

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE PERIOD ENDED SEPTEMBER 30, 2023

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#### **GLOSSARY**

**Additionality:** In the context of environmental sustainability and carbon offset projects, "additionality" refers to the extra or supplementary benefits that such initiatives bring beyond the existing or planned actions. Essentially, for a project to claim additionality, its positive outcomes—such as carbon reductions—must be above and beyond what would have occurred without the project. This concept ensures that credits and offsets purchased or credited to an organization genuinely represent new and extra reductions in greenhouse gas emissions, rather than funding pre-existing initiatives.

**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.

**Carbon Credits:** Quantifiable units representing verified emissions reductions achieved through carbon offsetting and removal activities. One carbon credit corresponds to the prevention or removal of one metric ton of CO<sub>2</sub> or its equivalent. Entities, including businesses and individuals, can acquire these credits by backing climate initiatives.

**Carbon dioxide removal certificates ("CORCs"):** Electronic document that records the Attributes of CO2 Removal from registered Production Facilities. Each CORC represents a Net Carbon Dioxide Removal (CDR) volume of 1 ton of Long-Term CO2 Removal, equivalent to 1 carbon credit.<sup>1</sup>

Carbon dioxide equivalent ("CO2e"): Metric measure used to compare the emissions of the different greenhouse gases based upon their global warming potential (GWP), normalized to the equivalent amount of CO<sub>2</sub>.

<sup>&</sup>lt;sup>1</sup> Source: Puro Earth, Puro Standard General Rules, V3.1.

**Carbon Footprint:** The cumulative amount of greenhouse gases produced by activities of an entity, be it a business, nation, individual, or specific action.

Carbon Markets: Platforms for trading carbon credits, falling into two categories:

- Compliance Markets: stems from policy requirements across different levels, like the Kyoto
  Protocol's inaugural market, where participants had to meet emissions reduction targets partially by
  purchasing carbon offsets.
- Voluntary Markets: enables entities to trade carbon credits voluntarily to achieve targets such as carbon neutrality. Unlike compliance markets, voluntary market transactions aren't tied to legal emissions reduction mandates.

**Carbon Sequestration:** The long-term capture and stable storage of atmospheric carbon dioxide. This can be achieved by harnessing natural reservoirs such as plants, soils, geological formations, and oceans.

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 tons at a grade of 9.28% K<sub>2</sub>O, which includes a Measured Mineral Resource of 1.85 billion tons 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.

**CDR (Carbon Dioxide Removal):** The practice of extracting carbon dioxide from the atmosphere post-release and securely storing it for extended durations. Carbon removal methods vary, encompassing nature-based solutions (e.g., enhanced rock weathering) and mechanically intensive approaches. CDR solutions are recognized by the IPCC as crucial for maintaining global temperature increases below 1.5°C.

**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.

**Climate Change:** A change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.<sup>2</sup>

**Co-benefits:** Co-benefits refer to the positive, secondary outcomes derived from initiatives primarily designed to combat climate change. For example, opting to walk or cycle instead of driving not only

<sup>&</sup>lt;sup>2</sup> Source: United Nations Framework Convention on Climate Change. Available at: <a href="https://unfccc.int/resource/ccsites/zimbab/conven/text/art01.htm#:~:text=2.,observed%20over%20comparable%20time%20periods">https://unfccc.int/resource/ccsites/zimbab/conven/text/art01.htm#:~:text=2.,observed%20over%20comparable%20time%20periods</a>

reduces carbon emissions but also promotes a healthier way of living. Likewise, certain techniques such as enhanced rock weathering also yield other advantages including improved soil health and decreased ocean acidity. In addition to their capability for carbon capture, Verde's Products also serve as a source of potash, a vital nutrient for plants.

**Cradle-to-Grave:** Assessment that considers CO<sub>2</sub>e emission impacts at each stage of a product's life cycle, from the time natural resources are extracted from the ground and processed through each subsequent stage of manufacturing, transportation, product use, and ultimately, disposal.

**Deforestation:** Deforestation refers to the widespread removal of trees and vegetation from areas traditionally characterized as forests. This phenomenon is not only observed when trees are directly exploited but also when the land is repurposed for other endeavors. Such activities pose significant ecological threats, leading to habitat loss, reduced biodiversity, and increased greenhouse gas emissions.

**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 microparticles 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.

Enhanced Rock Weathering (ERW): Enhanced Rock Weathering is a technique that mirrors nature's innate carbon sequestration process, aiming to speed up the geological weathering of rocks, thereby capturing and storing CO<sub>2</sub> from the atmosphere more efficiently. Under natural circumstances, rock weathering sees carbon dioxide mix with rainwater as it descends through the atmosphere, subsequently reacting with terrestrial rock formations. This reaction yields stable bicarbonate ions, which are either sequestered in the soil or carried to oceans. The "enhanced" aspect of ERW involves the use of finely ground rock, drastically speeding up a process that nature would take millennia to complete. Analyses performed on Verde's Products at Newcastle University, under the guidance of ERW expert Prof. David Manning, PhD, have verified their capability to extract CO2 from the atmosphere through ERW, at a rate of 120kg of CO2 per ton of Product.

**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").

**Environmental, Social, and Governance (ESG):** Criteria set to evaluate a company's sustainability and societal responsibility, encompassing three pillars. The Environmental pillar examines emissions, resource usage, and sustainability efforts. The Social pillar reviews labor practices, supply chain ethics, and employee growth. Governance focuses on shareholder rights, corporate accountability, and board-level diversity. The ESG is used by investors to gauge non-financial risks in a business's operations.

**Exploration Authorization Application ("Requerimento de Pesquisa"):** Claim for the geological exploration of an area. Interested parties must file an application for exploration authorization with the ANM and state a case for conducting mineral exploration activities. The Exploration Authorization Applications are analyzed in order of filing date. If the party requesting an exploration authorization meets the necessary legal requirements and an exploration authorization has not been previously issued for any part of the area in question, then the ANM will grant the exploration authorization.

Exploration Authorization ("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 Authorization 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 authorization 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.

**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.

**Gigaton:** A gigaton, abbreviated as "Gt," is a metric unit equal to one billion tons. Often used in carbon sequestration discussions, the IPCC emphasizes the need to sequester ten gigatons of CO<sub>2</sub> annually by 2050 to limit global warming to 1.5°C. For context, Verde's 3.32 billion tons of mineral resources hold a total carbon removal potential of 0.40 gigatons of CO<sub>2</sub>.

**Glauconitic Siltstone:** Derived from a naturally occurring potassium silicate rock, Glauconitic Siltstone has been valued as a natural potassium fertilizer for over 250 years. Notably, it stands out for its superior weathering properties in comparison to other materials. This rock is the foundational raw material for all Verde Agritech products. Its composition includes glauconite (40%-80%), K-feldspar (10%-15%), quartz (10%-60%), muscovite-sericite (5%), biotite (2%), titanium oxide (<1%), manganese oxide (<1%), goethite (<1%), and trace amounts of barium phosphate and rare-earth element phosphates.

**Global Warming:** This term describes the ongoing increase in Earth's average surface temperature, primarily due to human activities since the onset of the Industrial Revolution. The primary cause is the release of greenhouse gases which trap heat in the atmosphere, leading to a rough average temperature rise of about 0.2°C per decade.

**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.

**Intergovernmental Panel on Climate Change (IPCC):** United Nations body for assessing the science related to climate change. The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place. It also produces Special Reports on

topics agreed to by its member governments, as well as Methodology Reports that provide guidelines for the preparation of greenhouse gas inventories.<sup>3</sup>

**International Organization for Standardization ("ISO"):** Independent, non-governmental international organization with a membership of 169 national standards bodies. The Organization is a global network of the world's leading standardizers. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges.<sup>4</sup>

ISO: See "International Organization for Standardization"

KCI: See "Potassium Chloride".

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

 $K_2O$ : 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 ( $K_2O$ ).

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

**Life Cycle Analysis ("LCA"):** Life-cycle assessment is a process of evaluating the effects that a product has on the environment over the entire period of its life thereby increasing resource-use efficiency and decreasing liabilities. The LCA is a standardized, scientific method that can be used to study the environmental impact of either a product or the function the product is designed to perform.<sup>5</sup> The terms "assessment" and "analysis" are used interchangeably by different companies, but with the same objective.

LCA: See "Life Cycle Analysis".

**Megaton:** One megaton is equal to one million tons. The term "megaton" is often utilized to measure greenhouse gas emissions and address carbon removal objectives.

**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

<sup>&</sup>lt;sup>3</sup> Source: Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/

<sup>&</sup>lt;sup>4</sup> Source: ISO. Available at: https://www.iso.org/what-we-do.html

<sup>&</sup>lt;sup>5</sup> Source: <u>European Environment Agency</u>.

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.

**Micro S Technology**®: The Group's exclusive elemental sulfur micritization 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 the 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.
- Mineral Right ("Direito Minerário"): Authorization 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 natural process whereby organic matter is converted over time into mineral nutrients. In the carbon removal industry, 'mineralization' also refers to the act of injecting CO<sub>2</sub> into rock for permanent storage.

**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 authorization 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.

**MME:** See "Ministry of Mines and Energy".

**Measurement, Reporting, and Verification ("MRV"):** This is a systematic process designed to quantify the reductions in greenhouse gas emissions achieved through specific environmental initiatives. It involves the careful monitoring of emission reductions over a set timeframe, followed by the compilation and submission of this data to a certified third-party organization. The third party's role is to validate the accuracy of the reported data, which upon confirmation, can lead to the certification of the results and the issuance of carbon credits.

MRV: See "Measurement, Reporting, and Verification".

**Mtpy:** Million tons 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:** Refers to Canada's National Instrument 43-101, which establishes the standards for disclosure of mineral projects. Verde Agritech, in compliance with these standards, reports a combined measured and indicated mineral resource of 1.47 billion tons at 9.28% K2O and an inferred mineral resource of 1.85 billion tons at 8.60% K2O (using a 7.5% K2O cut-off grade).

**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.

PFS: See "Pre-Feasibility Study".

**Potassium chloride ("KCI"):** The most commonly used source of potash. It is composed of approximately 52% of potassium ("K") and 47% of Chloride (Cl<sup>-</sup>), representing 60% of K<sub>2</sub>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 PFS is an in-depth analysis assessing the technical and economic viability of a mineral project. It evaluates various aspects of the project once it reaches a stage where key methods like underground mining or open pit configurations are defined, along with effective mineral processing techniques. The study also entails a financial review, grounded in reasonable assumptions regarding modifying factors and other pertinent elements. This allows a Qualified Person to ascertain if any portion of the mineral resource can transition to a mineral reserve. Notably, a PFS offers a lower level of confidence compared to a full 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.

**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.

**Reforestation:** This term refers to the process of replenishing depleted or destroyed forest areas by planting new trees. This can be achieved naturally or artificially, and it is a vital strategy for mitigating the impacts of deforestation, such as loss of biodiversity and increased carbon dioxide levels in the atmosphere. Reforestation helps restore ecosystems, improve air quality, and combat climate change.

**Renewable Energy:** These are systems of energy generation that do not depend on the extraction and combustion of fossil fuels and can be sustainably replenished without contributing to an increase in carbon emissions. Verde's production process relies on renewable zero-emission hydropower for 100% of its electricity needs.

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

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

tpy: Tons per year.

# 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 period ended September 30,2023 ("Q3 2023").

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**"), and with IFRS and their interpretations issued by the IASB.

Verde'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".

All amounts herein are expressed in Canadian Dollars unless otherwise stated, and the information is current to November 13, 2023.

On September 30, 2023, the average rate of exchange was 3.72 and the closing rate was 3.71 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 <a href="www.sedar.com">www.sedar.com</a> and the Group's website at <a href="www.investor.verde.ag">www.investor.verde.ag</a>.

#### 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.

By diversifying the global potash supply chain, the Group aims to reduce dependence on two primary suppliers, fostering stability and resilience in the essential agricultural resource.

Its four-pillar approach positions Verde as a leader in sustainable solutions with a significant global impact:

- Carbon Capture: We endeavor to develop one of the world's largest carbon capture projects, leveraging enhanced rock weathering to sequester atmospheric carbon dioxide ("CO<sub>2</sub>"), combat climate change, and promote a sustainable future.
- Longevity Equality: Through nutrient enrichment and sustainable agricultural practices, Verde
  Agritech addresses hidden hunger and works to close the longevity gap, ensuring access to
  essential nutrients for everyone, regardless of socioeconomic background.

## **GROUP OVERVIEW (CONTINUED)**

- Geopolitical Security: By diversifying the global potash supply chain, we aim to reduce dependence on two primary suppliers, fostering stability and resilience in the essential agricultural resource.
- Food Security: By developing and implementing cutting-edge technologies to increase fertilizer
  efficiency and agricultural productivity, we play a vital role in promoting food security and
  environmental sustainability for future generations.

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".

Currently, the principal activity of the Group is the production and sale of its multinutrient potassium fertilizer marketed in Brazil under the brands K Forte® and BAKS®, and internationally as Super Greensand® ("the Products"). Verde operates in the state of Minas Gerais, Brazil.

#### 2023

In June 2023, Verde's shareholders voted to approve the Group's proposal to refrain sales to regions within the Amazon Rainforest - except for projects that plant native trees for reforestation - in a commitment to combat deforestation.<sup>6</sup> The initiative will protect a territory encompassing a total of 2.23 million km<sup>2</sup>.<sup>7</sup> To put its magnitude into perspective, this area surpasses the combined size of Japan, Germany, the United Kingdom, France, and Italy. Aligned with the Group's purpose of improving the health of all the people and the Planet, the Resolution represents a significant step in the ongoing battle against deforestation in one of the world's most biologically rich regions.

In July 2023, the Group announced the carbon capture properties of its Products through Enhanced Rock Weathering ("ERW"),<sup>8</sup> as detailed by an independent study conducted at Newcastle University under the leadership of Prof. David Manning, PhD, a renowned soil scientist. The carbon dioxide ("CO<sub>2</sub>") capture is inherent to the Products and is estimated at 120kg of CO<sub>2</sub> per ton. The CO<sub>2</sub> removal does not require any change to the Products' production and farmland application methods, nor does it change the nutritional benefits to plants.

<sup>&</sup>lt;sup>6</sup> The states of Amazonas, Acre, Roraima, and Amapá were entirely considered as Amazon Rainforest. For states that include partial forest areas, municipalities with less than 500 hectares of planted area were considered predominantly Amazon Rainforest.

<sup>&</sup>lt;sup>7</sup> Source: Brazilian Institute of Geography and Statistics (IBGE), Municipal Digital Mesh of the Brazilian Political-Administrative Division (2022). Available at: https://www.ibge.gov.br/geociencias/organizacao-do-territorio/malhasterritoriais/15774-malhas.html?edicao=36516&t=acesso-ao-produto

<sup>&</sup>lt;sup>8</sup> See "Verde's Products Remove Carbon Dioxide From the Air", Verde AgriTech. Available at: https://investor.verde.ag/verdes-products-remove-carbon-dioxide-from-the-air/

# **GROUP OVERVIEW (CONTINUED)**

In August 2023, Newton Nagumo was appointed as the Group's Chief Marketing Officer, bringing over two decades of successful communication and marketing planning expertise to boost Verde's market strategy. The hiring of Mr. Nagumo was part of the Group's corporate senior management restructuring strategy.

In August 2023, Verde announced that its Product undergoes mineral dissolution in only a matter of months to a year from its application to soils, faster than the most rapid reacting silicate minerals (forsterite), which takes years to decades for a similar dissolution. Mineral dissolution is directly correlated to the capture of carbon dioxide from the atmosphere; the faster the dissolution the faster the absorption of CO<sub>2</sub>. The conclusion was reached by a commissioned study conducted by Phil Renforth, Ph.D., at Heriot Watt University, based on peer-reviewed publication and commercial data.<sup>10</sup>

In September 2023, the Group announced that the National Land Transport Agency ("ANTT", from Agência Nacional de Transportes Terrestres) and the Brazilian Ministry of Infrastructure had authorized Verde to build a railway branch line to transport up to 50 million tonnes per year of Verde's Product. The Railway will connect Verde's production facilities to a railway node part of the Ferrovia Centro Atlântica (which is the largest railroad network in Brazil, interconnecting seven states and the Federal District), effectively linking the municipalities of São Gotardo and Ibiá, both in the state of Minas Gerais.<sup>11</sup>

In September 2023, Verde announced that Gilson Guardiero was joining the Group as its Chief Revenue Officer, contributing to craft and execute a forward-looking sales strategy that aligns with Verde's broader mission, based on his expertise in sales, client support and retention, and expansion and optimization of revenue-generating opportunities.<sup>12</sup>

<sup>&</sup>lt;sup>9</sup> See "Verde Appoints Chief Marketing Officer", Verde AgriTech. Available at: <a href="https://investor.verde.ag/verde-appoints-chief-marketing-officer/">https://investor.verde.ag/verde-appoints-chief-marketing-officer/</a>

<sup>&</sup>lt;sup>10</sup> See "Verde's Products Remove Carbon Dioxide from Air in Mere Months of Application", Verde AgriTech. Available at: https://investor.verde.ag/verdes-products-remove-carbon-dioxide-from-air-in-mere-months-of-application/

<sup>&</sup>lt;sup>11</sup> See "Railway to freight up to 50Mtpy of Verde's Product granted construction permit", Verde AgriTech. Available at: <a href="https://investor.verde.ag/railway-to-freight-up-to-50mtpy-of-verdes-product-granted-construction-permit/">https://investor.verde.ag/railway-to-freight-up-to-50mtpy-of-verdes-product-granted-construction-permit/</a>

<sup>&</sup>lt;sup>12</sup> See "Verde Appoints Chief Revenue Officer", Verde AgriTech. Available at: <a href="https://investor.verde.ag/verde-appoints-chief-revenue-officer/">https://investor.verde.ag/verde-appoints-chief-revenue-officer/</a>

### **OPERATIONS**

Verde is Brazil's largest potash producer by capacity. The Group's installed overall production capacity is 3,000,000 tpy.

Facility	Production Capacity (Product tpy)	Status	Commercial Production	Technologies Deployed
Plant 1	600,000	Concluded	In operation	Micro S, 3D Alliance, Cambridge Tech, Bio Revolution
Plant 2	2,400,000	Concluded	In operation	Cambridge Tech, Bio Revolution

Verde AgriTech Ltd's Brazilian subsidiaries, Verde Fertilizantes LTDA and FVS Mineração LTDA, are ISO 9001 and ISO 14001 certified.

## SUMMARY OF LICENSES AND PERMITS<sup>13</sup>

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. Verde is fully permitted to mine 2,833,000 million tons per year ("**Mtpy**") and has submitted concurrent mining and environmental applications for an additional 25,000,000 tpy, still pending approval.

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

Mine Pit	Fully Permitted to	Minir	ng (tpy)	Environn	nental (tpy)
millo i it	Produce (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	0	2,500,000	0	2,500,000
Other pits	0	0	11,560,000	0	0
Total	2,833,000	2,833,000	36,560,000	2,833,000	25,000,000

<sup>&</sup>lt;sup>13</sup> Please refer to the 2022 Annual Information Form for full explanation of movement in licenses and permits.

### **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

Verde's guidance for 2023 is described in the table below:

FY 2023 guidance ranges

FY 2023 Guidance	Range
Sales target (tons)	800,000 - 1,200,000
Revenue (C\$'000)	78,135 - 115,332
EBITDA (C\$'000) <sup>14</sup>	9,341 - 24,565
EPS (C\$)	0.04 - 0.29

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.

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<sup>&</sup>lt;sup>14</sup> Before non-cash events.

### Q3 2023 FINANCIAL HIGHLIGHTS

- Sales of Verde's multinutrient potassium products, BAKS® and K Forte® sold internationally as Super Greensand® (the "Product") by volume in Q3 2023 were 108,000 tons, compared to 189,000 tons in Q3 2022.
- Revenue in Q3 2023 was \$9.4 million, compared to \$27.3 million in Q3 2022.
- Cash held by the Group in Q3 2023 was \$9.3 million, compared to \$5.1 million in Q3 2022.
- Total non-current assets in Q3 2023 were \$67.3 million, compared to \$55.8 million in Q3 2022.
- EBITDA before non-cash events in Q3 2023 was -\$0.6 million, compared to \$8.1 million in Q3 2022
- From Q1 to Q3 2023, the Group sold 323,000 tons of Product, which have the potential to capture up to 38,760 tons of carbon dioxide equivalent ("CO<sub>2</sub>e") from the atmosphere via Enhanced Rock Weathering ("ERW").<sup>15</sup> The net amount of carbon captured, represented by carbon dioxide removal certificates ("CORCs"), is estimated at 20,936 tons of CO<sub>2</sub>e.<sup>16</sup>
- In Q3 2023, 8,559 tons of chloride have been prevented from being applied into soils by farmers
  who used the Product in lieu of potassium chloride ("KCI") fertilizers.<sup>17</sup> A total of 138,241 tons of
  chloride has been prevented from being applied into soils by Verde's customers since the Group
  started production.<sup>18</sup>

#### SUBSEQUENT EVENTS

- In October 2023, the Group appointed Lucas Brown as its new Vice President of Corporate
  Development. Mr Brown is leading Verde's expansion into the carbon market, in addition to
  overseeing the Group's institutional and investor relations. He has dedicated a decade working in
  Brazil, in the last four years serving as the British Consul to Minas Gerais state.<sup>19</sup>
- In October 2023, the Group announced that it has secured C\$16.2 million in debt financing facility from Banco do Brasil S.A. and Banco Bradesco S.A., the two largest Brazilian banks. The funds raised will be used to replace existing debts that were at higher interest rates and provide the Group with more favorable terms, including 6 months of grace period for Bradesco's loan and 12 months for Banco do Brasil's loan. This will enable Verde to offer financing solutions to potential

<sup>&</sup>lt;sup>15</sup> The carbon capture potential of Verde's products, through Enhanced Rock Weathering (ERW), is 120 kg CO₂e per ton of K Forte®. For further information, see "<u>Verde's Products Remove Carbon Dioxide From the Air</u>".

<sup>&</sup>lt;sup>16</sup> CO<sub>2</sub> Removal Certificate (CORC) is an electronic document, which records the Attributes of CO<sub>2</sub> Removal from registered Production Facilities. Each CORC represents a Net Carbon Dioxide Removal (CDR) volume of 1 ton of Long-Term CO<sub>2</sub> Removal, equivalent to 1 carbon credit. Source: <u>Puro.earth</u>, V3.1.

<sup>&</sup>lt;sup>17</sup> Verde's Product is a salinity and chloride-free replacement for KCl fertilizers. Potassium chloride is composed of approximately 46% of chloride, which can have biocidal effects when excessively applied to soils. According to Heide Hermary (Effects of some synthetic fertilizers on the soil ecosystem, 2007), applying 1 pound of potassium chloride to the soil is equivalent to applying 1 gallon of Clorox bleach, with regard to killing soil microorganisms. Soil microorganisms play a crucial role in agriculture by capturing and storing carbon in the soil, making a significant contribution to the global fight against climate change.

 $<sup>^{18}</sup>$  1 ton of Product (10% K<sub>2</sub>O) has 0.1 tons of K<sub>2</sub>O, which is equivalent to 0.17 tons of potassium chloride (60% K<sub>2</sub>O), containing 0.08 tons of chloride.

<sup>&</sup>lt;sup>19</sup> See "Verde appoints Vice President of Corporate Development". Available at:

customers, whilst fostering growth and financial stability. The Financing consists of C\$10.8 million in debt from Banco do Brasil, Brazil's largest bank, and C\$5.4 million from Bradesco, the second largest financial Group in Brazil. Additionally, Verde currently has C\$20 million pre-approved credit with banks in Brazil.<sup>20</sup>

• In October 2023, Verde announced the results of its first Life Cycle Analysis, completed by LCA Design Corporation, a leading Canadian consultancy firm. The LCA determines the climate impacts associated with the production of Verde's potassium fertilizer K Forte® from cradle-to-grave. The LCA was conducted according to ISO 14040/44:2006 Standard and Puro Earth Enhanced Rock Weathering Methodology.<sup>21</sup>

#### **CARBON CAPTURE POTENTIAL**

Verde's Products have a carbon capture potential of 120 kg CO<sub>2</sub>e per ton of K Forte® ("CO<sub>2</sub>e/t").<sup>22</sup> The Life Cycle Assessment ("LCA") calculated the Product's carbon footprint from cradle-to-gate at 7.44 kg CO<sub>2</sub>e/t.<sup>23</sup> Therefore, the Group's net carbon capture potential covering activities from raw material extraction, processing and production can reach 112.56 kg CO<sub>2</sub>e/t.<sup>24</sup>

The greenhouse gas emissions associated with the cradle-to-gate cycle of K Forte® are relatively low, at less than 10% of the amount of carbon captured by the Product. This can be attributed to Verde's sustainable production processes, noticeably the 100% use of renewable energy (hydroelectric) for the processing plants.

When considering the cradle-to-grave assessment<sup>25</sup> of the Product, which includes the final application of Products by farmers, the shipping distance between Verde's production facilities and the application site influences the range of greenhouse gas emissions within Verde's supply chain.

Between Q1 and Q3 2023, the Group sold 323,000 tons of Product, which have the potential to capture up to 38,760 tons of CO<sub>2</sub>e. This amount could result in a potential 20,936 tons of CORC, calculated within the LCA and inclusive of shipping emissions.

<sup>&</sup>lt;sup>20</sup> See "Verde Cultivates Financial Resilience with Banco do Brasil and Bradesco Backing".

<sup>&</sup>lt;sup>21</sup> See "Verde Announces Life Cycle Assessment Results in Accordance with ISO Standards".

<sup>&</sup>lt;sup>22</sup> The estimated amount of *CO*<sub>2</sub> captured by K Forte® is equivalent to 120 kg CO<sub>2</sub>e per ton of Product. The calculation was provided by Dr. Manning, determined through an independent study conducted at Newcastle University. For further information, see "<u>Verde</u>'s <u>Products Remove Carbon Dioxide From the Air</u>".

<sup>&</sup>lt;sup>23</sup> Cradle-to-gate is the assessment of a product's life cycle from raw material extraction (cradle) to its production facility gate. It does not include the carbon footprint associated with product transportation to the final customer. Source: https://circularecology.com/glossary-of-terms-and-definitions.html

<sup>&</sup>lt;sup>24</sup> For further information, see "Verde Announces Life Cycle Assessment Results in Accordance with ISO Standards".

<sup>&</sup>lt;sup>25</sup> 'Cradle-to-grave' assessment considers impacts at each stage of a product's life-cycle, from the time natural resources are extracted from the ground and processed through each subsequent stage of manufacturing, transportation, product use, and ultimately, subdisposal. Source: <u>European Environment Agency</u>.

Carbon credits for ERW are currently being negotiated in a range of \$138.78/t<sup>26</sup> to \$563.9/t.<sup>27</sup>

The following table shows the CORCs derived from the cradle-to-grave life cycle assessment and market size for K Forte®, according to the distance radius for the Product's shipment from Verde's production facilities.

# Net carbon sequestration for K Forte®'s cradle-to-grave LCA and market size, according to shipment distance

Distance from Verde's production facilities (km) <sup>28</sup>	CO <sub>2</sub> Stored (kg CO <sub>2</sub> e / t)	CO <sub>2 Supply Chain</sub> Footprint weighted average (kg CO <sub>2</sub> e / t) <sup>29</sup>	CORCs weighted average (kg CO <sub>2</sub> e / t) <sup>30</sup>	Potash Market Size ('000 tons K2O) <sup>31</sup>	Product's Market Size ('000 tons K Forte®)	Product's Cumulative Market Size ('000 tons K Forte®)
0 - 200	120.00	15.11	104.89	61.06	610.62	610.62
200 - 400	120.00	23.62	96.38	430.66	4,306.65	4,917.27
400 - 600	120.00	32.52	87.48	884.40	8,844.01	13,761.29
600 - 800	120.00	42.51	77.49	897.40	8,974.03	22,735.31

## MARKET OVERVIEW

## **Agricultural Inputs Market**

At the outset of the Ukrainian conflict in February 2022, there were concerns in the market that geopolitical sanctions against Russia would result in a significant shortage of fertilizers. Amidst this period of uncertainty, with looming concerns over potential fertilizer shortages, farmers hurried to secure these essential inputs, often paying steep prices. This urgency to buy, driven by the fear of scarcity, subsequently led to higher levels of debt among the farming community. However, these concerns proved to be unwarranted, as there was actually an oversupply of many fertilizers in the market due to increased availability, including potash fertilizers.

<sup>&</sup>lt;sup>26</sup> Source: Puro.earth (Nasdag), a crediting platform for engineered carbon removal. Available at: https://puro.earth/carbon-removal-index-price/. Exchange rate: €1.00 = \$1.07.

<sup>&</sup>lt;sup>27</sup> Average price of carbon credits sold by Frontier between 2022 and 2023. Frontier is an advance market commitment that aims to accelerate the development of carbon removal technologies by guaranteeing future demand for them. It was founded by Stripe, Alphabet, Shopify, Meta, McKinsey and tens of thousands of businesses using Stripe Climate. Available at: https://frontierclimate.com/

<sup>&</sup>lt;sup>28</sup> Shipping distances were calculated as the weighted average distance from Verde's production facilities to the geographical center of each city, determined through geoprocessing.

29 Considers the weighted average of CO₂e emissions within the different shipping distances.

<sup>&</sup>lt;sup>30</sup> Considers the weighted average of CORCs generated within the different shipping distances.

<sup>&</sup>lt;sup>31</sup> The potash market size was determined based on the potential demand for K<sub>2</sub>O. This calculation was derived from the total planted areas in Brazil in 2021 (Source: IBGE, 2022), considering the typical dosages of potash fertilizers for the main crops: Cotton = 100 kg of K2O/ha; Coffee = 200 kg of K2O/ha; Soybean/Maize System = 150 kg of K2O/ha; Other Crops = 100 kg of K2O/ha. On October 27, 2023, the Group updated the dosages of potash fertilizers considered for the main crops to better align with the most recent market data.

# Year-end stock in Brazil ('000 tonnes)<sup>32</sup>

Product	2021	2022	YoY
Ammonium Sulfate	610	848	39%
Urea	1,202	1,271	6%
Monoammonium Phosphate (MAP)	872	781	-10%
Single Super Phosphate (SAP)	816	1,288	58%
KCI	1,740	2,148	23%
NPKs	486	803	65%
Total	5,726	7,139	25%

This scenario led to a consistent decline in fertilizer prices from the second half of 2022 onwards. As the price of fertilizers started to decrease, many farmers postponed their purchases of agricultural inputs as much as possible, hoping that the downward trend would lead to even lower prices. This delay directly impacted Verde's sales volumes.

Additionally, the weather phenomenon, El Niño, in the latter half of 2023 led farmers to adopt a more conservative investment strategy.<sup>33</sup> The anticipated severe heat and drought conditions associated with El Niño, led to farmers adjusting their investment strategies to mitigate the predicted challenges in crop production.

## Average KCI Price

After the historic high reached in 2022, the Average KCI CFR price declined by 59% in Q3 2023, compared to Q3 2022, with a 34% decrease from January to September 2023.

The table below compares Brazil's monthly average KCI CFR prices from 2022 to 2023:

Source: Brazilian Fertilizer Mixers Association (from "Associação Misturadores de Adubo do Brasil", in Portuguese).
 Source: Coface for Trade. Available at: <a href="https://www.coface.com/News-Publications/News/El-Nino-a-threat-to-global-agriculture">https://www.coface.com/News-Publications/News/El-Nino-a-threat-to-global-agriculture</a>

KCI Brazil CFR average spot price (US\$)34

Month	2022	2023	YoY
January	772	510	-34%
February	781	498	-36%
March	1,018	463	-54%
April	1,183	415	-65%
May	1,113	366	-67%
June	1,030	333	-68%
July	943	328	-65%
August	883	352	-60%
September	711	351	-51%
October	624	343	-45%
November	571	340*	-40%
December	513	-	-

<sup>\*</sup>As of November 09, 2023.

# Other Fertilizers

The following tables present an overview of the price trends for essential nitrogen and phosphate fertilizers, as well as sulfur fertilizers, capturing the market's response to a period of geopolitical unrest.

Granular Urea Brazil CFR average price (US\$)35

Month	2022	2023	YoY
January	696	439	-37%
February	597	356	-40%
March	925	327	-65%
April	865	333	-62%
May	706	320	-55%
June	603	290	-52%
July	603	369	-39%
August	614	395	-36%
September	704	399	-43%
October	646	404	-38%
November	586	388*	-34%

<sup>\*</sup>As of November 09, 2023.

<sup>&</sup>lt;sup>34</sup> Acerto Limited Report.

<sup>&</sup>lt;sup>35</sup> Acerto Limited Report.

# Monoammonium phosphate ("MAP 11-52")<sup>36</sup> CFR Brazil average price (US\$)<sup>37</sup>

Month	2022	2023	YoY
January	860	654	-24%
February	873	652	-25%
March	1,179	636	-46%
April	1,266	596	-53%
May	1,119	530	-53%
June	1,035	461	-56%
July	959	465	-51%
August	878	517	-41%
September	730	533	-27%
October	644	555	-14%
November	611	555*	-9%

<sup>\*</sup>As of November 09, 2023.

# **Commodity Prices**

The agricultural commodities market has been experiencing significant fluctuations on a downward trend since H1 2022, impacting the fertilizers' market worldwide. The following table shows the shifts in the price of some of the main commodities in Brazil:

<sup>&</sup>lt;sup>36</sup> MAP 11-52 is a type of fertilizer known as Monoammonium Phosphate. The "11-52" notation refers to the nutrient content of the fertilizer, indicating that it contains 11% nitrogen in the form of ammonia (ammoniacal nitrogen) and 52% phosphorus.
<sup>37</sup> Acerto Limited Report.

2022-2023 variance in Brazilian commodities average prices (% R\$)38

Month	YoY $\Delta$			
Month	Soybeans	Coffee	Corn	Cotton
January	-1%	-32%	-10%	-22%
February	-11%	-24%	-11%	-25%
March	-19%	-14%	-15%	-31%
April	-22%	-12%	-16%	-40%
May	-29%	-18%	-33%	-51%
June	-30%	-30%	-36%	-47%
July	-23%	-38%	-33%	-37%
August	-21%	-36%	-35%	-36%
September	-21%	-38%	-35%	-34%
October	-22%	-27%	-30%	-22%
November*	-23%	-10%	-30%	-24%
YTD (Jan/Sep) $\Delta$	-20%	-27%	-25%	-34%

<sup>\*</sup>As of November 09, 2023.

As the prices of commodities initiated a downward trajectory in 2023, many farmers chose to delay their crop sales, anticipating a market rebound that would fetch more favorable prices. Although the decline in prices has halted, market values remain considerably below the levels observed in 2022, further impacting the agricultural sector.

#### Working capital constraints for Brazilian farmers

In 2023, the agricultural market is facing extreme conditions characterized by a substantial depletion of farmers' working capital.

The convergence of these circumstances aligns with the timeframe when farmers need to procure essential agricultural inputs, including fertilizers, for the upcoming planting season. Consequently, Brazilian farmers are facing significant challenges in securing financing for their planting activities.

These farmers opt to procure inputs from suppliers that provide extended payment terms, combined with the most competitive interest rates achievable. This strategy enables them to cover the expenses associated with these inputs after generating revenue from the imminent harvest, usually spanning a period of 9 to 12 months.

<sup>&</sup>lt;sup>38</sup> Source: Economic Research Center of the ESALQ/University of São Paulo. Available at: https://www.cepea.esalq.usp.br/br/indicador/soja.aspx

As a result, Brazilian farmers situation of reduced working capital and demanding conditions for extended payment terms has led to an elevated risk of customer default for fertilizer companies, including Verde.

## **Brazilian Economy**

In August 2023, the Central Bank of Brazil started lowering the SELIC rate after a sequence of 12 consecutive rate hikes. On November 01, 2023, the SELIC rate decreased to 12.25%.<sup>39</sup> However, this rate still represents the country's highest interest rate since 2017.

The Central Bank of Brazil projects the SELIC rate to reach 11.75% per annum by the end of 2023, 9% in 2024, and 8.5% in 2025 and 2026.<sup>40</sup> Annual inflation forecast for 2023 is 4.63%.<sup>41</sup>

The table below provides an overview of the SELIC rates spanning from 2018 to 2023, along with the projections for 2024, 2025 and 2026.

SELIC interest rates<sup>42</sup>

Year	Selic rate at year-end
2017	7.00%
2018	6.50%
2019	4.50%
2020	2.00%
2021	9.25%
2022	13.75%
Current rate	12.25%
2023 Forecast	11.75%
2024 Forecast	9.00%
2025 Forecast	8.75%
2026 Forecast	8.50%

## **Global Market Competition and Financing**

In the midst of the most challenging conditions witnessed by the fertilizer market in recent years, the Group is contending with the intersection of two crucial factors: In 2022, Brazil experienced its highest interest rates since 2006, a situation that is beginning to show signs of improvement in 2023 but still impacts the Group's financing conditions. Additionally, there is a pressing demand from farmers for credit.

<sup>39</sup> Source: Brazilian Central Bank. Available at: https://www.bcb.gov.br/en/pressdetail/2500/nota

<sup>&</sup>lt;sup>40</sup> Source: Brazilian Central Bank. Available at: https://www.bcb.gov.br/content/focus/focus/R20231027.pdf

<sup>&</sup>lt;sup>41</sup> Source: Boletim FOCUS. Available at: https://www.bcb.gov.br/publicacoes/focus

<sup>&</sup>lt;sup>42</sup> Source: Brazilian Central Bank. Available at: https://www.bcb.gov.br/en

Verde's average cost of debt is 16.4%. To incentivize sales, the Group offers its customers a credit line that charges a spread to its finance cost to comprise operational costs, provisions, and bad debt, leading to an average lending cost of 18.2% for credit-based purchases. The Group's ability to provide financing with longer tenors is considerably lower compared to international players<sup>43</sup>, which translates into less competitive terms for its customers. Unlike its competitors, Verde does not have the option to incur most of its cost of debt in US dollar-denominated liabilities. Overall, the Group is not able to provide financing for more than 20% of its revenue due to constraints related to lines of credit.

## **Exchange Rate**

The fluctuation in the exchange rate between the Canadian dollar and the Brazilian Real during the quarter also influences the Group's results. Canadian dollar devaluated by 7% versus Brazilian Real in Q3 2023, with and average exchange rate of R\$3.72 in the quarter, compared to R\$3.99 in Q3 2022.

## MARKET OUTLOOK

The market outlook for agricultural inputs, particularly fertilizers, is cautiously optimistic. Key trends and expectations shaping this outlook include:

- Stabilization of Fertilizer Prices: The global market has witnessed a stabilization in the prices of KCI. This trend is expected to continue, providing a more predictable cost environment for fertilizer production. The stabilization of KCI prices is particularly significant for Verde, as it could lead to more stable pricing strategies and potentially improved profit margins.
- 2. The market also demonstrates a returning stability in urea, MAP 11-52 and sulphur fertilizers prices following last year's volatile scenario.
- Steadying of Agricultural Commodity Prices: After a period of fluctuation, agricultural
  commodity prices are showing signs of steadying. This stabilization is likely to positively influence
  farmers' investment capabilities in agricultural inputs, including fertilizers.
- 4. Brazilian Economic Indicators: The Brazilian Central Bank's recent reduction in interest rates, with the potential for further cuts, could alleviate financial constraints on farmers. This would facilitate their business development and acquisition of essential inputs. Should the SELIC rate decrease to the anticipated 8.5%, Verde is projected to benefit from interest expense savings of C\$1.1 million by the end of 2024 and C\$2.7 million by Q4 2026.

<sup>&</sup>lt;sup>43</sup> Verde has an average of 93 days of receivables, while competitors can provide 180-360 days to collect its payments.

# MARKET OUTLOOK (CONTINUED)

- 5. Global Potash Market Dynamics: As a major potash producer, Verde is well-positioned in the global potash market, particularly with Brazil's reliance on imported potash. Verde's domestic production capabilities place it favorably to efficiently meet local demand.
- 6. **Focus on Climate Change and Sustainability:** As the global shift towards sustainable agriculture gains momentum and environmental impact becomes a critical evaluation metric, Verde's commitment to sustainable fertilizers and its carbon capture initiative positions the Group favorably in response to this market transition.

## **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	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022
Tons Sold '000	108	107	108	125
Revenue	9,375	10,305	11,125	16,837
Net Income / (loss) after tax	(3,464)	241	(108)	(1,312)
Basic earnings / (loss) per share	(0.066)	0.005	(0.002)	(0.028)
Diluted earnings / (loss) per share	(0.063)	0.004	(0.002)	(0.027)
Total Assets	95,501	97,256	105,245	97,310
Current Liabilities	10,974	17,009	29,707	28,804
Non-current Liabilities	36,544	28,418	25,443	20,155

All amounts in CAD \$'000	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021
Tons sold '000	189	202	112	134
Revenue	27,269	24,861	11,304	10,851
Net Income after tax	6,458	9,625	3,033	1,878
Basic earnings per share	0.123	0.189	0.060	0.037
Diluted earnings per share	0.121	0.185	0.057	0.036
Total Assets	91,862	65,508	55,189	41,400
Current Liabilities	24,220	15,746	13,953	9,364
Non-current Liabilities	18,069	8,059	8,167	5,678

### **RESULTS OF OPERATIONS**

The following table provides information about three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022. All amounts in CAD \$'000.

All amounts in CAD \$'000	3 months ended Sep 30, 2023	3 months ended Sep 30, 2022	9 months ended Sep 30, 2023	9 months ended Sep 30, 2022
Tons sold '000	108	189	323	503
Average Revenue per ton sold \$	87	144	95	126
Average Production cost per ton sold \$	(28)	(32)	(24)	(28)
Average Gross Profit per ton sold \$	59	112	71	98
Gross Margin	67%	78%	75%	78%
Revenue	9,375	27,269	30,805	63,434
Production costs <sup>(1)</sup>	(3,056)	(6,069)	(7,680)	(14,055)
Gross Profit	6,319	21,200	23,125	49,379
Gross Margin	67%	78%	75%	78%
Sales and marketing expenses	(695)	(1,866)	(3,026)	(3,895)
Product delivery freight expenses	(3,919)	(9,187)	(11,509)	(19,200)
General and administrative expenses	(2,328)	(1,970)	(5,142)	(3,666)
EBITDA (2)	(623)	8,177	3,448	22,618
Share Based and Bonus Payments (Non-Cash Event) <sup>(3)</sup>	(261)	(20)	(145)	(124)
Depreciation, Amortisation and P/L on disposal oplant and equipment (3)	of (973)	(84)	(2,852)	(148)
Operating Profit after non-cash events	(1,857)	8,073	451	22,346
Interest Income/Expense (4)	(1,593)	(722)	(3,586)	(1,152)
Net Profit before tax	(3,450)	7,351	(3,135)	21,194
Income tax (5)	(14)	(893)	(196)	(2,079)
Net Profit	(3,464)	6,458	(3,331)	19,115

<sup>(1) –</sup> C\$2,693,000 of depreciation in 2023 related to the investments made in Plant 1, Plant 2 and access routes improvement in the last 12 months that are included in production costs in the financial statements have been reclassified to a non-cash event in the MD&A.

<sup>(2) -</sup> Non GAAP measure.

<sup>(3) –</sup> Included in General and Administrative expenses in financial statements.

<sup>(4) -</sup> Please see Summary of Interest-Bearing Loans and Borrowings notes.

<sup>(5) –</sup> Please see Income Tax notes.

#### **External Factors**

Revenue and costs are affected by external factors including changes in the exchange rates between the US\$, C\$ and R\$ along with fluctuations in potassium chloride spot CFR Brazil, agricultural commodities prices, interest rates, among other factors.

For further details, please refer to the Market Overview section (page 22):

# Q3 2023 compared with Q3 2022

#### **EBITDA and EPS**

The Group had an EBITDA of -\$600,000 in Q3 2023, compared to \$8,200,000 in Q3 2022. This decrease can be mainly attributed to the factors below, outlined in greater detail within the Market Overview section (please refer to page 22):

- Increased bad debt provision: The increase in bad debt provision has increased the general expenses, further impacting on the Group's financial position. In Q3 2023, the Group recognized a bad-debt provision of \$563,000, which exerted a considerable impact on the general expenses and, consequently, EBTIDA. As outlined in the Market Overview section, 2023 has proven to be a demanding year for the agricultural sector, However, the Group is currently in active negotiations with these clients. If the negotiations are successful, the provision will be reversed.
- Potassium chloride price decline: The average price of KCI CFR Brazil experienced a substantial 59% decrease in Q3 2023 when compared to the same period in 2022, with a 34% decrease from January to September 2023.
- Extreme market conditions and working capital constraints: The current agricultural market
  scenario is characterized by extreme challenges, including working capital constraints for Brazilian
  farmers due to low agricultural commodity prices and financial market instability. Farmers are
  encountering difficulties in financing planting activities and are opting for extended payment terms
  with competitive interest rates from suppliers.
- Intensified competition and financing conditions: Larger international competitors benefit from lower financing costs within their countries and possess larger balance sheets. These advantages enable them to extend more appealing interest rates and favorable commercial terms to farmers when supplying products, giving them a distinctive competitive edge. Verde's capacity to offer competitive credit terms to farmers encounters limitations due to the Group's higher cost of debt compared to these well-established competitors. This financial discrepancy impairs Verde's ability to match the financing terms offered by its competitors, impacting its appeal to farmers seeking more favorable credit options.

- Sales price and volume: Verde's average sales price per ton had a decrease of 40% in Q3 2023, in addition to a 43% decrease in the sales volume. This was mainly driven by the lower potassium chloride prices and additional discounts provided by the Group, aiming to increase market adoption.
- Shift in product mix due to constrained working capital: With many farmers facing restricted cash flows, there has been a noticeable shift towards opting for lower-value-added products.
   Consequently, the utilization of micronutrients, which do not fall within the essential NPK elements for plants, has witnessed a reduction. This shift has culminated in a decrease in the sales proportion of BAKS, Verde's higher-margin product, from 11% to 8% in the third quarter of 2023.

Basic loss per share was \$0.066 for Q3 2023, compared to earnings of \$0.126 for Q3 2022.

#### **Product Sales**

Sales by volume decreased by 43% in Q3 2023, to 108,000 tons sold, compared to 189,000 tons sold in Q3 2022.

The combination of the previously described factors of extreme market conditions explained in detail within the Market Overview section (page 03) has brought forth noteworthy challenges for the agricultural sector, also impacting Verde's sales volumes.

#### Revenue

Revenue from sales decreased by 66% in Q3 2023, to \$9,375,000 from the sale of 108,000 tons of Product, at average \$87 per ton sold; compared to \$27,269,000 in Q3 2022 from the sale of 189,000 tons of Product, at average \$144 per ton sold.

Average revenue per ton excluding freight expenses (FOB price) decreased by 47% in Q3 2023, to \$51 compared to \$95 in Q3 2022 mainly due to the decrease in Potassium Chloride CFR Brazil, from US\$640-US\$980 per ton in Q3 2022 to US\$310-US\$360 per ton in Q3 2023.<sup>44</sup> This reduction was partially offset by the 7% appreciation of the Brazilian Real 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 includes 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:

<sup>&</sup>lt;sup>44</sup> Source: Acerto Limited Report.

- 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 Jumbo Bags.
- 3. Plant 1 produces K Forte® Bulk, K Forte® Jumbo Bag (sold in 1-ton bags), BAKS® Bulk, and BAKS® Jumbo 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.

The table below shows a breakdown of full year 2023 Verde's production costs projection for BAKS® and K Forte®, and what percentage of those costs is not controllable by management:

(+) (+) (=)

Cost per ton of product projected for 2023 <sup>45</sup> (C\$)	Cash cost	Assets depreciation	Total cost expected for 2023 <sup>46</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® Jumbo Bag (Plant 1)	30.4	2.8	33.2	71%
BAKS® (2%S 0.2%B) <sup>47</sup> Bulk (Plant 1)	42.1	3.8	45.9	81%
BAKS® (2%S 0.2%B) Jumbo 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.

Production costs decreased by 50% in Q3 2023, to \$3,056,000 compared to \$6,069,000 in Q3 2022. Average cost per ton decreased by 11% in Q3 2023, to \$28 compared to \$32 in Q3 2022.

<sup>&</sup>lt;sup>45</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 ton includes all costs directly related to production and feedstock extraction in addition to assets depreciation.

<sup>&</sup>lt;sup>46</sup> Total cost per ton 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>&</sup>lt;sup>47</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.

Plant 2 has lower operational costs than Plant 1 and, consequently, a lower production cost per ton of K Forte® Bulk. The construction of Plant 2 in Q4 2022 resulted in a reduction of production costs due to the increased volume of K Forte® Bulk sold from Plant 2, representing 70% of the total volume sold in the quarter. Additionally, there has been a change in the sales mix of packaging types, with a reduction in the proportion of Products sold in Jumbo Bags, which decreased to 18% in Q3 2023 from 27% in the same quarter of the previous year.

Similarly, the sales mix between BAKS® and K Forte® also underwent a shift, with the percentage of BAKS® sales decreasing to 8% in Q3 2023, compared to 11% in Q3 2022, as many farmers are opting for lower-value-added products, due to restricted cash flows. Consequently, the utilization of micronutrients, which do not fall within the essential NPK elements for plants, has witnessed a reduction.

#### SALES EXPENSES

CAD \$'000	3 months ended Sep 30, 2023	3 months ended Sep 30, 2022	9 months ended Sep 30, 2023	9 months ended Sep 30, 2022
Sales and marketing expenses	(890)	(1,385)	(2,990)	(2,919)
Fees paid to independent sales agents	195	(481)	(36)	(976)
Total	(695)	(1,866)	(3,026)	(3,895)

# 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.

Sales and marketing expenses decreased by 36% in Q3 2023 to \$890,000 compared to \$1,385,000 in Q3 2022.

## 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.

Fees paid to independent sales agents in Q3 2023, had a credit balance of \$195,000 compared to \$481,000 expenses in Q3 2022, in accordance with the decrease in revenue for the quarter.

The decrease in fees paid to independent sales agents is in accordance with the decrease in revenue of 66% for the quarter. In addition, Sales made through Sales Agents experienced a proportional decline in the period.

# SALES EXPENSES (CONTINUED)

The Group has reversed a provision of \$249,000 in the quarter, significantly contributing to the credit balance in the quarter.

### PRODUCT DELIVERY FREIGHT EXPENSES

Product delivery freight expenses decreased by 57% in Q3 2023, to \$3,919,000 compared to \$9,187,000 in Q3 2022. This reduction can be attributed to the lower sales volume on a Cost Insurance and Freight (CIF) basis, which decreased to 84,000 tons in Q3 2023, down from 148,000 tons in Q3 2022. Notably, the volume sold as CIF as a percentage of the total sales in the quarter remained stable at 78% during this period.

The Group achieved a reduction in average freight costs per ton for products sold on a CIF basis, to \$46.58 in Q3 2023 from \$62.06 in the comparable period of the previous year. The 24.97% decrease in freight costs can primarily be attributed to a reduction in the percentage of sales made to regions that are more distant from Verde's production facilities. For instance, sales to Mato Grosso state significantly dropped to 14% of overall sales in Q3 2023, compared to 33% of the total sales volume accounted for in Q3 2022.

#### GENERAL AND ADMINISTRATIVE EXPENSES

CAD \$'000	3 months ended Sep 30, 2023	3 months ended Sep 30, 2022	9 months ended Sep 30, 2023	9 months ended Sep 30, 2022
General administrative expenses	(1,203)	(1,096)	(2,983)	(1,895)
Bad debt provision	(563)	0	(592)	0
Legal, professional, consultancy and audit costs	(332)	(667)	(939)	(1,155)
IT/Software expenses	(190)	(180)	(532)	(570)
Taxes and licenses fees	(40)	(27)	(96)	(46)
Total	(2,328)	(1,970)	(5,142)	(3,666)

# **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.

General administrative expenses increased by 10% in Q3 2023, to \$1,203,000 compared to \$1,096,000 in Q3 2022.

This increase can primarily be attributed to general expenses related to Plant 2, such as the rental of water trucks and metallic structures to support operations.

## GENERAL AND ADMINISTRATIVE EXPENSES (CONTINUED)

#### **Bad Debt Provision**

In 2023, for the first time, the Group had to record a Bad Debt Provision in its accounts. As per Verde's sales policy, any outstanding customer payments overdue for more than 12 months must be provisioned. The total bad debt provision booked in Q3 2023 amounted to \$563,000, in contrast to no provision being recorded in Q3 2022.

### 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.

Expenses decreased by 50% in Q3 2023, to \$332,000 compared to \$667,000 in Q3 2022.

The primary reason for this decrease can be attributed to expenses related to the Group's re-domiciliation to Singapore in 2022, which was completed in August 2022. However, the Group has appointed EY as its new audit firm, resulting in higher costs compared to the former auditors starting from 2023 onwards.

#### IT/Software expenses

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

Expenses increased by 6% in Q3 2023, to \$190,000 compared to \$180,000 in Q3 2022, primarily due to higher license expenses related to the Group's new ERP system, SAP Business One, which was implemented in H2 2022.

#### Taxes and licenses

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

Expenses increased in Q3 2023, to \$40,000 compared to \$27,000 in Q3 2022 and increase of \$13,000. This increase was mainly driven by federal taxation on the Group's financial revenues.

#### **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.

## GENERAL AND ADMINISTRATIVE EXPENSES (CONTINUED)

Share Based, equity and bonus payments costs in Q3 2023 increased by \$241,000 to \$261,000 compared to \$20,000 in Q3 2022.

This value is attributed to stock options issuance to Group's Board members and senior management team.

#### 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.

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.

#### LIQUIDITY AND CASH FLOWS

On September 30, 2023, the Group held cash of \$9,275,000, an increase of \$4,221,000 on the same period in 2022.

Cash received from / (used for): CAD \$'000	3 months ended Sep 30, 2023	3 months ended Sep 30, 2022	9 months ended Sep 30, 2023	9 months ended Sep 30, 2022
Operating activities	(9,216)	5,398	(16,090)	16,872
Investing activities	504	(13,797)	(1,985)	(29,659)
Financing activities	11,883	11,767	25,823	16,079

#### Operating activities

Net cash under operating activities decreased by 271% in Q3 2023, to \$9,216,000 cash utilized compared to cash generated of \$5,398,000 in Q3 2022.

Trade and other receivables decreased by 44% in Q3 2023, to \$16,119,000 compared to \$29,029,000 in Q3 2022. Trade and other payables decreased by 71% in Q3 2023 to \$5,743,000 compared to \$19,954,000 in Q3 2022.

Sales of agricultural inputs often involve credit transactions due to the unique characteristics of agricultural operations. Farmers experience fluctuations in income throughout the year, with periods of higher cash flow during harvests and lower revenue during planting and crop growth stages. Given the agricultural production cycle, farmers typically require inputs like seeds, fertilizers, and pesticides before they can harvest and sell their products. Providing credit options allows farmers to acquire these necessary inputs without immediate payment, aligning their payments with the timing of their crop sales.

As a result of Verde's market-aligned credit policies in the agricultural sector, the Group consistently maintains a significant amount of receivables. The Group's payment term is up to 360 days, depending on factors such as crop cycle duration, individual client credit assessments, and other relevant considerations.

## **Investing activities**

Cash utilized from investing activities decreased by 104% in Q3 2023, to \$504,000 compared to \$13,797,000 in Q3 2022 as costs relating to the commissioning and construction of Plant 2 were high in Q3 2022 as the Group worked towards opening plant 2.

## Financing activities

Cash used in financing activities increased by 1% in Q3 2023, to \$11,883,000 compared to \$11,767,000 generated in Q3 2022 as the Group secured more loans in Q3 2023.

## LIQUIDITY AND CASH FLOWS (CONTINUED)

## **Financial condition**

The Group's current assets decreased by 22% in Q3 2023, to \$28,162,000, compared to \$36,047,000 in Q3 2022. Current liabilities decreased by 55% in Q3 2023, to \$10,974,000, compared to \$24,220,000 in Q3 2022; providing a working capital surplus of \$17,188,000, an increase of 45% compared to the working capital surplus of \$11,827,000 in Q3 2022.

#### INTEREST-BEARING LOANS AND BORROWINGS

	30 Sep 2023	30 Sep 2022
Non-current liabilities	\$'000	\$'000
Bank loans	36,362	14,928
Current liabilities		
Bank loans	5,202	4,212
Total	41,564	19,140

#### SUMMARY OF INTEREST-BEARING LOANS AND BORROWINGS

Lender	Loan start date	Purpose	Grace period (months)	Term (months)	Loan value (R\$'000)	Balance at Sep 30, 2023 (C\$'000)	Repayable by	Total interest payable*
Brazil	Aug, 2023	Working capital	12	36	40,000	10,917	Aug, 2026	CDI (1) +3.60%
Votorantim	Jul, 2023	Working capital	12	36	5,000	1,468	Jul, 2026	CDI (1) +3.65%
Brazil	Apr, 2023	Working capital	12	48	20,000	5,394	Apr, 2028	CDI (1) +4.88%
Bradesco	Mar, 2023	Capex	6	18	4,729	1,276	Mar, 2025	CDI (1) +4.18%
Bradesco	Jan, 2023	Capex	6	18	10,000	2,394	Jan, 2025	CDI (1) +4.21%
Bradesco	Jan, 2023	Capex	6	18	5,000	1,197	Jan, 2025	CDI (1) +4.57%
Inter	Jan, 2023	Working capital	12	24	5,000	1,349	Jan, 2026	CDI (1) +5.51%
Brazil (4)	Dec, 2022	Working capital	12	12	4,891	1,319	Dec, 2023	14.88%
Brazil	Oct, 2022	Working capital	12	48	20,000	5,580	Oct, 2027	CDI (1) +3.70%
Votorantim	Sep, 2022	Working capital	12	30	10,000	2,706	Mar, 2025	CDI (1) +5.10%
Brazil	Sep, 2022	Working capital	6	24	5,000	899	Sep, 2024	CDI (1) +3.00%
Bradesco	Aug, 2022	Equipment	6	24	5,597	1,249	Oct, 2024	IPCA (2) +5.19%
ABC Brazil	Aug, 2022	Working capital	5	24	3,500	623	Sep, 2024	CDI (1) +7,44%
ABC Brazil	Aug, 2022	Working capital	6	24	1,500	281	Sep, 2024	CDI (1) +7,44%
Santander	Aug, 2022	Working capital	3	24	12,000	1,884	Aug, 2024	CDI (1) +4,85%
ABC Brazil	Aug, 2022	Working capital	6	30	2,500	515	Mar, 2025	CDI (1) +7,44%
BDMG	Apr, 2022	Working capital	24	72	3,000	832	Mar, 2030	TJLP (3) +5,00%
Santander	Feb, 2022	Equipment	03	36	260	33	Feb, 2025	CDI (1) + 4,60%
Santander	Feb, 2022	Equipment	03	36	888	135	Feb, 2025	CDI (1) + 4,60%
Santander	Feb, 2022	Equipment	03	36	1,340	201	Feb, 2025	CDI (1) + 4,60%
Santander	Feb, 2022	Equipment	03	36	2,169	324	Jan, 2025	CDI (1) + 4,60%
Santander	Feb, 2022	Equipment	03	36	888	133	Jan, 2025	CDI (1) + 4,60%
Various loans	pre 2022				9,737	855		

Lender	Loan start date	Purpose	Grace period (months)	Term (months)	Loan value (R\$'000)	Balance at Sep 30, 2023 (C\$'000)	Repayable by	Total interest payable*
Total					233,697	41,564		

- (1) CDi (Certificado de Depósito Interbancário) is the average of interbank overnight rates in Brazil. As of September 30, 2023, the 12 months cumulative rate was 13.50%.
- (2) Inc Variable interest (IPCA) Broad Consumer Price Index, a measure of the average price needed to buy consumer goods and services. As of September 30, 2023 the 12 months cumulative rate was 4.61%.
- (3) TJLP (Taxa de Juros de Longo Prazo) is the long term interest rate in Brazil. As of September 30, 2023, the 12 months cumulative rate was 6.55%

The Group's average current loan rates is 16.40% per annum. The Brazilian Government long term bond rate is currently 12.25% per annum.

The Group has secured three loans with a total of C\$17.5 million in Q3 2023. The funds raised will be used to replace existing debt that were at higher interest rates and provide the Group with more favorable terms, including 6 months of grace period for Bradesco's loan and 12 months for Banco do Brasil's and Votarantim's loan. This will enable Verde to offer financing solutions to potential customers, whilst fostering growth and financial stability. This financing consists of C\$10.8 million in debt from Banco do Brasil, C\$5.4 million from Bradesco and C\$1.3 million from Votorantim. Out of the total amount secured, C\$9.5 million has been allocated towards the settlement of six existing loans.

## COMMITMENTS AND CONTINGENT LIABILITIES

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

Amounts payable (\$'000)	30 Sep 2023	30 Sep 2022
Amount payable within one year	65	65
Amounts payable after more than one year and less than five years	63	59
After five years	286	284
Total	414	408

#### **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.

## FINANCIAL INSTRUMENTS (CONTINUED)

Late receivables are defined by the Group as payments that are more than 30 days overdue from the scheduled payment date, calculated based on the last 12 months of revenue. As of September 30, 2023, the percentage of late receivables in relation to the total amount sold by the Group is approximately 5,7%.

## 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)	30 Sep 2023	30 Sep 2022
Canadian Dollar	277	569
Brazilian Real	8,923	4,391
American Dollar	13	55
British Pound	62	39
Total	9,275	5,054

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)	30 Sep 2023	30 Sep 2022
10% weakening of Brazilian Real	(2,344)	(470)
10% strengthening of Brazilian Real	1,918	575

## 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.

## FINANCIAL INSTRUMENTS (CONTINUED)

#### 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 analyzed in more detail in the notes to the accounts. All the Group's financial assets are categorized as loans and receivables and all financial liabilities are measured at amortized 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 2023. 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.

## CRITICAL JUDGEMENTS AND ACCOUNTING ESTIMATES (CONTINUED)

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 \$19,113,000. 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.

#### **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 September 30, 2023, 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 September 30, 2023.

## 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 September 30, 2023.

There have been no changes during the period ended September 30, 2023 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:

Туре	Number
Ordinary shares	52,669,724
Stock options	2,692,685
Total	55,362,409

#### **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.

## 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.

#### **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.

#### **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.

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 licenses and contracts to conduct operations in the nature of exploration and, in due course if warranted, development and mining, on the license areas. Maintenance of such rights is subject to ongoing compliance with the terms of such licenses 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".

## **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 cyclicality 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.

## **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 \$9,375,000 and achieved an operating loss of \$3,331,000 for the period ended September 30, 2023. Management anticipates that the Group will 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 52,669,724 Ordinary Shares outstanding and 54,290,545 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.

# 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 21.90% 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.

#### **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 and Elton Golçaves. Despite the controls that the Group 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 Group.

## 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;

## QUALIFIED PERSON (CONTINUED)

• 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 <a href="www.sedar.com">www.sedar.com</a> and on the Group's website at <a href="www.investor.verde.ag">www.investor.verde.ag</a>.