde increased from 29% in Q4 2021 to 63% Q4 2022, demonstrating an increase in market adoption due to customers applying Verde's product on a larger area of their farms.

### Percentage of clients' purchase potential (in tonnes of Product) supplied by Verde

Year	Number of customers from the coffee sector in Q4	Percentage of clients' purchase potential supplied by Verde
2021	98	29%
2022	49	63%

"When the war in Ukraine broke out, there were concerns about a potential shortage of potash. In reality, however, the market was oversupplied. Throughout 2022, many farmers refrained from buying potash due to the unprecedented soaring prices, resulting in a 15% Brazilian potash imports and, consequently, a record inventory build-up.<sup>30</sup> In Brazil, the last quarter of 2022 saw the convergence of several unfavourable factors, including pre and post-electoral tensions that drastically reduced investments by farmers. Moreover, two years of bad weather severely affected coffee harvests in Brazil, leading coffee growers to reduce expenditure on inputs. Despite all these challenges, which are unlikely to recur in 2023, I am proud to share Verde's record growth and financial results for the year", commented Mr. Veloso.

In 2022, Verde presented a growth of 386% in EPS, 271% in EBITDA, 190% in revenue and 57% in sales compared to the previous year, as can be seen in the table below:

### FY 2022 growth compared to FY 2021

Period	Year	EPS (C\$)	EBITDA <sup>31</sup> (C\$'000)	Revenue (C\$'000)	Sales (tonnes)
FY	2021	0.07	6,450	27,709	400,133
	2022	0.34	23,912	80,271	628,000
	YoY	386%	271%	190%	57%

<sup>30</sup> Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).

<sup>31</sup> Before non-cash events.

## OPERATIONS

In February 2022, the Group received a new Mining Concession for the extraction of up to 2,500,000 tpy of Product. Verde is now fully permitted to produce up to 2,833,000 tpy.<sup>32</sup>

In February 2022, the Group's Board of Directors unanimously approved an accelerated investment program to bolster an expansion plan, that has two objectives: First, expand Plant 2's operational capacity from 1,200,000 to 2,400,000 tpy; and second, upgrade local infrastructure to sustain Plant 2's logistics with added capacity to enable a future Plant 3.<sup>33</sup>

In February 2022, Verde AgriTech Ltd (Verde AgriTech Plc to July 29, 2022)'s Brazilian subsidiaries, Verde Fertilizantes LTDA and FVS Mineração LTDA, earned ISO 9001 and ISO 14001 certifications.

In August 2022, the Group announced the commissioning of its second production plant ("**Plant 2**"), to produce up to 1.2 Mtpy of the Product. It achieved its nameplate capacity in October 2022. In parallel, Plant 2 was undergoing an expansion process to be capable of producing 2.4Mtpy, construction which is now concluded.

Verde's Plant 1 operates at a capacity of 0.6Mtpy; therefore, Verde's current overall production capacity is 3Mtpy.

## SUMMARY OF LICENSES AND PERMITS<sup>34</sup>

In November 2022, Verde filed an Operating Environmental License Application for extraction of up to 22.5 million tonnes per year ("**Mtpy**") of potash rich ore for its Mine Pit 2, that is processed into Verde's Product.

Under Brazilian law, a pit is fully permitted to mine when the Group holds both a Mining Concession/Permit and Environmental License for that area. With this latest Environmental License Application, Verde is now fully permitted to mine 2,833,000 tpy and has submitted concurrent mining and environmental applications for an additional 25,000,000 tpy, still pending approval.

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<sup>32</sup> See the release at: <https://investor.verde.ag/2-5-million-tonnes-per-year-potash-mining-concession-granted-to-verde/>

<sup>33</sup> See the release at: <https://investor.verde.ag/verde-to-reach-3-million-tonnes-potash-production-capacity-in-2022/>

<sup>34</sup> Please refer to the 2022 Annual Information Form for full explanation of movement in licenses and permits.

## SUMMARY OF LICENSES AND PERMITS (CONTINUED)

The Group has 3 different mine pits, each at different permitting stages and targeting different volumes, as summarized in the table below.

Mine Pit	Fully Permitted to Produce (tpy)	Mining (tpy)		Environmental (tpy)	
		Granted	Pending	Granted	Pending
1	233,000	233,000	0	233,000	0
2	2,600,000	2,600,000	22,500,000	2,600,000	22,500,000
3	0	49,800	2,500,000	0	2,500,000
<b>Total</b>	<b>2,833,000</b>	<b>2,882,800</b>	<b>25,000,000</b>	<b>2,833,000</b>	<b>25,000,000</b>

## OUTLOOK

The Group continues to expand its Cerrado Verde Project and will continue with the market development, engineering studies, construction, finance and environmental licensing efforts to advance the project.

### 2023 Guidance

As previously described, potash trends did not meet the market's expectations after the Ukraine war, reflecting in decreasing fertilizer prices and lower demand throughout 2022. The price of potash has been on a downward trend since late 2022, with a decrease of 47% in 2022 average KCI CFR Brasil price, compared to the current price,<sup>35</sup> leading farmers to holdback potash purchases with the expectation of even lower prices in the near future.

In light of the aforementioned factors, Verde's guidance for 2023 is described in the table below:

### FY 2023 guidance ranges

FY 2023 Guidance	Range
Sales target (tonnes)	800,000 - 1,200,000
Revenue (C\$'000)	78,135 - 115,332
EBITDA (C\$'000) <sup>36</sup>	9,341 - 24,565
EPS (C\$)	0.04 - 0.29

<sup>35</sup> As of March 23, 2023. Source: Acerto Limited report.

<sup>36</sup> Before non-cash events.



## OUTLOOK (CONTINUED)

The 2023 guidance is underpinned by the following assumptions:

- Average Brazilian Real ("R\$") to Canadian dollar exchange rate: C\$1.00 = R\$4.20
- Average KCI CFR Brazil price of US\$450, with an overall discount rate of 10%, resulting in the final price of US\$405.
- Sales Incoterms: 70% CIF and 30% FOB
- Sales channels: 47% direct sales and 53% indirect sales
- Income taxes: 34% of the subsidiary net profit before taxes

As of January 2023, the Brazilian Subsidiary (Verde Fertilizantes) is subject to income taxes using the 'Actual Profits' method ("Lucro Real", in Portuguese), which is based on taxable income (the tax in this method is approximately 34% of the Net Profit), adjusted by certain additions and exclusions as determined by the legislation. The Actual Profit will be calculated quarterly.

Up to December 31, 2022, the Brazilian Subsidiary was under the 'Assumed Profits' method.

## SELECTED ANNUAL FINANCIAL INFORMATION

All values are expressed in Canadian Dollars (\$'000).

Category	Year to	Year to	Year to
	Dec 31, 2022	Dec 31, 2021	Dec 31, 2020
Product sales (tonnes '000)	628	400	244
Revenue	80,271	27,709	9,167
Production costs	18,022	7,131	3,515
Sales and general administrative expenses	38,337	14,128	4,061
Share based and non cash payments *	344	1,551	425
Depreciation and amortization *	181	53	23
Net profit / (loss)	17,804	3,522	550
Cash Flow generated from / (utilized in) operating activities	11,469	(1,677)	1,062
Cash Flow utilized in investing activities	(42,021)	(2,552)	(1,467)
Cash Flow generated from financing activities	30,030	3,669	2,081
Net (decrease) / increase in cash	(522)	(560)	1,676
Cash and cash equivalents at end of year	1,163	1,534	2,237
Total Assets	97,310	41,400	28,732
Total Liabilities	48,959	15,042	7,592
Working Capital	3,361	8,321	3,627
Weighted average number of shares outstanding ('000)	51,720	50,321	47,583
Earnings / (Loss) per share (basic and diluted) (\$)	0.34	0.07	0.012

\* - Included in administrative expenses in Financial Statements

## SELECTED QUARTERLY FINANCIAL INFORMATION

The following table provides information on selected operating results for the past eight fiscal quarters. All values are expressed in Canadian Dollars (\$'000).

All amounts in CAD \$'000	Dec 31, 2022	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022
<b>Tonnes Sold '000</b>	125	189	202	112
<b>Revenue</b>	16,837	27,269	24,861	11,304
<b>Net (Loss) / Income after tax</b>	(1,312)	6,458	9,625	3,033
<b>Basic (Loss) / Earnings per share</b>	(0.028)	0.123	0.189	0.060
<b>Diluted (Loss) / Earnings per share</b>	(0.027)	0.121	0.185	0.057
<b>Total Assets</b>	97,310	91,862	65,508	55,189
<b>Current Liabilities</b>	28,804	24,220	15,746	13,953
<b>Non-current Liabilities</b>	20,155	18,069	8,059	8,167

All amounts in CAD \$'000	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021	Mar 31, 2021
<b>Tonnes sold '000</b>	134	154	96	17
<b>Revenue</b>	10,851	10,651	5,376	831
<b>Net (loss) / Income after tax</b>	1,878	3,182	273	(1,811)
<b>Basic (loss)/earnings per share</b>	0.037	0.063	0.005	(0.036)
<b>Diluted (loss)/earnings per share</b>	0.036	0.062	0.005	(0.036)
<b>Total Assets</b>	41,400	35,274	31,873	26,754
<b>Current Liabilities</b>	9,364	5,802	4,191	2,199
<b>Non-current Liabilities</b>	5,678	4,407	4,923	4,519

## RESULTS OF OPERATIONS

The following table provides information about three and twelve months ended December 31, 2022 as compared to the three and twelve months ended December 31, 2021. All amounts in CAD \$'000.

All amounts in CAD \$'000	3 months ended Dec 31, 2022	3 months ended Dec 31, 2021	12 months ended Dec 31, 2022	12 months ended Dec 31, 2021
<b>Tonnes sold '000</b>	125	134	628	400
<b>Average revenue per tonne sold \$</b>	135	81	128	69
<b>Average production cost per tonne sold \$</b>	(32)	(20)	(29)	(18)
<b>Average gross profit per tonne sold \$</b>	103	61	99	51
<b>Average gross margin</b>	76%	75%	78%	74%
<b>Revenue</b>	16,837	10,851	80,271	27,709
<b>Production costs</b>	(3,967)	(2,691)	(18,022)	(7,131)
<b>Gross Profit</b>	12,870	8,160	62,249	20,578
<b>Gross Margin</b>	76%	75%	78%	74%
<b>Sales and product delivery freight expenses</b>	(9,892)	(4,463)	(32,986)	(11,252)
<b>General and administrative expenses</b>	(1,685)	(1,245)	(5,351)	(2,876)
<b>EBITDA <sup>(1)</sup></b>	1,293	2,452	23,912	6,450
<b>Share Based, Equity and Bonus Payments (Non-Cash Event) <sup>(2)</sup></b>	(220)	(23)	(344)	(1,551)
<b>Depreciation and Amortisation <sup>(2)</sup></b>	(33)	(18)	(181)	(53)
<b>Profit on disposal of plant and equipment <sup>(2)</sup></b>	-	-	-	9
<b>Operating Profit after non-cash events</b>	1,040	2,411	23,387	4,855
<b>Interest Income/Expense <sup>(3)</sup></b>	(1,812)	(173)	(2,964)	(402)
<b>Net Profit before tax</b>	(772)	2,238	20,423	4,453
<b>Income tax <sup>(4)</sup></b>	(540)	(360)	(2,619)	(931)
<b>Net Profit</b>	(1,312)	1,878	17,804	3,522

<sup>(1)</sup> – Non GAAP measure

<sup>(2)</sup> – Included in General and Administrative expenses in financial statements

<sup>(3)</sup> – Please see Summary of Interest-Bearing Loans and Borrowings notes

<sup>(4)</sup> – Please see Income Tax notes

## RESULTS OF OPERATIONS (CONTINUED)

### External Factors

Revenue and costs are affected by external factors including changes in the exchange rates between the C\$ and R\$ along with fluctuations in potassium chloride spot CFR Brazil. The table below summarizes these changes:

	% Δ	3 months ended Dec 31, 2022	3 months ended Dec 31, 2021	% Δ	12 months ended Dec 31, 2022	12 months ended Dec 31, 2021
<b>Canadian Dollar (C\$) Average Exchange Rate</b>	-13%	R\$3.87	R\$4.43	-8%	R\$3.97	R\$4.31
<b>Potassium Chloride CFR Brazil Lowest Price<sup>(1)</sup></b>	-34%	US\$500	US\$760	+104%	US\$500	US\$245
<b>Potassium Chloride CFR Brazil Highest Price<sup>(1)</sup></b>	-19%	US\$650	US\$800	+50%	US\$1200	US\$800

(1) – Source: Acerto Limited Report.

### FY and Q4 2022 compared with FY and Q4 2021

#### Net Profits and EPS

##### FY 2022

The Group generated a net profit of \$17,804,000 in FY 2022, an increase of \$14,282,000 compared to a net profit of \$3,522,000 in FY 2021, thanks to an increase of 57% in sales and an increase of 59% in the average Potassium Chloride CFR Brazil price in 2022, compared to 2021.

Earnings per share were \$0.34 for FY 2022, compared to \$0.07 for FY 2021.

##### Q4 2022

The Group suffered a net loss of \$1,312,000 for Q4 2022, a decrease of \$3,190,000 compared to \$1,878,000 profit for Q4 2021, mainly due to a \$1,639,000 increase in interest expenses.

Basic loss per share was \$0.03 for Q4 2022, compared to earnings of \$0.04 for Q4 2021.

## RESULTS OF OPERATIONS (CONTINUED)

### Product Sales

#### FY 2022

Sales increased by 57% in FY 2022, to 628,000 tonnes sold, compared to 400,000 tonnes FY 2021, thanks to purchases from new clients and an increase in the purchase of K Forte® and BAKS® among Verde's returning customers,

#### Q4 2022

Sales by volume decreased by 7% in Q4 2022, to 125,000 tonnes sold, compared to 134,000 tonnes sold in Q4 2021, due to the circumstances summarized in the topics below. For further details, please refer to the topic [2022 Overview](#) of this document.

- A glut of potash in the market due to increased availability, resulted in a 45% surge in potash imports by Brazil over the same period, compared to 2021.<sup>37</sup> This oversupply, combined with a 15% drop in potash consumption in Brazil in 2022,<sup>38</sup> contributed to a challenging market for fertilizer producers. The 23% increase in the year-end stock of potash in Brazil demonstrate its lower overall demand over the year.
- In the first months of 2022, Verde faced record demand for its Product from customers looking to build potash inventories ahead of an expected market shortage. However, the Group had to halt the sale of its Product for Q3 and Q4 delivery due to anticipated inability to supply the demand.
- In addition to that, Verde could not fulfill all the orders in its books during the peak season between Q3 and Q4 due to limited access to and from Plant 2, caused by unforeseen groundwater issues that impacted the new road construction. Consequently, some of Verde's customers had to cancel their orders, which had an impact on the Group's results, that could have been better if Plant 2 had started producing and delivering on schedule.
- The presidential election in Brazil brought additional challenges to farmers' purchasing decisions for the 2022/2023 harvests. The fertilizer market was stagnant before the elections, with many customers holding off on purchasing. Following the elections, the market remained stagnant due to concerns and uncertainty surrounding the new government policies.

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<sup>37</sup> Source: Brazilian Comex Stat, available at: <http://comexstat.mdic.gov.br/en/geral>

<sup>38</sup> Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).

## RESULTS OF OPERATIONS (CONTINUED)

- The Brazilian coffee sector experienced significant challenges in 2022 due to adverse climate conditions, following on two years of frost and drought,<sup>39,40</sup> which disrupted global commodity markets and impacted crop productivity for years to come. In Minas Gerais, the largest coffee producer in Brazil, the average productivity was 21.6 scs/ha, 4.6% lower than the 2021 harvest, a year of negative bienniality. As a result, many farmers opted not to apply fertilizers as they anticipated low yields in the next harvests.

### Revenue

#### FY 2022

Revenue from sales increased by 190% in FY 2022, to \$80,271,000 from the sale of 628,000 tonnes of K Forte® and BAKS, at an average \$128 per tonne sold; compared to \$27,709,000 in FY 2021 from the sale of 400,000 tonnes of Product, at an average \$69 per tonne sold.

Average revenue per tonne excluding freight expenses (FOB price) improved by 77% in FY 2022, to \$83 compared to \$47 in FY 2021.

Average revenue per tonne in FY 2022 was higher than FY 2021 mainly due to:

1. Product volume sold as CIF (Cost Insurance and Freight) increased from 52% of total sales in FY 2021 to 71% in FY 2022.
2. Potassium Chloride CFR Brazil price increased from US\$245-US\$800 per tonne in FY 2021 to US\$500-US\$1200 per tonne in FY 2022 (as reported by Acerto Limited).
3. BAKS®, which has a higher sales price per tonne compared to K Forte®, accounted for 11% of the total volume sold by the Group, compared to 10% in FY 2021.
4. Brazilian Real appreciated by 8% against the Canadian Dollar.

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<sup>39</sup> *Brazil's Weather-Damaged Coffee Trees Will Take Years to Recover* (Bloomberg). Available at: <https://www.bloomberg.com/news/articles/2022-10-04/brazil-s-weather-damaged-coffee-trees-will-take-years-to-recover?leadSource=uverify%20wall>

<sup>40</sup> *Coffee prices may face volatility amid unknown harvest figures* (Valor Internacional). Available at: <https://valorinternational.globo.com/agribusiness/news/2023/01/04/coffee-prices-may-face-volatility-amid-unknown-harvest-figures.ghtml>

## RESULTS OF OPERATIONS (CONTINUED)

### Q4 2022

Revenue from sales increased by 55% in Q4 2022, to \$16,837,000 from the sale of 125,000 tonnes of Product, at average \$135 per tonne sold; compared to \$10,851,000 in Q4 2021 from the sale of 134,000 tonnes of Product, at average \$81 per tonne sold.

Average revenue per tonne excluding freight expenses (FOB price) improved by 15% in Q4 2022, to \$62 compared to \$53 in Q4 2021.

Average revenue per tonne in Q4 2022 was higher than Q4 2021 mainly due to:

1. Product volume sold as CIF (Cost Insurance and Freight) increased from 63% of total sales in Q4 2021 to 74% in Q4 2022.
2. Potassium Chloride CFR Brazil price decreased from US\$760-US\$800 per tonne in Q4 2021 to US\$500-US\$650 per tonne in Q4 2022 (as reported by Acerto Limited, a market intelligence firm).
3. BAKS® has a higher sales price per tonne compared to K Forte®. BAKS® accounted for 7% of the total volume sold by the Group compared to 5% in 2021.
4. Brazilian Real appreciated by 8% against the Canadian Dollar.

### Production costs

Production costs include all direct costs from mining, processing, and the addition of other nutrients to the Product, such as Sulphur and Boron. It also include the logistics costs from the mine to the plant and related salaries.

Verde's production costs and sales price are based on the following assumptions:

1. Micronutrients added to BAKS® increase its production cost, rendering K Forte® less expensive to produce.
2. Production costs vary based on packaging type, with bulk packaging being less expensive than Big Bags.
3. Plant 1 produces K Forte® Bulk, K Forte® Big Bag, BAKS® Bulk, and BAKS® Big Bag, while Plant 2 exclusively produces K Forte® Bulk. Therefore, Plant 2's production costs are lower than Plant 1's costs, which produces two types of Products and offers two types of packaging options each.

## RESULTS OF OPERATIONS (CONTINUED)

4. Non-controllable costs, such as transportation, electricity, packaging, acquisition of other nutrients (especially Sulfur and Boron), and depreciation, range from 30 to 80% of the Group's total production cost, depending on the type of product, packaging, and production site (Plant 1 or Plant 2).

The table below shows a breakdown of Verde's production costs for BAKS® and K Forte®, and what percentage of those costs is not controllable by management:

	(+)	(+)	(=)	
Cost per tonne of product projected for 2023 <sup>41</sup> (C\$)	Cash cost	Assets depreciation	Total cost expected for 2023 <sup>42</sup>	Non-controllable costs (% of total costs)
K Forte® Bulk (Plant 1)	20.2	3.8	24.0	61%
K Forte® Bulk (Plant 2)	10.2	2.8	13.0	58%
K Forte® Big Bag (Plant 1)	30.4	2.8	33.2	71%
BAKS® (2%S 0.2%B) <sup>43</sup> Bulk (Plant 1)	42.1	3.8	45.9	81%
BAKS® (2%S 0.2%B) Big Bag (Plant 1)	51.3	3.8	55.0	85%

Verde calculates its total production costs as a weighted average of the production costs for BAKS® and K Forte®, taking into account the production site and packaging type for each product. Therefore, comparing the Group's production costs on a quarter-over-quarter basis may not be meaningful due to the varying proportions of the cost factors that impact each quarter.

<sup>41</sup> The costs were estimated based on the following assumptions: Costs in line with Verde's 2023 budget. Sales volume of 1.0Mt per year. Crude Oil WTI (NYM US\$/bbl) = US\$80.00. Diesel price = US\$1.26. Currency exchange rate: US\$1.00 = R\$5.25; C\$1.00 = R\$4.20. Total cost per tonne includes all costs directly related to production and feedstock extraction in addition to assets depreciation

<sup>42</sup> Total cost per tonne includes labor mining, mining, crushing, processing, maintenance of support facilities, product transportation from mine pits to production plants, laboratory expenses, G&A, and environmental compensation expenses.

<sup>43</sup> BAKS® can be customized according to the crop's needs, so it can have several compositions. The 2%S 0.2%B composition is responsible for most of Verde's sales.



## RESULTS OF OPERATIONS (CONTINUED)

### FY 2022

Production costs increased by 153% in FY 2022, to \$18,022,000 compared to \$7,131,000 in FY 2021. This was due to a 57% increase in volume sold, from 400,000 tonnes in FY 2021 to 628,000 tonnes in FY 2022. Average cost per tonne increased by 61% in FY 2022, to \$29 compared to \$18 in FY 2021. The cost increase was due in large part to higher fuel prices, which increased by 66% in FY 2022 compared to FY 2021 and Brazil's inflation over the twelve-month period of 6,6%. In addition, volume sold on Big Bags, which have a significantly higher cost than Bulk, increased from 21% to 32% year on year.

### Q4 2022

Production costs increased by 47% in Q4 2022, to \$3,967,000 compared to \$2,691,000 in Q4 2021. Average cost per tonne increased by 59% in Q4 2022, to \$32 compared to \$20 in Q4 2021. Although the volume sold decreased by 7%, from 134,000 tonnes in Q4 2021 to 125,000 tonnes in Q4 2022, the average production costs increased due to:

1. Diesel costs increased by 42% in Q4 2022 compared to Q4 2021.
2. BAKS® accounted for 7% of the total volume sold by the Group, compared to 5% in 2021.
3. Brazil's inflation was over 6,5% in the twelve-month period.
4. The lower volume sold in Q4 2022, compared to Q4 2021, also impacted the cost per tonne due to fixed cost dilution.

## SALES EXPENSES

CAD \$'000	3 months	3 months	12 months	12 months
	ended Dec 31, 2022	ended Dec 31, 2021	ended Dec 31, 2022	ended Dec 31, 2021
Sales and marketing expenses	(533)	(578)	(3,451)	(1,818)
Fees paid to independent sales agents	(196)	(203)	(1,172)	(464)
Product delivery freight expenses	(9,163)	(3,682)	(28,363)	(8,970)
<b>Total</b>	<b>(9,892)</b>	<b>(4,463)</b>	<b>(32,986)</b>	<b>(11,252)</b>

## SALES EXPENSES (CONTINUED)

### **Sales and marketing expenses**

Sales and marketing expenses include employees' salaries, car rentals, travel within Brazil, hotel expenses, and the promotion of the Product in marketing events.

#### *FY 2022*

Expenses increased by 90% in FY 2022, with a total of \$3,451,000, compared to \$1,818,000 in FY 2021, mainly due to a further expansion of Verde's sales and marketing team. This increase is in line with the Group's growth strategy. *Q4 2022*

In Q4 2022, Verde's expenses decreased by 8% to \$533,000, compared to \$578,000 in Q4 2021. This was mainly due to the provision reversion of \$493,000 in bonuses and market programs that occurred during the year. Despite the decrease in expenses, the Group's sales and marketing team increased the professional headcount, and additional investments were made in media as a strategy to attract new customers.

### **Fees paid to independent sales agents**

As part of Verde's marketing and sales strategy, the Group pays out commissions to its independent sales agents.

#### *FY 2022*

Fees paid to independent sales agents increased by 153% in FY 2022, to \$1,172,000 compared to \$464,000 in FY 2021, as a direct result of increased sales in the year. The increase was partially mitigated by the decrease in percentage of sales made by sales agents, from 37% of total sales in FY 2021 to 32% in FY 2022.

#### *Q4 2022*

Fees paid to independent sales agents decreased by 3% in Q4 2022, to \$196,000 compared to \$203,000 in Q4 2021. Besides revenue growth of 55% in the quarter, the percentage of sales made by sales agents, decreased from 42% of total sales in Q4 2021 to 21% in Q4 2022.

## SALES EXPENSES (CONTINUED)

### Product delivery freight expenses

#### FY 2022

Expenses increased by 216% in FY 2022, to \$28,363,000 compared to \$8,970,000 in FY 2021, as the Group has significantly increased the volume sold as CIF (Cost Insurance and Freight), up from 52% of total sales in FY 2021 to 71% in FY 2022 and due to higher fuel prices, which increased 66% in FY 2022 compared to FY 2021.

#### Q4 2022

Product delivery freight expenses increased by 149% in Q4 2022, to \$9,163,000 compared to \$3,682,000 in Q4 2021, as the Group has significantly increased the volume sold as CIF (Cost Insurance and Freight), up from 63% of total sales in Q4 2021 to 74% in Q4 2022, and due to higher fuel prices, which increased by 42% in the period.

The Brazilian coffee sector continued to experience challenges in 2022 due to adverse climate conditions, with over two years of frost and drought,<sup>44, 45</sup> which disrupted global commodity markets and have impacted crop productivity. As a result, many farmers opted not to apply fertilizers as they anticipated low yields in the next harvests. The coffee sector is a significant consumer of Product, and Verde has a competitive geographical advantage thanks to its proximity to major coffee growers in Brazil, reducing freight costs and boosting margins. Therefore, the decline in Product sales in the coffee sector had an outsized impact on the Group's Q4 2022 results.

Furthermore, sales made to states located further away from Verde's production facilities also had a significant impact on the logistics costs, with 48% of the total sales delivered to the states of Pará, Mato Grosso and to the Northeast region of Brazil in Q4 2022, compared to 40% in 2021, which increased the freight cost per tonne in the quarter.

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<sup>44</sup> Brazil's Weather-Damaged Coffee Trees Will Take Years to Recover (Bloomberg). Available at: <https://www.bloomberg.com/news/articles/2022-10-04/brazil-s-weather-damaged-coffee-trees-will-take-years-to-recover?leadSource=uverify%20wall>

<sup>45</sup> Source: Erica Polo, Agribusiness (Valor Internacional). Available at: <https://valorinternational.globo.com/agribusiness/news/2023/01/04/coffee-prices-may-face-volatility-amid-unknown-harvest-figures.ghtml>

## GENERAL AND ADMINISTRATIVE EXPENSES

CAD \$'000	3 months	3 months	12 months	12 months
	ended Dec 31, 2022	ended Dec 31, 2021	ended Dec 31, 2022	ended Dec 31, 2021
General administrative expenses	(1,270)	(612)	(3,166)	(1,621)
Legal, professional, consultancy and audit costs	(188)	(516)	(1,343)	(915)
IT/Software expenses	(219)	(103)	(788)	(307)
Taxes and licenses fees	(8)	(14)	(54)	(33)
Total	<b>(1,685)</b>	<b>(1,245)</b>	<b>(5,351)</b>	<b>(2,876)</b>

### General administrative expenses

These costs include general office expenses, rent, bank fees, insurance, foreign exchange variances and remuneration of executive and administrative staff in Brazil.

#### FY 2022

Expenses increased by 95% in FY 2022, to \$3,166,000 compared to \$1,621,000 in FY 2021, as they include additional administrative employees, and also due to an increase of \$689,000 in bonuses provision to employees, compared to the prior year.

#### Q4 2022

Expenses increased by 108% in Q4 2022, to \$1,270,000 compared to \$612,000 in Q4 2021, as they include additional administrative employees, and also due to an increase of \$430,000 in bonus provision to employees, compared to the prior year.

### Legal, professional, consultancy and audit costs

Legal and professional fees include legal, professional, consultancy fees along with accountancy, audit and regulatory costs. Consultancy fees are consultants employed in Brazil, such as accounting services, patent process, lawyer's fees and regulatory consultants.

#### FY 2022

Expenses increased by 47% in FY 2022, to \$1,343,000 compared to \$915,000 in FY 2021, mainly due to the costs incurred with the Group's redomiciliation from the UK to Singapore, which involved hiring lawyers, accountants, and consultants in Singapore, the UK, and Canada.

## GENERAL AND ADMINISTRATIVE EXPENSES (CONTINUED)

### Q4 2022

Expenses decreased by 64% in Q4 2022, to \$188,000 compared to \$516,000 in Q4 2021. The decrease was due to a \$347,000 provision in Q4 2021, set aside for a contested claim made by a consultant retained by the Group in 2012. The consultancy services were for an environmental report, the quality of which was disputed by Verde and payment withheld. The court decision in Q4 2021 was favourable to the consultant.

### IT/Software expenses

IT/Software expenses include software licenses such as Microsoft Office, Customer Relationship Management (CRM) software and enterprise resource planning (ERP).

### FY 2022

Expenses increased by 157% in FY 2022, to \$788,000 compared to \$307,000 in FY 2021, due to an increase in third party computing services and number of software licenses used by the Group in Brazil. In addition to that, the Group has changed its accountant ERP to SAP Business One, effective from July 1st, 2022, which has a higher cost compared to the former ERP used.

### Q4 2022

Expenses increased by 113% in Q4 2022, to \$219,000 compared to \$103,000 in Q4 2021, mainly due to CRM and ERP consultants' services. In addition to that, the Group has changed its accountant ERP to SAP Business One, which has a higher cost compared to the former ERP used.

### Taxes and licences

Taxes and licence expenses include general taxes, product branding and licence costs.

### FY 2022

Expenses increased by 64% in FY 2022, to \$54,000 compared to \$33,000 in FY 2021, due to increased fees, taxes and state contributions in line with the growth of the Group.

### Q4 2022

Expenses decreased in Q4 2022, to \$8,000 compared to \$14,000 in Q4 2021.

## GENERAL AND ADMINISTRATIVE EXPENSES (CONTINUED)

### Share Based, Equity and Bonus Payments (Non-Cash Events)

These costs represent the expense associated with stock options granted to employees and directors along with equity compensation and non-cash bonuses paid to key management.

#### FY 2022

Share Based, equity and bonus payments costs decreased by 78% in FY 2022, to \$344,000 compared to \$1,551,000 in FY 2021. In FY 2021, non-cash bonuses of \$609,000 were paid along with a share based payment charge of \$855,000 for stock options vesting.

#### Q4 2022

Share Based, equity and bonus payments costs increased by 857% in Q4 2022, to \$220,000 compared to \$23,000 in Q4 2021. This increase is mainly a result of an equity compensation accrual to the board of directors of \$178,000 made in Q4 2022.

## INCOME TAX

Brazilian corporations are subject to income taxes (IRPJ and CSLL) using an 'Actual Profits' method (i.e. APM - Lucro Real), which is based on taxable income (the tax in this method is approximately 34% of the EBITDA), adjusted by certain additions and exclusions as determined by the legislation. The Actual Profit can be calculated annually or quarterly - for the annual calculation, the tax authorities collect anticipations during the year, as the taxpayer is obliged to calculate the income tax monthly.

Subject to certain restrictions (i.e. where gross income does not exceed R\$78 million and depending on the activity), Brazilian taxpayers have the option to calculate IRPJ and CSLL using a 'Assumed Profits' method (i.e. PPM - Lucro Presumido). Under the PPM, the income is calculated on a quarterly basis on an amount equal to different percentages of gross revenue (the tax in this method is approximately 3,4% of the net revenue) and adjusted as determined by the prevailing legislation.

The Brazil subsidiaries are currently under 'Assumed Profits' method, which is the most efficient method at this time. Under 'Assumed Profits' method, it is not possible to utilise prior period losses to reduce income tax. When the Group switches to "Realized Profits" method, these losses can be utilised.

## LIQUIDITY AND CASH FLOWS

For additional details see the consolidated statements of cash flows for the quarters ended December 31, 2022 and December 31, 2021 in the financial statements.

Cash received from / (used for): CAD \$'000	3 months ended Dec 31, 2022	3 months ended Dec 31, 2021	12 months ended Dec 31, 2022	12 months ended Dec 31, 2021
Operating activities	(5,403)	(2,323)	11,469	(1,677)
Investing activities	(12,362)	(760)	(42,021)	(2,552)
Financing activities	13,951	2,267	30,030	3,669

On December 31, 2022, the Group held cash of \$1,163,000, a decrease of \$371,000 on the same period in 2022. This was expected due to the additional bank loans taken out in Q4-2022.

### Operating activities

#### FY 2022

Net cash generated under operating activities increased by 784% in FY 2022, to \$11,469,000 compared to net cash utilised of \$1,677,000 in FY 2021. This was mainly due to an increase in receivables and payables compared to previous financial year reflecting the profit growth of the Group's trading activities and changes in working capital.

Trade and other receivables increased by 90% in FY 2022, to \$28,533,000 compared to \$15,055,000 in FY 2021. Trade and other payables increased by 54% in FY 2022, to \$10,586,000 compared to \$6,858,000 in FY 2021.

#### Q4 2022

Net cash utilised under operating activities increased by 133% in Q4 2022, to \$5,403,000 compared to cash utilised of \$2,323,000 in Q4 2021.

### Investing activities

#### FY 2022

Cash utilised from investing activities increased by 1,547% in FY 2022, to \$42,021,000 compared to \$2,552,000 in FY 2021, mainly due to infrastructure investments in Plant 2.

## LIQUIDITY AND CASH FLOWS (CONTINUED)

### Q4 2022

Cash utilised from investing activities increased by 1,527% in Q4 2022, to \$12,362,000 compared to \$760,000 in Q4 2021, for the same reason as FY 2022.

### Financing activities

#### FY 2022

Cash generated from financing activities increased by 718% in FY 2022, to \$30,030,000 compared to \$3,669,000 in FY 2021. This was due to additional \$29,023,000 bank loans received in the year, along with \$1,007,000 cash proceeds (net of capital restructure expenses) from the issue of shares in FY 2022.

#### Q4 2022

Cash generated from financing activities increased by 515% in Q4 2022, to \$13,951,000 compared to \$2,267,000 in Q4 2021.

### Financial condition

The Group's current assets increased by 82% in Q4 2022, to \$32,165,000, compared to \$17,685,000 in Q4 2021. Current liabilities increased by 208% in Q4 2022, to \$28,804,000, compared to \$9,364,000 in Q4 2021; providing a working capital surplus of \$3,361,000, a decrease of 60% compared to the working capital surplus of \$8,321,000 in Q4 2021.

## INTEREST-BEARING LOANS AND BORROWINGS

	31 Dec 2022	31 Dec 2021
	\$'000	\$'000
<b>Non-current liabilities</b>		
<b>Bank loans</b>	19,977	3,079
<b>Current liabilities</b>		
<b>Bank loans</b>	18,131	2,506
<b>Total</b>	38,108	5,585



## SUMMARY OF INTEREST-BEARING LOANS AND BORROWINGS

Lender	Loan start date	Purpose	Grace period (months)	Term (months)	Loan value (R\$'000)	Balance at Dec 31, 2022 (C\$'000)	Repayable by	Total interest payable*
Brazil	Dec, 2022	Working capital	6	18	10,000	3,421	Dec, 2024	CDI <sup>(1)</sup> +4.10%
Brazil <sup>(4)</sup>	Dec, 2022	Working capital	12	12	4,891	1,253	Dec, 2023	14.88%
Itaú <sup>(4)</sup>	Dec, 2022	Working capital	6	6	7,800	1,983	May, 2023	15.96%
Itaú <sup>(4)</sup>	Dec, 2022	Working capital	6	6	12,105	3,077	May, 2023	16.08%
Brazil	Oct, 2022	Working capital	12	48	20,000	7,988	Oct, 2027	CDI <sup>(1)</sup> +3.70%
Votorantim	Sep, 2022	Working capital	12	30	10,000	3,175	Mar, 2025	CDI <sup>(1)</sup> +5.10%
Brazil	Sep, 2022	Working capital	6	24	5,000	1,482	Sep, 2024	CDI <sup>(1)</sup> +3.00%
Bradesco	Aug, 2022	Equipment	6	24	5,597	1,665	Oct, 2024	IPCA <sup>(2)</sup> +5.19%
ABC Brazil	Aug, 2022	Working capital	5	24	3,500	1,081	Sep, 2024	CDI <sup>(1)</sup> +7.44%
ABC Brazil	Aug, 2022	Working capital	6	24	1,500	462	Sep, 2024	CDI <sup>(1)</sup> +7.44%
Santander	Aug, 2022	Working capital	3	24	12,000	3,149	Aug, 2024	CDI <sup>(1)</sup> +4.85%
ABC Brazil	Aug, 2022	Working capital	6	30	2,500	785	Mar, 2025	CDI <sup>(1)</sup> +7.44%
Brazil	Aug, 2022	Working capital	6	18	5,000	1,369	Aug, 2023	CDI <sup>(1)</sup> +3.00%
BDMG	Apr, 2022	Working capital	24	72	3,000	1,209	Mar, 2030	TJLP <sup>(3)</sup> +5.00%
Santander	Feb, 2022	Equipment	03	36	260	54	Feb, 2025	CDI <sup>(1)</sup> +4.60%
Santander	Feb, 2022	Equipment	03	36	888	225	Feb, 2025	CDI <sup>(1)</sup> +4.60%
Santander	Feb, 2022	Equipment	03	36	1,340	312	Feb, 2025	CDI <sup>(1)</sup> +4.60%
Santander	Feb, 2022	Equipment	03	36	2,169	504	Jan, 2025	CDI <sup>(1)</sup> +4.60%
Santander	Feb, 2022	Equipment	03	36	888	208	Jan, 2025	CDI <sup>(1)</sup> +4.60%
Brazil	Jan, 2022	Working capital	06	36	5,000	1,188	Dec, 2024	CDI <sup>(1)</sup> +2.92%
Various loans	pre 2022				23,723	3,518		
<b>Total</b>					<b>137,161</b>	<b>38,108</b>		

<sup>(1)</sup> - CDI (Certificado de Depósito Interbancário) is the average of interbank overnight rates in Brazil. As at December 31, 2022, the 12 months cumulative rate was 12.43%.

<sup>(2)</sup> - Inc Variable interest (IPCA) - Broad Consumer Price Index, a measure of the average price needed to buy consumer goods and services. As at December 31, 2022 the 12 months cumulative rate was 5.90%.

<sup>(3)</sup> - TJLP (Taxa de Juros de Longo Prazo) is the long term interest rate in Brazil. As at December 31, 2022, the 12 months cumulative rate was 7.37%.

<sup>(4)</sup> - \$516,000 out of \$1,812,000 interest expenses in Q4 2022 were due to a specific type of loan with Itaú and Banco do Brasil in Q4 2022, named "Reverse Factoring". According to accounting standards, the entire interest of Reverse Factoring operations must be recognized at the time of the loan, rather than over the loan period. In Q4 2022, these loans total \$6,313,000, with a total of \$560,000 in interest expenses.

The Group's average current loan rates is 15.36% per annum. The Brazilian Government long term bond rate is currently 13.75% per annum.

## LEASES

### Right-of-use assets

Cost	Total (\$'000)
Additions	198
Effect of movements in foreign exchange	3
Balance at 31 December 2022	201
Amortisation	
Amortisation charge for the period	26
Effect of movements in foreign exchange	1
Balance at 31 December 2022	27
Carrying amounts	
At 31 December 2022	174

### Lease liabilities

The following table outlines the future lease payments:

	31 Dec 2022	31 Dec 2021
	\$'000	\$'000
Not later than one year	87	-
Later than one year but not later than five years	178	-
<b>Total</b>	<b>265</b>	<b>-</b>

## COMMITMENTS AND CONTINGENT LIABILITIES

The Group has the following capital expenditure commitments in its projects:

Amounts payable (\$'000)	31 Dec 2022	31 Dec 2021
Amount payable within one year	65	62
Amounts payable after more than one year and less than five years	59	48
After five years	283	240
<b>Total</b>	<b>407</b>	<b>350</b>

## OFF-BALANCE SHEET FINANCING

The Group has not entered into any off-balance sheet financing arrangements.

## FINANCIAL INSTRUMENTS

The Board of Directors determines, as required, the degree to which it is appropriate to use financial instruments and hedging techniques to mitigate risks. The main risks for which such instruments may be appropriate are foreign exchange risk, interest rate risk and liquidity risk, each of which is discussed below. Late receivables are close to 0,99% of the total sold as of December 31, 2022 and bank deposits have been made with financial institutions which are considered to be safe by the Board of Directors.

### Foreign currency risk

The Group's cash resources are mainly held in Brazilian Real. Exchange rate fluctuations may adversely affect the Group's financial position and results. The Group's financial results are reported in Canadian Dollars and its costs are primarily incurred in Brazilian Real. The appreciation of the Brazilian Real against the Canadian Dollar could increase the actual revenues and operating costs of the Group's operations and materially affect the results presented in the Group's financial statements.

Currency exchange fluctuations may also materially affect the Group's future cash flow from operations, its results from operations, financial condition and prospects. The Group has a general policy of not hedging against foreign currency risks. The Group manages foreign currency risk by regularly reviewing the balances held in currencies other than the functional currency.

The Group had the following cash and cash equivalents in currencies other than its presentational currency. The amounts are stated in Canadian Dollar equivalents.

Currency (\$'000)	31 Dec 2022	31 Dec 2021
Canadian Dollar	252	110
Brazilian Real	848	1,414
American Dollar	16	4
British Pound	47	6
Total	1,163	1,534

## FINANCIAL INSTRUMENTS (CONTINUED)

The results of a foreign currency risk sensitivity analysis showing a 10% weakening/strengthening of the Brazilian Real against Canadian Dollars, with all other variables held constant, are as follows:

Equity (\$'000)	31 Dec 2022	31 Dec 2021
10% weakening of Brazilian Real	(1,978)	(406)
10% strengthening of Brazilian Real	1,618	496

### Liquidity risk

The Group has relied on revenue generated from the sale of Product, along with shareholder funding and long-term loans to finance its operations. The liquidity risk is significant and is managed by controls over expenditure and cash resources.

### Interest rate risk

The Group's policy is to retain its surplus funds in the most advantageous term of deposit available up to twelve month's maximum duration. Given that the directors do not consider that interest income is significant in respect of the Group's operations no sensitivity analysis has been provided in respect of any potential fluctuations in interest rates.

### Financial assets

The floating rate financial assets comprise interest earning bank deposits at rates set by reference to the prevailing LIBOR or equivalent to the relevant country.

### Fair values

In the Directors' opinion there is no material difference between the book value and fair value of any of the Group's financial instruments.

### Classes of financial instruments

The classes of financial instruments are the same as the line items included on the face of the balance sheet and have been analysed in more detail in the notes to the accounts. All the Group's financial assets are categorised as loans and receivables and all financial liabilities are measured at amortised cost.

## FINANCIAL REPORTING STANDARDS

The Group has adopted all the new and revised Standards and Interpretations that are relevant to its operations and effective for accounting periods beginning on or after 1 January 2022. The adoption of these new and revised Standards and Interpretations had no material effect on the profit or loss or financial position of the Group.

No standards issued but not yet effective have been adopted early.

## CRITICAL JUDGEMENTS AND ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Information about such judgements and estimates is contained in the accounting policies and/or the notes to the consolidated financial statements. Areas of judgement and sources of estimation or uncertainty that have the most significant effect on the amounts recognized in the consolidated financial statements are as follows:

### Judgements

- **Impairment of Intangible assets:**

The directors have assessed whether there are any indicators of impairment in respect of the mineral properties totalling \$18,619,000. In making this assessment they have considered the Group's business plan which includes resource estimates, future processing capacity, future exchange rates, the forward market and the longer term price outlook and assumptions regarding weighted average cost of capital. Resource estimates have been based on the most recently filed Pre-Feasibility Study NI43-101 report and its opportunities economic model which includes resource estimates without conversion of its inferred resources. The directors have concluded no provision for impairment is necessary. Management's estimates of these factors are subject to risk and uncertainties affecting the recoverability of the Group's mineral property costs.

## CRITICAL JUDGEMENTS AND ACCOUNTING ESTIMATES (CONTINUED)

### Estimates

- **Share-based payments:**

The Group charges the consolidated statement of comprehensive income with the fair value of share options issued. This charge is not based on historical cost but is derived based on assumptions input into an option pricing model. The model requires management to make several assumptions as to future events, including: an estimate of the average future hold period of issued stock options before exercise, expiry or cancellation; future volatility of the Group's share price in the expected hold period (using historical volatility as a reference); and the appropriate risk-free rate of interest. The resulting value calculated is not necessarily the value that the holder of the option could receive in an arm's length transaction, given there is no market for the options, and they are not transferable. The value derived from the option-pricing model is highly subjective and dependent entirely upon the input assumptions made.

## MANAGEMENT'S REPORT ON INTERNAL CONTROLS

### Disclosure Controls and Procedures ("DC&P")

As at December 31, 2022, the CEO and the CFO evaluated the design and operation of the Group's DC&P. Based on that evaluation, the CEO and CFO concluded that the Group's DC&P was effective as at December 31, 2022.

The Group has changed its accountant ERP to SAP Business One, effective from July 1<sup>st</sup>, 2022.

### Internal control over financial reporting ("ICFR")

Based on the evaluation of the design and operating effectiveness of the Group's ICFR, the CEO and the CFO concluded that the Group's ICFR was effective as at December 31, 2022.

There have been no changes during the year ended December 31, 2022 that have a material effect on the disclosure controls and procedures or the internal controls over financial reporting.

## OUTSTANDING SHARE DATA

As at the date of this MD&A the following securities are outstanding:

Type	Amount
Ordinary shares	52,597,951
Stock options	1,597,398
<b>Total</b>	<b>54,195,349</b>

## RISKS

The Board regularly reviews the risks to which the Group is exposed and ensures through Board Committees and regular reporting that these risks are minimized to the extent possible. The Audit Committee is responsible for the implementation and review of the Group's internal financial controls and risk management systems.

The extraction of natural resources involves a high degree of risk. The following risk factors should be considered in assessing the Group's activities. Should any one or more of these risks occur, it could have a material adverse effect on the business, prospects, assets, financial position or operating results of the Group. The risks noted below do not necessarily comprise all those faced by the Group.

Additional risks not currently known to the Group or that the Group currently deems would not likely influence an investor's decision to purchase securities of the Group may also impact the Group's business, prospects, assets, financial position or operating results.

There has been no change to the impact of risks on the previous year.

### Ukraine and Russia conflict risk

The Group is exposed to price risk related to consumables and services. In 2022, prices for electricity, fuel, and other materials, commodities and consumables required for the Group's operations have experienced substantial recent increases associated with global inflation as well as supply chain delivery, further heightened with the Russian-Ukraine conflict. To date, there has not been a significant impact on our operations relating to supply chain availability; however, inflationary increases on energy, fuel, contractor costs and consumables are expected to impact operating costs. The Group has implemented procurement strategies to mitigate the impact and to continue to monitor these risks.

## RISKS (CONTINUED)

### **Uncertainty in the estimation of mineral resources and mineral reserves**

The estimation of mineral reserves, mineral resources and related grades has a degree of uncertainty. Until such time as the mineral reserves and mineral resources are actually mined and processed, the quantity of grades must be considered as estimates only. The mineral reserve estimates of the Group have been determined or reviewed by an independent consultant and are based on assumed cut-off grades and costs that may prove to be inaccurate. Any material change in these variables may affect the economic outcome of current and future projects.

### **Mining risks**

Mining operations are inherently risky. These operations are subject to all hazards and risks encountered in exploration, development and production. These include but are not limited to formation pressures, seismic activity, rock bursts, fires, power outages, cave-ins, flooding, explosions and other conditions involved in the drilling and removal of material. Any of these events could result in serious damage to the mine and other infrastructure, damage to life or property, environmental damage and possible legal liability.

The Group has all necessary permits in place to continue with the current operation. As expansion plans progress, the Group will be required to submit revised plans for approval. There can be no guarantee that these revised plans will be agreed to or approved in a timely manner.

The Group's profitability will depend, in part, on the economic returns and actual costs of developing its mining projects, which may differ from the estimates made by the Group.

### **Credit risk**

The Group is exposed to credit risk, which is the risk that one party of a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. Exposure to credit risk arises primarily from trade receivables.

The Group has developed procedures to ensure that the sale of goods is made only to customers with an appropriate credit history. Customers who do not meet the Group's credit requirements may only conduct transactions with the Group on a prepayment basis.



## RISKS (CONTINUED)

### **Production risk**

Production risk relates to the possibility that the Group output levels will be lower than expected. Factors affecting production include adverse weather conditions and failure of equipment and machinery. Mining of the Product continues throughout the year with maximum capacity (within permitted mining limits) during the summer, dry months of the year. Regular inspection and service of equipment and machinery is carried out to ensure they are in full working order.

### **Expected Market Potential of the Product**

The Product is a new product without an established market. Substantial investment may be required to develop the market in Brazil and, if relevant, internationally. Although an established market for potassium-based fertilizers already exists, there is no assurance that the Group's market development efforts will result in the sales of the Product.

### **Uncertainty of Acquiring Necessary Permits**

The Group's current and future operations will require approvals and permits from various federal, state and local governmental authorities, and such operations are and will be governed by laws and regulations governing prospecting, development, mining, production, taxes, labour standards, health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. There is no assurance that delays will not occur in connection with obtaining all necessary renewals of such approvals and permits for the existing operations or additional approvals or permits for any possible future changes to operations. Prior to any development on any of its properties, the Group must receive permits from appropriate governmental authorities. There can be no assurance that the Group will continue to hold all permits necessary to develop or continue operating at any particular property or obtain all the required permits on reasonable terms or in a timely basis. The Group has been successful in obtaining environmental and mining licences for small scale production and continues to apply for the appropriate licences to meet future production in line with its expansion plans.

## RISKS (CONTINUED)

### **Uninsurable Risks**

The development and production of mineral properties involves numerous risks including unexpected or unusual geological operating conditions such as rock bursts, cave-ins, fires, flooding and earthquakes.

Insurance may not be available to cover all of these risks, may only be available at economically unacceptable premiums or may be inadequate to cover any resulting liability. Any uninsured liabilities that arise would have a material adverse effect on the Group's business and results of operations.

### **Operations in a Foreign Country and Regulatory Requirements**

All the Group's properties are located in Brazil and mineral exploration and mining activities as well as project development may be affected in varying degrees by changes in political, social and financial stability, inflation and changes in government regulations relating to the mining industry. Any changes in regulations or shifts in political, social or financial conditions are beyond the control of the Group and may adversely affect its business. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, environmental legislation and mine safety. Brazil's status as a developing country may make it more difficult for the Group to obtain any financing required for the exploration and development of its properties due to real or perceived increased investment risk.

Currently there are no restrictions on the repatriation from Brazil on the earnings of foreign entities. Capital investments registered with the central bank in Brazil may similarly be repatriated. There can be no assurance that restrictions on repatriation of earnings and capital investments from Brazil will not be imposed in the future.

### **Competition**

The Group competes with other mining companies as well as other companies producing agricultural products, many of which have greater financial and technical resources and experience, particularly with respect to the potash industry and the limited number of mineral opportunities available in South America. Competition in the mining industry is primarily for properties which can be developed and can produce economically; the technical expertise to find, develop, and operate such properties; the labour to operate the properties; and the capital for the purpose of funding such properties. In addition, many competitors not only explore for and mine potash, but conduct refining and marketing operations on a world-wide basis.

## RISKS (CONTINUED)

Such competition may result in the Group being unable to acquire desired properties on terms acceptable to the Group, to recruit or retain qualified employees or to acquire the capital necessary to fund its operations and develop its properties. The Group's inability to compete with other mining companies for these resources would have a material adverse effect on the Group's business and results of operations.

The Group also competes with other potash mining and/or marketing companies, many of which have greater marketing, financial and technical resources and experience, in exporting and marketing its potash or potassium-based products. The Group is vulnerable to increases in the supply of potash beyond market demand either from the opening of new potash mines or the expansion of existing potash mines by the Group's competitors, which could depress prices and have a material adverse effect on the Group's business, financial condition and results of operation.

### **Title Matters**

While the Group has diligently investigated title to all mineral properties and, to the best of its knowledge, title to all properties is in good standing; this should not be construed as a guarantee of title. The properties may be affected by undetected defects in title, such as the reduction in size of the mineral claims and other third party claims affecting the Group's priority rights, at the discretion of the ANM. The Group's interests in mineral properties are comprised of exclusive rights under government licences and contracts to conduct operations in the nature of exploration and, in due course if warranted, development and mining, on the licence areas. Maintenance of such rights is subject to ongoing compliance with the terms of such licences and contracts.

### **Uncertainty of Additional Capital**

In the past, the Group has relied on sales of equity securities to meet its capital requirements. The Group plans to use predominately production revenue to cover costs going forward with a small amount of bank financing. There is no assurance that the Group will be successful in obtaining the required financing.

The ability of the Group to arrange additional financing in the future will depend, in part, on the prevailing capital market conditions as well as the business performance of the Group. The development of the Group's projects may require substantial additional financing. Failure to obtain such financing may result in delaying or indefinite postponement of exploration, development or production on any or all of the Group's projects or even a loss of property interest. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favourable to the Group. If the Group, through the issuance of securities from treasury, raises additional financing, control of the Group may change and security holders may suffer additional dilution. See "Risk Factors – Dilution".

## RISKS (CONTINUED)

### Government Royalties

The Federal Government of Brazil collects royalties on mineral production, with up to half of such royalties being paid to surface rights owners. The current Brazilian federal royalty applicable to fertilizer production is a 2% Financial Compensation for Mineral Exploration (“CFEM”, from *Compensação Financeira pela Exploração Mineral*) for Glauconitic Siltstone. This level and the level of any other royalties, payable to the Brazilian government in respect of the production of minerals may be varied at any time as a result of changing legislation, which could materially adversely affect the Group’s results of operations.

### Market Factors and Volatility of Commodity Prices

The Group’s future profitability and long-term viability will depend, in large part, on the global market price of minerals produced and their marketability. The marketability of mineralized material, which may be acquired or discovered by the Group, will be affected by numerous factors beyond the control of the Group. These factors include market fluctuations in the prices of minerals sought, which are highly volatile, inflation, consumption patterns, speculative activities, international political and economic trends, currency exchange fluctuations, interest rates, production costs and rates of production. The effect of these factors cannot be accurately predicted, but may result in the Group not receiving an adequate return on invested capital. Prices of certain minerals have fluctuated widely, particularly in recent years, and are affected by numerous factors beyond the control of the Group. Future mineral prices cannot be accurately predicted. A severe decline in the price of a mineral being produced or expected to be produced by the Group would have a material adverse effect on the Group, and could result in the suspension of mining operations by the Group.

### Cyclical Industry

The market for potash tends to move in cycles. Periods of high demand, increasing profits and high capacity utilization lead to new plant investment and increased production. This growth increases supply until the market is over-saturated, leading to declining prices and declining capacity utilization until the cycle repeats. This cyclicity in prices can result in supply/demand imbalances and pressures on potash prices and profit margins, which may impact the Group’s financial results, and common share prices. The potash industry is dependent on conditions in the economy generally and the agriculture sector. The agricultural sector can be affected by adverse weather conditions, cost of inputs, commodity prices, animal diseases, the availability of government support programs and other uncertainties that may affect sales of fertilizer products.

## RISKS (CONTINUED)

### **Exchange Rate Fluctuations**

Exchange rate fluctuations may adversely affect the Group's financial position and results. The Group's financial results are reported in Canadian Dollars and its costs are incurred primarily in Canadian Dollars and Brazilian Real. The appreciation of the Brazilian Real against the Canadian Dollar could increase the actual capital and operating costs of the Group's mineral exploration projects and materially adversely affects the results presented in the Group's financial statements. Currency exchange fluctuations may also materially adversely affect the Group's future cash flow from operations, its results of operations, financial condition and prospects. The Group does not currently have in place a policy for hedging against foreign currency risks. The Group manages foreign currency risk by regularly reviewing the balances held in currencies other than the functional currency.

### **Dependence on Key Executives and Technical Personnel**

The Group is currently dependent on the services of a relatively small management team. Locating mineral deposits and successfully bringing them into production in Brazil depends on a number of factors, not the least of which is the technical skill of the personnel involved. Due to the relatively small size of the Group, the loss of members of the management team or the Group's inability to attract and retain additional highly skilled employees may materially adversely affect its business and future operations. The Group does not currently carry any "key man" life insurance on any of its executives. The non-executive directors of the Group devote only part of their time to the affairs of the Group.

### **Lack of Hedging Policy**

The Group does not have a resource hedging policy and has no present intention to establish one. Accordingly, the Group has no protection from declines in mineral prices. The Group will explore the merits of hedging foreign currency reserves against foreign currency exchange rate fluctuations.

### **History of Earnings**

The Group generated operating revenue of \$80,271,000 and achieved an operating profit of \$23,387,000 for the year ended December 31, 2022. Management anticipates that the Group will continue to generate net profits going forward. However, there is no assurance the Group will generate sufficient earnings, operate profitably, or provide a return on investment in the future.

## **Dilution**

The Group currently has 52,597,951 Ordinary Shares outstanding and 53,041,661 on a fully diluted basis. To the extent the Group should, in future, issue any additional warrants, additional options, convertible securities or other similar rights, the holders of such securities will have the opportunity to profit from a rise in the market price of the Ordinary Shares with a resulting dilution in the equity interest of any persons who become holders of Ordinary Shares. The Group's ability to obtain additional financing during the period may be adversely affected and the existence of the rights may have an adverse effect on the price of the Ordinary Shares. The holders of warrants, options and other rights may exercise such securities at a time when the Group would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favourable than those provided by the outstanding rights.

In some circumstances, the increase in the number of Ordinary Shares issued and outstanding and the possibility of sales of such shares may have a depressive effect on the price of the Ordinary Shares. In addition, as a result of such additional Ordinary Shares, the voting power of the Group's existing shareholders may be diluted.

## **RISKS (CONTINUED)**

### **Officers and Directors of the Group Own a Significant Number of Ordinary Shares and Can Exercise Significant Influence**

The officers and directors of the Group, as a group, beneficially own, on a non-diluted basis, approximately 21.91% of the outstanding Ordinary Shares. The officers and directors, as shareholders, will be able to exert significant influence on matters requiring approval by shareholders, including the election of directors and the approval of any significant corporate transactions.

### **Future Sales of Ordinary Shares by Existing Shareholders**

Sales of a large number of Ordinary Shares in the public markets, or the potential for such sales, could decrease the trading price of the Ordinary Shares and could impair the Group's ability to raise capital through future sales of Ordinary Shares.

## RISKS (CONTINUED)

### **Conflicts of Interest**

Directors of the Group are or may become directors of other reporting companies or have significant shareholdings in other mining companies and, to the extent that such other companies may participate in ventures in which the Group may participate, the directors of the Group may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. The Group and its directors attempt to minimize such conflicts. In the event that such a conflict of interest arises at a meeting of the directors of the Group, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms. In appropriate cases the Group will establish a special committee of independent directors to review a matter in which several directors, or management, may have a conflict. The directors of the Group are required to act honestly, in good faith and in the best interests of the Group. In determining whether or not the Group will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the potential benefits to the Group, the degree of risk to which the Group may be exposed and its financial position at that time.

### **The Cerrado Verde Project is Managed by a Subsidiary**

The material operating subsidiary for the Cerrado Verde Project is Verde Fertilizantes. The directors of Verde Fertilizantes are Felipe Paolucci, Elton Golçaves, and Gustavo Santos. Despite the controls that the Company has put in place, there may be risks associated with ensuring that the corporate actions of Verde Fertilizantes reflect the decisions of the Board of Directors and management of the Company.

### **Political, Economic and Social Instability Associated Key Priorities**

Political, economic and social instability may affect our business including, for instance, if any of the jurisdictions in which we operate introduce restrictions on monetary distributions, forced divestitures or changes to or nullification of existing agreements, mining permits or leases.

### **Cybersecurity Threats**

Cyberattacks or breaches of our systems, including our CRM, or exposure to potential computer viruses, could lead to disruptions to our operations, loss of data, or the unintended disclosure of confidential information and/or personally identifiable information or property damage.

## QUALIFIED PERSON

Scientific and technical information contained in this MD&A is based on the Pre-Feasibility Study technical report filed by the Group in 2022, and prepared by consultants, specialists in the fields of geology, exploration, mineral resource and mineral reserve estimation and classification, mining, geotechnical, environmental, permitting, metallurgical testing, mineral processing, processing design, capital and operating cost estimation, and mineral economics.

The following individuals, by virtue of their education, experience and professional association, are considered Qualified Person ("QP") as defined in the NI 43-101 standard, for this report, and are members in good standing of appropriate professional institutions:

- Bradley Ackroyd. B.Sc., MAIG, principal consulting geologist for AMS, responsible for the resource estimates;
- Beck Nader. D.Sc., M.Sc., MAIG, Senior Advisor at BNA, responsible for the reserve estimates, processing and economical assessment.

## FURTHER INFORMATION

Additional information relating to the Group can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Group's website at [www.investor.verde.ag](http://www.investor.verde.ag).