ASX ANNOUNCEMENT
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DEVELOPING A BATTERY MATERIALS BUSINESS

Highlights

- **Volt progressing to become a battery materials manufacturer in the United States and Europe**

- **Testwork undertaken in the United States confirmed Volt's graphite is suitable for use in the production of battery-ready anode material for energy storage systems**

- **Proprietary battery anode material process flowsheet enables very high yields of approximately 70% purified spheroidal graphite produced from graphite feed**

- **Leveraging AETC's inverted LIB anode materials flowsheet design to produce non-spherical graphite products as a by-product of making spherical graphite for the LIB battery market including:**
    - **Performance testing in traditional battery systems with direct oversight by Volt's potential offtake partner, which operates in the lead-acid battery market**
    - **Joint Development Agreement with Urban Electric Power ("UEP") to improve alkaline battery performance with plans to enter into an offtake agreement between UEP and Volt**

- **The development of non-spherical graphite products for the alkaline and lead-acid battery markets will improve the economics of Volt's planned BAM facilities in the United States and Europe**

Graphite producer and battery anode material developer **Volt Resources Limited** (**ASX: VRC**) ("**Volt**" or "**the Company**") is implementing a plan to become a battery anode materials manufacturer in Europe and the United States based on an integrated supply chain using flake graphite produced

from its producing mine and processing plant in Ukraine and the development ready Bunyu project in Tanzania.

Battery Anode Material (Spherical Graphite)

Testwork

The Company has completed successful LIB cell cycle testing using coated spheroinised purified graphite ("CSPG") produced from natural graphite originated from the Bunyu Resource in Tanzania. The testwork demonstrated highly consistent performance with negligible degradation of electrochemical characteristics from cycle to cycle. The flat capacity curve signals that Bunyu graphite can compete not only with other natural graphite battery anode material (**"BAM"**), but also with higher cost synthetic graphite BAM offerings, in its long-term cycling performance. The testwork confirmed Volt's Bunyu flake graphite is well-suited for use in the production of battery-ready anode material for energy storage applications.

The testwork program was undertaken by Volt's technology partner in the United States, American Energy Technologies Co. ("AETC"), an established commercial graphite producer and processor which is headquartered in Illinois, USA.

Flowsheet

Volt will be adopting the inverted flow sheet developed by AETC for its downstream operations following the successful spheronization and purification results achieved during the testwork program. The use of this proprietary process enables Volt to not only convert a significant portion of its graphite feed with yields of approximately 70% achieved in the production of battery-ready anode material for lithium-ion batteries, but also generate a range of ultra-high purity by-products for use as electrically conductive diluents in battery cathodes and in a variety of valuable non-battery applications.

The process begins with graphite purification with all of the subsequent sizing and shaping undertaken with purified material by exclusively using environmentally responsible high temperature furnaces. No acid leaching or caustic bakes are employed.

The main benefits Volt enjoys from this inverted flowsheet are:

- The ability to divert non-spherical portions of the purified graphite to higher-margin markets such as conductivity enhancement applications in LIB cathodes and for other applications in alkaline and lead-acid batteries; and
- Reduced wear and tear on shaping mill parts (due to processing being accomplished with high purity graphite, which is a natural lubricant).

Non-spherical Purified Graphite

The non-spherical purified graphite is a by-product of the spheroidization of purified graphite when producing LIB anode material. Volt will reap the benefits from the inverted flowsheet developed by AETC to produce not only spherical purified graphite for lithium-ion batteries, but also higher-margin non-spherical material that can be used in applications such as conductivity enhancement and other specialty uses[1].

Alkaline Batteries – Urban Electric Power

Volt is in the process of entering into a strategic collaboration with advanced alkaline battery

[1] Refer ASX announcement dated 8 November 2021 and titled "High Performance Results from Bunyu Battery Cell Testwork"

producer, Urban Electric Power ("**UEP**"). UEP, Volt and AETC, will partner in the development of new technologies using non-spherical purified graphite for conductivity enhancement and ultra-high-purity graphite-based coatings to improve alkaline battery performance. Notably this will improve the alkaline battery performance while benefitting the end users - consumers of UEP's alkaline battery technologies - by offering a more attractive cost structure than the currently available industry solutions on the market.

Following the successful completion of the graphite technology programs for use in alkaline batteries, UEP and Volt plan to enter into an offtake agreement for the supply of ultra-high-purity graphite-based coatings and additives in addition to potential licensing benefits derived from the intellectual property developed.

Lead-acid Batteries

Volt is currently evaluating the electrochemical performance of its ultra-high purity non-spherical material for use in the expander of lead acid batteries. Test data from this initiative will be announced in the near future. This work is being performed under the close oversight of Volt's potential off-take partner, a lead-acid battery company.

The development of non-spherical graphite products for the alkaline and lead-acid battery markets will improve the economics of Volt's planned BAM facilities in the US and Europe leveraging our current flake graphite production capability from the Zavalievsky Graphite business located in Europe combined with future production from the Bunyu graphite project development in Tanzania.

-ENDS-

This announcement was authorised for release by the Board of Volt Resources Ltd.

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About Volt Resources Limited

Volt Resources Limited ("Volt") is a graphite producer/developer and gold exploration company listed on the Australian Stock Exchange under the ASX code VRC. Volt has a 70% controlling interest in the Zavalievsky Graphite business in Ukraine. Zavalievsky is in close proximity to key markets with significant developments in LIB facilities planned to service the European based car makers and renewable energy sector. ZG benefits from an existing customer base and graphite product supply chains based on excellent transport infrastructure covering road, rail, river and sea freight combined with reliable grid power, ample potable ground water supply and good communications. ZG has current plans to install a processing plant and equipment in order to commence production of spheroinised purified graphite (SPG) for the European LIB market1[2].

Volt acquired three licence applications that are considered to be prospective for lithium-borate mineralisation.

[2] Refer to Volt's ASX announcements titled "Volt to Acquire European Graphite Business following Completion of Due Diligence" dated 14 May 2021 and "Completion of the ZG Group Transaction Following Execution of New Convertible Securities Facility" dated 26 July 2021.

The licence applications are in respect to a total area of 291km^2, located in Serbia and are west and south-west of the Serbian capital, Belgrade[3].

Volt is progressing the development of its large wholly-owned Bunyu Graphite Project in Tanzania, as well as gold exploration in Guinea leveraging the Company's existing extensive networks in Africa.

The Bunyu Graphite Project is ideally located near to critical infrastructure with sealed roads running through the project area and ready access to the deep-water port of Mtwara 140km from the Project. In 2018, Volt reported the completion of the Feasibility Study ("FS") into the Stage 1 development of the Bunyu Graphite Project. The Stage 1 development is based on a mining and processing plant annual throughput rate of 400,000 tonnes of ore to produce on average 23,700tpa of graphite products[4]. A key objective of the Stage 1 development is to establish infrastructure and market position in support of the development of the significantly larger Stage 2 expansion project at Bunyu.

The Guinea Gold Projects comprise 6 permits in Guinea, West Africa having a total area of 348km. The Projects are located in the prolific Siguiri Basin which forms part of the richly mineralised West African Birimian Gold Belt.

[3] Refer to Volt's ASX announcement titled "Strategic European Lithium Acquisition – Jadar North" dated 18 November 2021.

[4] Refer to Volt's ASX announcement titled "Positive Stage 1 Feasibility Study Bunyu Graphite Project" dated 31 July 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in this document and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.