# US\$1.98 Billion NPV & US\$3 Million Capex (Phase 1)

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TORONTO, Nov. 27, 2017 (GLOBE NEWSWIRE) -- Verde AgriTech Plc (TSX:NPK) (OTCQB:AMHPF) ("Verde" or the "Company") is pleased to announce the conclusion of a Pre-Feasibility Study ("PFS") for the expansions to the ongoing Super Greensand® production. The PFS was prepared by BNA Mining Solutions ("BNA") and Andes Mining Services Ltd. ("ANDES") with inputs from technical studies completed by other consultants on Verde's Cerrado Verde Project ("Cerrado Verde" or the "Project") located in Minas Gerais State, Brazil.

The PFS evaluated the technical and financial aspects of producing 25 million tonnes per year ("Mtpy") of Super Greensand®, divided in three phases: Phase 1 (0.6Mtpy); Phase 2 (5Mtpy) and Phase 3 (25Mtpy). The proposed scalable development is predicated on expansions being financed largely from projected internal cash flow.

## Project Highlights:

- Proven and Probable Reserves of 777.28 million tonnes, grading 9.78% K<sub>2</sub>O.
- Capex for Phase 1 is estimated at US\$3.05 million.
- Capex for the Project is estimated at US\$369.53 million.
- Sustaining Capital for the Project is estimated at US\$222.26 million.
- Estimated after-tax Net Present Value (&Idquo;NPV") for the Project, using an 8% discount rate, of US\$1,987.97 million.
- Estimated after-tax Internal Rate of Return (&ldguo; IRR&rdguo;) of 290%.
- Adopted Potassium Chloride ("KCl") long term price of US\$250 CFR Brazil as reference for Super Greensand® pricing.
- Estimated Operating Cost of US\$14.53, US\$6.77, US\$7.92 per product tonne for Phases 1, 2 and 3 respectively.

World Food Prize winner and Verde's director Mr Alysson Paolinelli said: "Tropical agriculture requires slow release fertilizers like Super Greensand® rather than highly water soluble chemical fertilizers developed for temperate climates with short growing seasons. In Brazil, for example, farmers can have up to 3 harvests per year and Super Greensand® will bring everlasting benefits to the environment as well as food and nutrition security.

The PFS is based on the following assumptions:

- 100% equity.
- Phase 1 production of 0.6 Mtpy; Phase 2 production of 5 Mtpy; Phase 3 production of 25 Mtpy.
- A projected mine life of 36 years.
- Contract Mining.
- A 15% contingency applied to Capex.
- US Dollar-Brazilian Real exchange rate of US\$1 = R\$3.28.
- Potassium Chloride ("KCl") long term price of US\$250 CFR Brazil as reference for Super Greensand® pricing.

# Capital Costs

A summary of expected capital costs is presented in Table 1.

**Table 1 Capital Costs Summary** 

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Conital Coata	Phase 1	Phase 2	Phase 3	
Capital Costs	Investment (US\$x1,000)			
Processing Plant	1,294	8,721	143,518	
Infra-structure	884	5,258	145,427	
Owner's Cost	478	933	14,815	
Contingency	398.32	2,236.69	45,564	
Total	3,053.80	17,147.98	349,324	

#### **Operating Costs**

Operating costs per ton of Super Greensand® produced over the life of mine are displayed on Table 2. Costs associated with mining comprise 55% of operating costs, processing 19%, and G&A 3% on Phase 1. The per ton break-down of operating cost by Phase is as follows:

Table 2 Operating Costs Summary

Operating Costs	Phase 1	Phase 2	Phase 3
Operating Costs	US\$ per Product Tonne		
Mining	7.98	3.48	4.90
Processing	2.74	1.36	1.04
General and Administrative	0.50	0.50	0.50
Others*	1.41	0.55	0.45
Contingency	1.90	0.88	1.03
Total	14.53	6.77	7.92

<sup>\*</sup>Others: Mining Labour, Environmental Recovery, Environmental Compensation and Support Facilities Maintenance

# Mineral Reserves

A large portion of the Measured and Indicated mineral resource has been successfully converted to an initial Proven and Probable Mineral Reserve totalling 777.28 million tonnes, at 9.78% content of  $K_2O$ , for a total of 76 million contained tonnes of  $K_2O$ .

The tonnes, grades, and classification of the Mineral Reserves are summarized below.

# Table 4 Mineral Reserve Summary

Classification	Tonnes (Mt)	K <sub>2</sub> O (%)
Proven	68.11	10.34
Probable	709.17	9.72
Total	777.28	9.78

- (1) As of November 27, 2017.
- (2) A cut-off grade of 8.50% K<sub>2</sub>O was used to report reserves.
- (3) Numbers may not add up due to rounding.
- (4) Overall strip ratio of 0.29
- (5) Waste contains inferred resources, which have potential for upgrading to higher category resources, and possibly reserves after sufficient definition work has been completed.
- (6) Based on 100% mining recovery.

### Mineral Resources

This Mineral Resources estimated by the PFS are.

#### Table 5 Mineral Resources Summary

Category Tonnes (Mt) Average Grade (% K<sub>2</sub>O)

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Measured	83	10.13
Indicated	1,389	9.23
Total (M+I)	1,472	9.28
Inferred	1,850	8.60

- (1) Mineral resources are not mineral reserves and do not have demonstrated economic viability.
- (2) CIM Definition Standards were followed for classification of Mineral Resources.
- (3) Mineral Resources are reported at a cut-off grade of 7.5% K<sub>2</sub>O.
- (4) Bulk density of 2.18 t/m<sup>3</sup> for fresh rock material and 1.64 t/m<sup>3</sup> for the weathered material.

## Super Greensand® Pricing

Super Greensand®'s price is based exclusively on its potassium content despite of its other nutrients and benefits. Super Greensand® has 10% K<sub>2</sub>O whereas the cheapest source of potash, i.e. KCl has 60% K<sub>2</sub>O. Therefore, the farmer in Brazil pays an average of 6 times less per ton of Super Greensand® than it pays per ton of KCl.

The table below illustrates pricing for phase 1

Table 6 Average Super Greensand®'s price at Phase 1 X KCI - (USD)

K2O Content60%Average CFR (Farm) Price\$376670Average Transportation cost to farm\$12.62Average FOB (Vendor) Price\$384.60CFR (Port) Price\$256Αρβlicable

The difference in price between CFR (Port) and FOB (vendor) is presented below:

Table 7 Difference in price between CFR (Port) and FOB (vendor) - (USD)

Item	Cost
Brazilian port costs	\$17.00
Demurrage	\$3.00
AFRMM <sup>1</sup> Tax	\$5.00
Cost of transportation Brazilian port - dealer	\$29.00
Average margin added by the dealer	\$30.00
Total	\$84.00

For Phases 2 and 3 the average FOB Price realized decreases as the Company increases its sales to agriculture regions more distant from its mine. The average net sales prices are US\$38.15 (phase 1); US\$35.17 (phase 2); US\$25.10 (phase 3).

The CFR Brazil (Port) KCl price adopted was US\$250, which corresponds to the lowest long-term price estimated by analysts at major Canadian banks. The current price is US\$263. The lowest price since 2010 was US\$225 and the highest price was US\$520.

Super Greensand<sup>®</sup> is a premium multi nutrient product free of chloride, free of salinity and approved for organic agriculture. In addition to Potash it has Magnesium, Manganese, Iron, Silicon and 60 other minerals and trace elements. Its pricing could be superior if based on other Chloride free potassium fertilizers such as Potassium Sulphate, Nitrate of Potash or Polyhalite, however, the Company has decided to grant all those additional nutrients and benefits to farmers in exchange for a faster market development and broader market adoption.

Brazilian Potash Market

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Brazil is the world's largest food exporter but the country imports over 95% of its current potash needs.

Table3 Historical Brazilian K<sub>2</sub>O consumption x Super Greensand® equivalent

	Brazilian K <sub>2</sub> O consumption*	Super Greensand®
2010	3.894.088	38.940.880
2011	4.430.526	44.305.260
2012	4.843.592	48.435.920
2013	5.094.069	50.940.690
2014	5.394.660	53.946.600
2015	5.162.465	51.624.650
2016	5.728.415	57.284.150

<sup>\*</sup>Source: Associação Nacional para Difusão de Adubos (ANDA), 2017.

In 2016, Brazil consumed 5.7Mt of K  $_2$  O, the equivalent of a potential of 57Mt of Super Greensand  $^{\circledR}$  . According to the production phases, Cerrado Verde would be able to supply the Brazilian potash market in 1.05% during Phase 1; 8.77% during Phase 2 and 43.85% during Phase 3 considering no growth to the current market.

#### **Technical Disclosure**

Dr Beck Nader. (D.Sc., M.Sc., MAIG), BNA Mining Solutions' principal, has reviewed and approved the scientific and technical information contained in this news release. Dr Nader is a Qualified Person ("QP") within the meaning of Canadian Securities Administrator's National Instrument 43-101 ("NI 43-101").

The Pre-Feasibility Study has been prepared by the following QPs: Mr Bradley Ackroyd (MAIG (C.P.)) who is a principal consulting geologist with Andes Mining Services Ltd. and Dr Beck Nader. (D.Sc., M.Sc., MAIG), who is a principle at BNA Mining Solutions

The Company expects to file a technical report prepared in accordance with NI 43-101 on SEDAR at www.sedar.com within 45 days of the date of this release.

Cautionary Language and Forward Looking Statements

All Mineral Reserve and Mineral Resources estimates reported by the Company were estimated in accordance with the Canadian National Instrument 43-101 and the Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards (May 10, 2014). These standards differ significantly from the requirements of the U.S. Securities and Exchange Commission. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.

This document contains "forward-looking information" within the meaning of Canadian securities legislation and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. This information and these statements, referred to herein as "forward-looking statements" are made as of the date of this document. Forward-looking statements relate to future events or future performance and reflect current estimates, predictions, expectations or beliefs regarding future events and include, but are not limited to, statements with respect to:

- 1. the estimated amount and grade of Mineral Resources and Mineral Reserves;
- 2. the PFS representing a viable development option for the Project;
- 3. estimates of the capital costs of constructing mine facilities and bringing a mine into production, of sustaining capital and the duration of financing payback periods;
- 4. the estimated amount of future production, both produced and sold; and,
- 5. estimates of operating costs and total costs, net cash flow, net present value and economic returns from an operating mine.

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Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives or future events or performance (often, but not always, using words or phrases such as "expects", "anticipates", "plans", "projects", "estimates", "envisages", "assumes", "intends", "strategy", "goals", "objectives" or variations thereof or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements.

All forward-looking statements are based on Verde's or its consultants' current beliefs as well as various assumptions made by them and information currently available to them. The most significant assumptions are set forth above, but generally these assumptions include:

- 1. the presence of and continuity of resources and reserves at the Project at estimated grades;
- 2. the geotechnical and metallurgical characteristics of rock conforming to sampled results; including the quantities of water and the quality of the water that must be diverted or treated during mining operations:
- 3. the capacities and durability of various machinery and equipment;
- 4. the availability of personnel, machinery and equipment at estimated prices and within the estimated delivery times;
- 5. currency exchange rates;
- 6. Super Greensand® sales prices and exchange rate assumed;
- 7. appropriate discount rates applied to the cash flows in the economic analysis;
- 8. tax rates and royalty rates applicable to the proposed mining operation;
- 9. the availability of acceptable financing under assumed structure and costs;
- 10. anticipated mining losses and dilution;
- 11. reasonable contingency requirements;
- 12. success in realizing proposed operations;
- 13. receipt of permits and other regulatory approvals on acceptable terms; and
- 14. the fulfilment of environmental assessment commitments and arrangements with local communities.

Although management considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect. Many forward-looking statements are made assuming the correctness of other forward looking statements, such as statements of net present value and internal rates of return, which are based on most of the other forward-looking statements and assumptions herein. The cost information is also prepared using current values, but the time for incurring the costs will be in the future and it is assumed costs will remain stable over the relevant period.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that estimates, forecasts, projections and other forward-looking statements will not be achieved or that assumptions do not reflect future experience. We caution readers not to place undue reliance on these forward-looking statements as a number of important factors could cause the actual outcomes to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates assumptions and intentions expressed in such forward-looking statements. These risk factors may be generally stated as the risk that the assumptions and estimates expressed above do not occur as forecast, but specifically include, without limitation: risks relating to variations in the mineral content within the material identified as Mineral Resources and Mineral Reserves from that predicted; variations in rates of recovery and extraction; the geotechnical characteristics of the rock mined or through which infrastructure is built differing from that predicted, the quantity of water that will need to be diverted or treated during mining operations being different from what is expected to be encountered during mining operations or post closure, or the rate of flow of the water being different; developments in world metals markets; risks relating to fluctuations in the Brazilian Real relative to the Canadian dollar; increases in the estimated capital and operating costs or unanticipated costs; difficulties attracting the necessary work force; increases in financing costs or adverse changes to the terms of available financing, if any; tax rates or royalties being greater than assumed; changes in development or mining plans due to changes in logistical, technical or other factors; changes in project parameters as plans continue to be refined; risks relating to receipt of regulatory approvals; delays in stakeholder negotiations; changes in regulations applying to the development, operation, and closure of mining operations from what currently exists; the effects of competition in the markets in which Verde operates; operational and infrastructure risks and the additional risks described in Verde's Annual Information Form filed with SEDAR in Canada (available at www.sedar.com ) for the year ended December 31, 2016. Verde cautions that the foregoing list of factors that may affect future results is not exhaustive.

When relying on our forward-looking statements to make decisions with respect to Verde, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Verde does not undertake to update any forward-looking statement, whether written or oral, that may be made from

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time to time by Verde or on our behalf, except as required by law.

About Verde AgriTech

Verde AgriTech promotes sustainable and profitable agriculture through the development of its Cerrado Verde Project. Cerrado Verde, located in the heart of Brazil's largest agricultural market, is the source of a potassium-rich deposit from which the Company intends to produce solutions for crop nutrition, crop protection, soil improvement and increased sustainability.

For additional information please contact:

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<sup>&</sup>lt;sup>1</sup> Additional to the Freight for the Merchant Navy Renewal. It is an additional charge on freight charged by Brazilian and foreign shipping companies operating in the Brazilian port, according to the bill of lading and the cargo manifest. It concerns long-haul navigation, cabotage, river and lake navigation, when dealing exclusively with the transportation of cargoes of liquid bulk transported in the North and Northeast regions.