



# Investors Newsletter

**August Edition | September 18, 2023**

**TSX:NPK | OTCMKTS:VNPKE**

## Disclaimer

This document contains “forward-looking information” within the meaning of Canadian securities laws, which includes but is not limited to, statements with respect to Verde AgriTech Ltd’s (the Company’s) strategy, the commercial production of Super Greensand®, K Forte®, Silício Forte®, BAKS®, TK47 and Alpha (“Products”), design and building of a manufacturing facility, receipt of environmental permits, and the generation of cash flow. All statements other than statements of historical facts constitute forward-looking information, including but not limited to statements regarding plans, prospects and business strategies; timing and amount of future production; expectations regarding the results of operations and costs; permitting requirements and timelines; timing and possible outcome of pending litigation or labour disputes; timing for any required repairs and resumption of any interrupted operations; the results of any Feasibility Study, economic studies or Mineral Resource and Mineral Reserve estimations and life of mine estimates; market prices of metals, currency exchange rates, and interest rates; the ability to comply with permitting or other regulatory requirements; anticipated exploration and development activities; and the integration and benefits of acquisitions. Words such as “believe”, “expect”, “anticipate”, “contemplate”, “target”, “plan”, “goal”, “aim”, “intend”, “continue”, “budget”, “estimate”, “may”, “will”, “can”, “could”, “should”, “schedule” and similar expressions identify forward-looking statements. Forward-looking information is necessarily based upon various assumptions including, without limitation, the expectations and beliefs of management, including that the Company can access financing, equipment and labour; assumed and future price of metals; anticipated costs; ability to achieve goals; the effective integration of acquisitions; the political environment supporting mining projects; and assumptions related to the factors set forth below. While these factors and assumptions are considered reasonable by Verde as at the date of this document in light of management’s experience and perception of current conditions and expected developments, these statements are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected. Such factors include, but are not limited to: volatility in commodity prices; global financial conditions; risks inherent in mining including but not limited to the environment, industrial accidents, catastrophic equipment failures, unexpected geological formations or unstable ground conditions, and natural phenomena; uninsurable risks; equity markets volatility; outbreaks of viruses and infectious diseases (such as COVID-19); negative publicity and reputation risks; reliance on a single asset; fraud and corruption risks; actual ore mined and/or recoveries varying from estimates; risks associated with the estimation of Mineral Resources and Mineral Reserves and the geology, grade and continuity of mineral deposits; ore processing efficiency; foreign country and emerging markets risks; security; taxation regimes; health and safety risks; exploration, development or mining results not being consistent with expectations; infrastructure risks; counterparty and credit risks and customer concentration; environmental regulation risks; exchange rate fluctuations; stakeholder opposition; civil disruption; labour disputes or difficulties; interruptions in production; uncertain political and economic environments; litigation; regulatory investigations, enforcement and/or sanctions; changes in laws or policies; climate change; cybersecurity risks; estimates of future production, operations, capital and operating cash and all-in sustaining costs; permitting risks; compliance with laws; mine closure risks; challenges to title; the price/availability of supplies or services; liquidity risks and limited financial resources; the estimation of asset carrying values; risks relating to dividends; and other risks and uncertainties, including but not limited to those described in the “Risk Factors” section of the Annual Information Form and the “Risks” section of the Company’s MD&A for the year ended December 31, 2020, which are available on SEDAR at [www.sedar.com](http://www.sedar.com) under the Company’s profile and can also be accessed through this link, at Verde’s website. All of the forward-looking statements made in this document are qualified by these cautionary statements. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated, forecast or intended and readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in web sites. Accordingly, there can be no assurance that forward-looking information will prove to be accurate and forward-looking information is not a guarantee of future performance. Readers are advised not to place undue reliance on forward-looking information. The forward-looking information contained herein speaks only as of the date of this document. The Company has filed on SEDAR a NI 43-101 compliant updated pre-feasibility study, published date May 26, 2022. All technical information should be reviewed according to this pre-feasibility study. Readers are cautioned not to rely solely on the summary of such information contained in this document and are directed to complete information posted on Verde’s website ([www.investor.verde.ag](http://www.investor.verde.ag)) and filed on SEDAR and any future amendments to such. This document may include facts, views and opinions of individuals and organizations deemed of interest. Verde does not guarantee the accuracy, completeness or timeliness of, or otherwise endorse, such views, opinions or recommendations, give investment advice, or advocate the purchase or sale of any security or investment. Verde is therefore not responsible for the content, accuracy or timeliness of any linked web site or any link contained in a linked web site. Verde provides such links only as a convenience and the inclusion of any link does not imply endorsement, investigation or verification by Verde of the linked web site or information contained therein. Use of such third party web site will be solely at your risk. The reader should seek the advice of a securities professional or other appropriate investment advisor regarding such reader’s particular situation. The Company does not control any third-party web site and in viewing any third-party web sites. Potential investors should conduct their own investigations as to the suitability of investing in securities of Verde AgriTech Ltd.

**We are not good enough for you to invest if you:**

Are risk averse.

Just want to make a quick buck.

Expect delayed growth so you can earn dividends in the near term.

Are looking for a traditional potash company.

Don't deal well with changes.

Don't understand the difficulties in developing technologies and markets for innovative products.

**Join our journey if you:**

Want to change the world into a better place.

Are looking for a real-world technology developing company.

Want to help Brazilian farmers protect the Amazon.

Believe that Verde can make you and the planet healthier.

Have watched or will watch the ["Kiss the Ground" Netflix documentary](#).

Care about soil biodiversity.

**All new information since the last newsletter will be highlighted in green.**

**Latest press release and filings**

On August 14, 2023, Verde filed its Q2 2023 Results. Please find below weblinks to the relevant materials:

[MD&A](#)

[Financial Statements](#)

[Press Release](#)

[Q2 2023 Results Presentation](#)

**Access the Company's latest released news on the following links:**

September 12, 2023: [Railway to freight up to 50Mtpy of Verde's Product granted construction permit](#)

August 30, 2023: [Verde's Products Remove Carbon Dioxide from Air in Mere Months of Application](#)

August 22, 2023: [Verde Appoints Chief Marketing Officer](#)

August 14, 2023: [Verde achieves C\\$10.3 million revenue, 81% gross margin and C\\$2.1 million EBITDA in the second quarter of 2023](#)

July 27, 2023: [Verde to Sell Carbon Credits](#)

July 19, 2023: [Verde's Products Remove Carbon Dioxide From the Air](#)

## 1. Permits \*

### 1.1. Summary

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

Mine Pit	Mining (tpy)			Environmental (tpy)	
	Fully Permitted (tpy)	Granted	Pending	Granted	Pending
1	233,000	233,000	0	233,000	0
2	2,600,000	2,600,000	22,500,000	2,600,000	22,500,000
3	0	49,800	2,500,000	0	2,500,000
Other Pits	0	0	11,560,000	0	0
<b>Total</b>	<b>2,833,000</b>	<b>2,882,800</b>	<b>36,560,000</b>	<b>2,833,000</b>	<b>25,000,000</b>

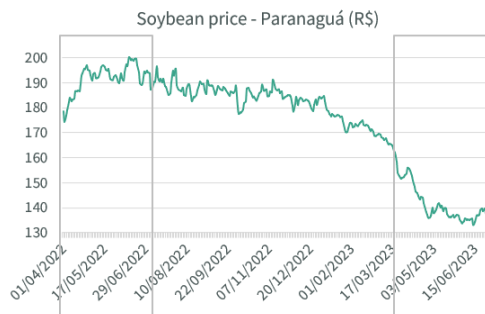
Under Brazilian law, a pit is fully permitted to mine when the Group holds both a Mining Concession/Permit and Environmental License for that area. Verde is fully permitted to mine 2,833,000 million tonnes per year (“tpy”) and has submitted concurrent mining and environmental applications for an additional 25,000,000 tpy, still pending approval.

### 1.2. Last 12 months

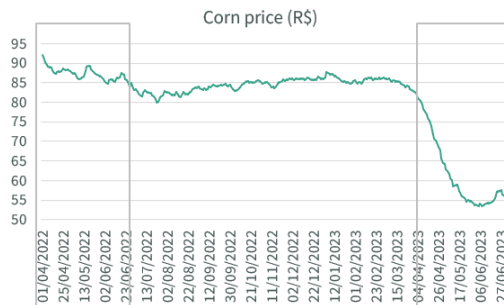
Pit	Date	Category	Status	Event
10	March 20, 2023	Mining	Applied	400,000 tpy Mining Concession Application
2	November 12, 2022	Environment	Applied	22,500,000 Operating Environmental License
9	October 25, 2022	Mining	Applied	1,000,000 tpy Mining Concession Application
8	October 25, 2022	Mining	Applied	1,500,000 tpy Mining Concession Application
7	October 25, 2022	Mining	Applied	2,500,000 tpy Mining Concession Application
6	September 12, 2022	Mining	Approved	4,660,000 tpy Feasibility Study

## 2. Market Overview | Q2 2023

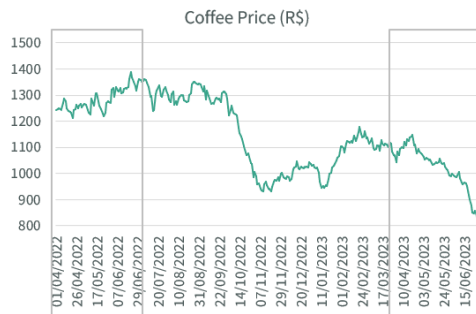
The agricultural commodities market has been experiencing significant fluctuations on a downward trend for the last months, impacting the fertilizers' market worldwide.



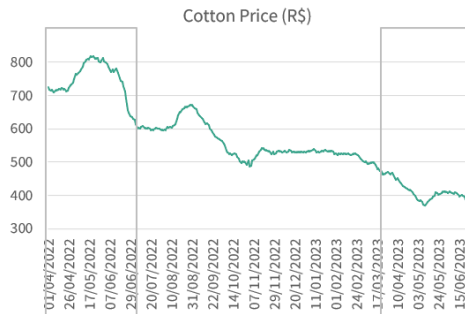
Soybean prices decreased 27% in Q2 2023, compared to Q2 2022. The crop also decreased 19% from January 2023 to June 2023.



Corn prices decreased 28% in Q2 2023, compared to Q2 2022. The crop also decreased 20% from January 2023 to June 2023.



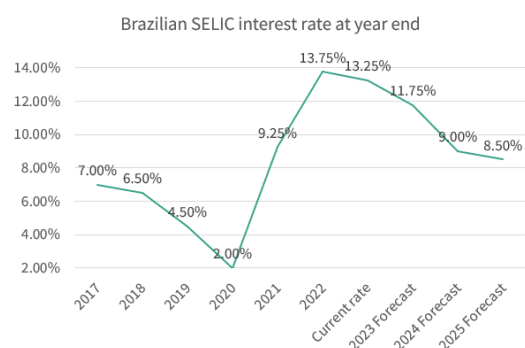
Coffee prices decreased 20% in Q2 2023, compared to Q2 2022. The crop also decreased 22% from January 2023 to June 2023.



Cotton prices decreased 46% in Q2 2023, compared to Q2 2022. The crop also decreased 36% from January 2023 to June 2023.

### Brazilian Economic Scenario

- On August 5, 2023, the Central Bank of Brazil lowered the SELIC rate from 13.75% to 13.25% after a sequence of 12 consecutive rate hikes, commencing in March 2021.
- This series unfolded against the backdrop of escalating prices in essential commodities like food, energy, and fuel.
- Since August 2022, the rate has remained fixed at 13.75% per annum for seven consecutive periods.
- The SELIC rate is to reach 11.75% per annum by the end of 2023, 9% in 2024, and 8.5% in 2025 and 2026.



The latest economic activity indicators consistently align with a scenario of deceleration, with annual inflation eased to 3.99% in the last 12 months.

Sources:

CEPEA – ESALQ / USP. Available at: <https://www.cepea.esalq.usp.br/br>

Brazilian Central Bank. Available at: <https://www.bcb.gov.br/en>

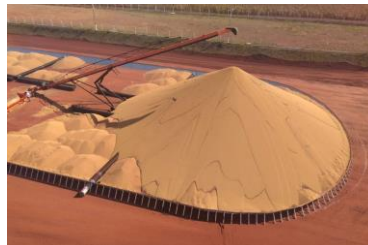
## Agricultural inputs market and credit crunch

The convergence of these factors characterizes the current scenario as an atypical and extreme circumstance:



As a result, 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.

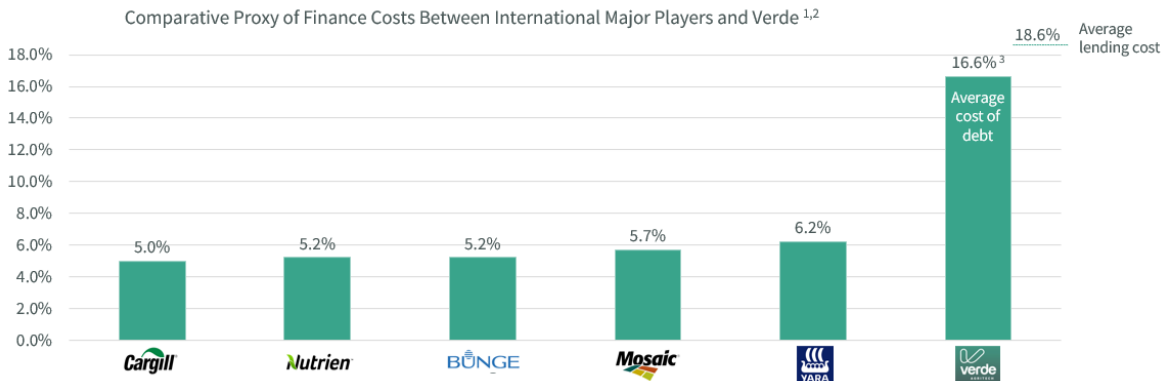
In addition to the forecast of a record harvest in Brazil, the decline in grain prices has prompted Brazilian farmers to suspend sales, causing a backlog in product distribution. In the state of Mato Grosso, the country's largest soybean producer, over 20% of the soybeans harvested in January are still occupying storage facilities.



Source: <https://g1.globo.com/jornal-nacional/noticia/2023/07/20/falta-de-silos-de-armazenamento-ameaca-a-superproducao-de-graos-no-centro-oeste-do-brasil.ghtml>

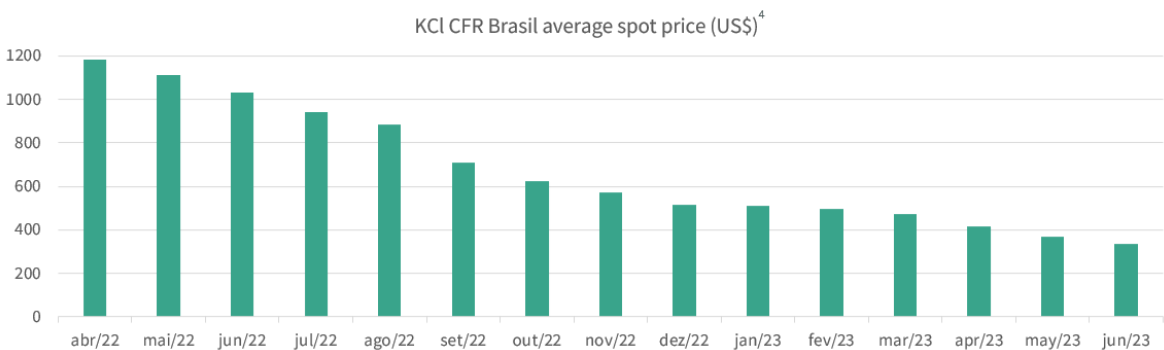
## Global Market Competition and Financing

- Unlike its competitors, Verde does not have the option to incur most of its cost of debt in US dollar-denominated liabilities.
- Overall, the Company is not able to provide financing for more than 20% of its revenue due to constraints related to lines of credit.



## Potassium Chloride Prices

The price of potassium chloride (KCl) has exhibited a consistent downward trend since H2 2022. The Average KCl CFR declined by 67% in Q2 2023, compared to Q2 2022, with a sharp 40% decrease from January to July 2023.



1- Source: Bloomberg, as of July 24th, 2023.

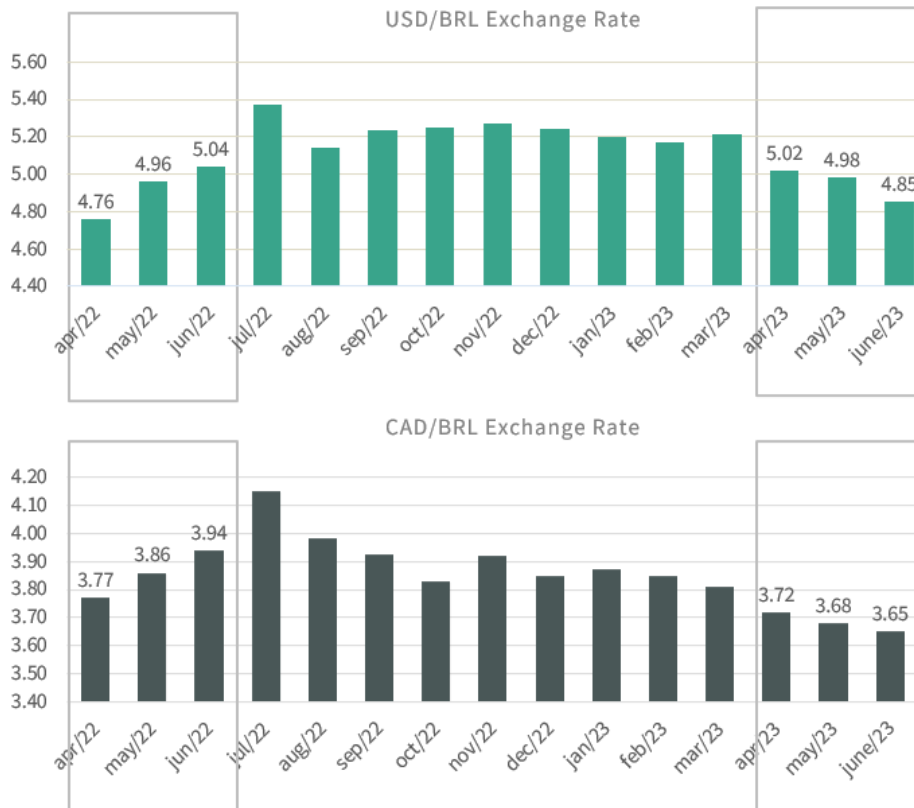
2 - Considers each Company most traded bond, which differs considerably from Verde's tenors. This is likely to imply that large international players have an even lower cost of finance.

3 - Considers average cost of debt related to working capital loans with maturity from September 2023 onwards as of Q2 2023.

4 - Acerto Limited Report.

## Currency exchange

- As the US dollar weakened by 10% against the Brazilian Real during the year, Verde's sales revenue, priced based on potassium chloride, suffered a decline when converted to Brazilian Real.
- Canadian dollar devaluated by 6% versus Brazilian Real in Q2 2023, with an average exchange rate of R\$3.76 in the quarter, compared to R\$3.99 in Q2 2022.



## Market outlook

The agricultural market is showing early signs of recovery:

- Agricultural commodity prices are no longer experiencing a rapid decline.
- Interest rates in Brazil have started to decrease from their elevated levels.
- Projections indicate a positive outlook for inflation control and stability in the coming years.

We anticipate that these shifts will soon mitigate the extraordinary distortions that temporarily favored competitors with lower capital costs.

Source: <https://www.bcb.gov.br/estabilidadefinanceira/historicocotacoes>



### 3. Sales Growth

#### 3.1. Earned Growth Rate

The Earned Growth methodology was created by Fred Reichheld, a business strategist at Bain & Company who is renowned for his research and writing on the loyalty business model and loyalty marketing, and author of *Winning on Purpose: The Unbeatable Strategy of Loving Customers*.<sup>1</sup> Earned Growth Rate ("EGR") was created as a metric framework for customer success in lieu of traditional methodologies, which are usually based on samples of survey responses that do not have a specific sector methodology and can be easily biased according to the criteria utilised.

Year	2019	2020	2021	2022
Earned Growth Rate	Not Registered	61%	165%	38.71%

Verde's EGR was 38.71% in 2022, which shows a positive rate of sales driven by returning customers and clients' referrals.

\* Please refer to the [Glossary](#) on page 13 for technical terms.

1 - F. Reichheld, D. Darnell and M. Burns, **Winning on Purpose: The Unbeatable Strategy of Loving Customers** (Harvard Business Review Press) 2021

#### 3.2. Number of clients in Brazil per year<sup>3</sup>

The table below indicates the number of clients who purchased Verde's products annually in Brazil since 2017, along with their total cultivated area.

The percentage of the clients' total purchase potential (in tonnes of Product) that was served by Verde increased from 9.57% in 2021 to 16.76% in 2022, demonstrating an increase in market adoption due to customers applying Verde's product in a larger area of their farms.

Year	2018	2019	2020	2021	2022
Number of total clients	127	351	847	1277	1223
Total area cultivated by clients (million hectares)	1.09	1.99	2.01	3.03	2.93
Total purchase potential ('000 tonnes of K Forte)	1,629	2,882	2,825	4,179	3,747
Verde's sales volume ('000 tonnes)	29	120	244	400	628
Percentage of the clients' total purchase potential (in tonnes of Product) served by Verde	1.78%	4.16%	8.64%	9.57%	16.76%

2 - For a summarized definition of EGR, see article: F. Reichheld, D. Darnell and M. Burns, **Net Promoter 3.0**, Harvard Business Review, November 2021, available at: <https://hbr.org/2021/11/net-promoter-3-02>. To learn more about the methodology, see the press release issued on February 8, 2021.

3 - Does not include international sales.

### 3. Sales Growth

#### 3.3. Sales per quarter:

The following table shows Verde's growth per quarter year-on-year:

Product Sales (Tonnes)						
Quarter	2019	2020	2021	2022	2023	YoY Growth
Q1	1,093	10,170	16,558	112,000	108,000	(4%)
Q2	23,600	71,183	95,551	202,000	107,000	(47%)
Q3	62,895	105,769	153,674	189,548	TBD	-
Q4	32,221	56,585	134,000	125,000	TBD	-
<b>Total</b>	<b>119,809</b>	<b>243,707</b>	<b>400,000</b>	<b>628,000</b>	<b>TBD</b>	-

Revenue (CAD \$'000)						
Quarter	2019	2020	2021	2022	2023	YoY Growth
Q1	154	510	831	11,304	11,125	(2%)
Q2	1,329	2,492	5,376	24,861	10,305	(59%)
Q3	3,055	3,956	10,651	27,269	TBD	-
Q4	1,491	2,209	10,851	16,837	TBD	-
<b>Total</b>	<b>6,029</b>	<b>9,167</b>	<b>27,709</b>	<b>80,271</b>	<b>TBD</b>	-

#### 3.4. 2023 Guidance: <sup>1</sup>

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

FY 2023 Guidance	Range
Sales target (tonnes)	800,000 - 1,200,000
Revenue (C\$'000)	78,135 - 115,332
EBITDA (C\$'000) <sup>2</sup>	9,341 - 24,565
EPS (C\$)	0.04 - 0.29
Cash held + Trade Receivables (C\$'000)	\$21,979 - \$35,004

1 - Please see the Q1 2023 MD&A for Guidance assumptions: <https://investor.verde.ag/wp-content/uploads/2023/05/Q1-2023-MDA-Verde-AgriTech.pdf>

2- Before non-cash events

#### 4. Environmental, Social, and Governance

- Verde's production process is sustainable, with no water or chemical consumption and no tailings dams or waste generation. Ore recovery rate is 100%.
- Mined area is mainly composed of degraded pasture that, once mined, Verde will transform into a tropical forest.
- Verde planted 4,300 trees in 2019, 5,000 trees in 2020, and 9,888 trees in 2021. All planted species are native to the region located around the Company's production area.
- Verde was awarded the "Good Environmental Practices Award", promoted by the State System of Environment and Water Resources (SISEMA, in Portuguese) in the category "Best Practice of Mineral Solid Waste Management", 2019.

#### Potassium Chloride compared to Verde's Product

Potassium chloride (KCl) is the conventional source of potassium, produced mostly in Canada, Russia, and Belarus. Brazil is highly dependent on imported KCl, accounting for over 96% of the total potassium used in the country's crops. Verde's Product is a salinity and chloride-free replacement for KCl fertilizers. The table below shows a comparison between Verde's Products and KCl.

Agricultural use	Conventional potassium source	Salinity and chloride-free replacement for KCl fertilizers as a potassium source
Potassium grade	60% K <sub>2</sub> O	8 to 10% K <sub>2</sub> O
Carbon footprint	<p>The manufacturing and logistics chain of KCl only adds to CO<sub>2</sub> emissions:</p> <ul style="list-style-type: none"> <li>- KCl production directly emits approximately 40 kg of CO<sub>2</sub> per tonne of fertilizer produced (calculation focuses solely on the CO<sub>2</sub> emissions from KCl manufacturing and does not consider transportation emissions).</li> <li>- Transportation emissions from major producing countries (Russia, Belarus, Canada, USA, and China) to Brazil increase its carbon footprint.</li> <li>- Excessive chloride in soil has been found to be detrimental to the essential functions of soil microorganisms that contribute to carbon capture and storage</li> </ul>	<p>Remarkably smaller carbon footprint compared to KCl:</p> <ul style="list-style-type: none"> <li>- Local production and distribution within the same country.</li> <li>- Reliance on renewable energy sources.</li> <li>- Ability to contribute to carbon capture, once applied to soils.</li> </ul> <p>By applying 1 tonne of Glauconitic Siltstone as a potassium alternative to KCl, approximately 6.67 kg of CO<sub>2</sub> emissions can be avoided (considering the CO<sub>2</sub> emissions from KCl manufacturing only).</p>
Salinity index	116%	0.17%
Organic farming	Not approved.	Certified organic by several governmental and non-governmental organizations, including some of the most stringent global standards such as the Washington State Fertilizer Registration and the California Department of Food & Agriculture.
Soil biodiversity	Its extensive use is associated with damaging effects on soil health and microbe balance, as well as contributing to chloride leaching into water systems.	Has the lowest salinity index among fertilizers available in the market, which helps preserve soil and its microorganisms, leading to increased benefits for farmers.

Potassium Chloride Replacement

By using Verde’s product in leu of potassium chloride fertilizers, farmers prevents chloride from being applied into soils.<sup>9,10</sup>

Period	Chloride amount that has not been applied to agricultural soils
Q2 2023	8,480 tonnes
Since production started	129,682 tonnes

Once it achieves the production capacity of 50 million tonnes per year, the Company aims to mitigate the application of approximately 94.5 billion tonnes of chloride into soils over time<sup>11</sup> in collaboration with its customers.

<sup>9</sup> Verde’s Product is a salinity and chloride-free replacement for KCl fertilizers. 1 tonne of Product (10% K2O) has 0.1 tonnes of K2O, which is equivalent to 0.17 tonnes of potassium chloride (60% K2O), containing 0.08 tonnes of chloride. 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, regarding 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>10</sup> 1 tonne of Product (10% K2O) has 0.1 tonnes of K2O, which is equivalent to 0.17 tonnes of potassium chloride (60% K2O), containing 0.08 tonnes of chloride.

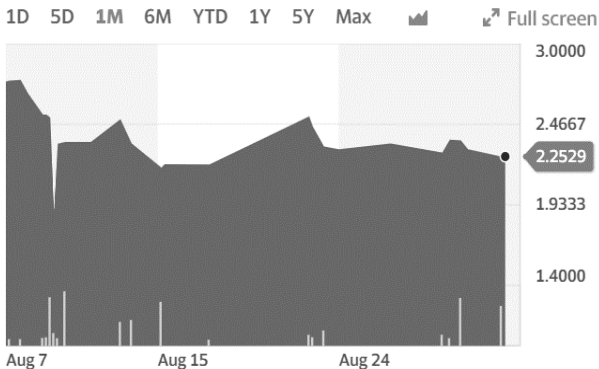
<sup>11</sup> Based on the 50Mtpy production scenario of the NI 43-101 Pre-Feasibility Technical Report. See the PFS for further information: <https://investor.verde.ag/wp-content/uploads/2022/05/NI-43-101-Pre-Feasibility-Technical-Report-for-the-Cerrado-Verde-Project.pdf>

5. Share Statistics

The following graphs show Verde’s stock value over the past 30 days and average volume statistics over the past 3 months, as of September 05, 2023:



TSX: NPK  
Average Volume (3 months) = 91.28k



OTCMKTS: VNPKE  
Average Volume (3 months) = 5.95k

## 6. Top Headlines

### Verde's YouTube Channel

- [Farmers Testimonials - Mr. Bueno - Sugarcane, oranges, soybeans, corn](#): Farmer talks about K Forte® and how its use improved his crops.
- [Farmers Testimonials - Mr. Maldaner – Soybeans](#): In this video, a soybean producer discusses the benefits of K Forte® to his crops, highlighting its positive impact on their growth and productivity.

### Relevant Agribusiness News

- [More than half of Earth's species live in the soil, study finds](#): Soil estimated to be home to 90% of world's fungi, 85% of plants and more than 50% of bacteria, making it the world's most species-rich habitat. These organisms play an outweighed impact on the balance of our planet. Their biodiversity matters because soil life affects climate change feedbacks, global food security, and even human health.
- [Can Soil Help Combat Climate Change?:](#) Currently, soils remove about 25 percent of the world's fossil fuel emissions each year. By restoring the soil with natural sources of organics that support beneficial microbes that improve plant growth, the plants will flourish and draw down the carbon from the atmosphere

## 7. Analysts Covering Verde\*

Kaiser Research

John Kaiser

+1 (925) 631-9748

info@KaiserResearch.com

Fundamental Research Corp

Sid Rajeev

+1 (604) 682-7065

siddharthrajeev@gmail.com

\* Disclaimer for Reference to Analysts: Please note that any opinions, estimates, or forecasts regarding Verde AgriTech's performance made by these analysts are theirs alone and do not represent opinions, forecasts, or predictions of Verde AgriTech or its management. Verde AgriTech does not by its reference above or distribution imply its endorsement of or concurrence with such information, conclusions, or recommendations.

## 8. How much K Forte® is used in average per crop

- Soybeans: 1 tonne per hectare
- Corn: 1 tonne per hectare
- Cotton: 1.5 tonne per hectare
- Coffee: 3 tonnes per hectare
- Sugarcane: 1.5 tonne per hectare

## 9. K Forte® Application Calendar

The calendar below shows the agricultural production cycles and the period for application of K Forte® in different crops, according to seasonality.

Crop	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Soybeans	Harvest				K Forte® Application							
									Planting			
Corn	Harvest				K Forte® Application							
	Planting (Second Crop)				Harvest (Second Crop)				Planting			
Cotton					K Forte® Application							
					Harvest				Planting			
Coffee					K Forte® Application							
	Planting - Top Dressing				Harvest				Planting - Top Dressing			
Sugarcane					K Forte® Application							
	Harvest (Northeast Region)				Harvest (Central-West and South Regions)							
	Planting (18-month cycle)								Planting - Top Dressing			

## 10. Area used for crop production in Brazil\*

State	Area (ha)
Mato Grosso	16,611,799
Paraná	10,565,962
São Paulo	8,172,747
Goiás	6,522,432
Mato Grosso do Sul	5,790,276
Minas Gerais	5,596,641
Bahia	4,073,219
Other States	21,913,415
<b>Total area</b>	<b>79,246,491</b>

Source: Brazilian Institute of Geography and Statistics, Systematic Survey of Agricultural Production, 2019.

10. Area used for crop production in Brazil

Brazilian States:



## 11. Results Calendar

Results	Due Date
Q3 2023	November 15, 2023
Q4 & FY 2023	March 29, 2024
Q1 2024	May 15, 2024
Q2 2024	August 15, 2024

## 12. Verde's Social Media

Verde has investors-only Social Media. Click on the links below and follow the company to receive the latest news:

<a href="#">YouTube</a>	<a href="#">Twitter</a>	<a href="#">Linkedin</a>	<a href="#">Facebook</a>	<a href="#">Website</a>
-------------------------	-------------------------	--------------------------	--------------------------	-------------------------

## 13. 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 simply 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.



### 13. Glossary

**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 Company 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 Footprint:** A sum of greenhouse gases generated from activities of an individual, business, nation, 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 Neutral:** Certification given to organizations that have offset their carbon emissions to balance out what they've produced. Recognized globally and valid for a year, this certification can relate to specific parts of a business's operations or its entirety.

**Carbon Removal:** Often termed Carbon Dioxide Removal (CDR), this process targets the extraction of carbon dioxide from the atmosphere after its release, ensuring its long-term containment. Methods for removal span from nature-based solutions like enhanced rock weathering to more technologically driven approaches. The Intergovernmental Panel on Climate Change (IPCC) underscores the importance of carbon removal technologies in keeping global temperature rises under 1.5°C.

**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.

### 13. Glossary

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

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

**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 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.

**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 endeavours. Such activities pose significant ecological threats, leading to habitat loss, reduced biodiversity, and increased greenhouse gas emissions. As part of Verde's commitment to combat deforestation, the Company refrains from selling its Products in 218 municipalities predominantly covered by the Amazon rainforest, except for native tree reforestation projects. This commitment encompasses a total area of approximately 2.23 million square kilometers.

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

### 13. Glossary

**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 authority Prof. David Manning, PhD, have verified their capability to extract CO<sub>2</sub> from the atmosphere through ERW, at a rate of 120kg of CO<sub>2</sub> per tonne 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").

### 13. Glossary

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

**Exploration Authorisation (“Alvará de Pesquisa”):** The Exploration Authorisation guarantees to the owner, be it an individual or a legal entity, the power and duty to carry out mineral research work in the entitled area. It grants the rights to conduct exploration activities for a period from two to four years, which may be renewed for an additional period (and potentially additional renewals on a case-by-case basis). An exploration authorisation does not entitle the holder the right to extract mineral substances. During the research work, extraction will only be allowed in exceptional circumstances, with a specific title issued by the ANM (see Mining Permit – “Guia de Utilização”). 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).

**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 mineral 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.

### 13. Glossary

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

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

**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.

**KCl:** See "Potassium Chloride".

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

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

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

**Life Cycle Analysis (LCA):** A methodical evaluation of the total environmental footprint of a product, service, or process from its inception to end-of-life. It accounts for each phase – from raw material extraction to manufacture, usage, and ultimate disposal or recycling. ISO, the International Organization for Standardization, outlines guidelines for conducting LCAs.

### 13. Glossary

**Micro S Technology:** The Group's exclusive elemental sulfur micronization technology, that allows for a larger contact surface. This facilitates the work of microorganisms and oxidation rate increases and so nutrients become available to plants more efficiently. This increases the absorption of sulfur and, consequently, the development of the plant. Micro S Technology allows micronized sulfur, one of the additional nutrients most required by farmers, to be added to BAKS®.

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

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

The public disclosure of a mineral reserve must be demonstrated by a pre-feasibility study or feasibility study.

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

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

### 13. Glossary

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

**Measured Mineral Resource:** That part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. A measured mineral resource has a higher level of confidence than that applying to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.

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

### 13. Glossary

**Mineralisation:** Refers to the natural process wherein organic compounds are progressively converted into mineral nutrients. Within carbon sequestration, it also describes the method of confining CO<sub>2</sub> in rock structures for long-term containment.

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

**Mining Concession (“Portaria de Concessão de Lavra”):** guarantees to the owner the power and duty to explore the mineral deposit until it is exhausted, without a definite term. The title can only be obtained by mining companies and only after undertaking the authorised exploration through an exploration authorisation and subsequent approval of the Final Exploration Report.

One of the essential documents for requesting a mining concession is the Feasibility Study, which must demonstrate the technical and economic viability of the project and indicate, among other information, the mining method, the planned scale of production and the mine closure plan.

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

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

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

**Mtpy:** Million tonnes per year.



### 13. Glossary

**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 tonnes at 9.28% K<sub>2</sub>O and an inferred mineral resource of 1.85 billion tonnes at 8.60% K<sub>2</sub>O (using a 7.5% K<sub>2</sub>O 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.

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

**PFS:** See “Pre-Feasibility Study”.

**Potassium chloride (“KCl”):** The most commonly used source of potash. It is composed of approximately 52% of potassium (“K”) and 47% of Chloride (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”).

### 13. Glossary

**Pre-Feasibility Study (“PFS”):** A pre-feasibility study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined.

It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the mineral resource may be converted to a mineral reserve at the time of reporting. A pre-feasibility study is at a lower confidence level than a feasibility study.

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

**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.

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

**tpy:** Tonnes per year.



[investor.verde.ag](https://investor.verde.ag) | TSX: NPK | OTCMKTS: VNPKE