

ASX ANNOUNCEMENT  
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## Volt Begins Definitive Feasibility Study for Alabama Graphite Refinery Led by Wave International

Volt Resources Limited (**ASX:VRC**) ("**Volt**" or "**the Company**"), an established graphite producer and advanced materials developer, is pleased to announce the commencement of a Definitive Feasibility Study (**DFS**) for the high purity graphite (**HPG**) stage of its planned Alabama Graphite Refinery in the United States. The DFS is scheduled for completion in the June 2026 quarter and will build on the Scoping Study work already completed for Volt's US graphite refinery strategy.

### Highlights

- **Definitive Feasibility Study launched for the first stage of the Alabama Graphite Refinery to produce HPG**, targeting completion in the June 2026 quarter.
- **Builds on June 2025 Scoping Study** showing strong HPG and UHPG economics.
- **Wave International** appointed as lead DFS consultant, bringing extensive graphite purification expertise and U.S. critical minerals refining experience.
- **Two-stage development** using proven Ukraine refinery process for HPG production and Volt's patent-pending purification technology for the second stage production of ultra high purity graphite (**UHPG**).
- **Feed-flexible design** to process graphite from Zavalievsky Graphite (Ukraine), Bunyu (Tanzania), third-party, and recycled sources.
- **Aligned with U.S. policy priorities** to strengthen domestic critical minerals refining capacity.



Figure 1: VEM Proposed Alabama Graphite Refinery Facility Concept Drawing

## Launch of Definitive Feasibility Study

The DFS will be delivered to meet an AACE Class 3 estimate and will advance project definition for the first stage of the Alabama Graphite Refinery for the production of HPG, including, plant design, capital and operating cost estimates, schedule, and production forecast, to support a Final Investment Decision (FID). The DFS scope will cover the HPG production stage, aligned with the product and commercial strategy identified in Volt’s prior study.

The DFS follows the June 2025 Scoping Study which indicated robust financial metrics for the production of HPG and UHPG. The Scoping Study outcomes, combined with ongoing customer and market engagement, have reinforced the strategic and commercial rationale for progressing the project to a definitive level of study.

### Key Highlights of the June 2025 Scoping Study<sup>1</sup>

Metric	Result
<b>Pre-tax NPV13 (real)</b>	US \$136 million
<b>Pre-tax IRR</b>	58 %
<b>Average annual EBITDA</b>	US \$38 million over 21 years
<b>Initial capital cost</b>	US \$21 million
<b>Total capital cost</b>	US \$57 million
<b>Location benefits</b>	Proposed site in U.S. industrial park with access to energy, water, transport infrastructure, and proximity to customers

### Project Rationale and Market Drivers

Continued development of customer relationships and downstream market analysis has highlighted strong demand for both industrial high purity graphite products and battery-grade materials in North America and other key regions. This demand outlook, together with increased interest from potential strategic partners and customers, supports the acceleration of Volt’s Alabama Graphite Refinery as a key pillar of the Company’s downstream growth strategy.

Critical mineral refining and midstream processing capacity have been identified as U.S. national priorities. Volt’s proposed graphite refinery is aligned with these objectives, targeting production of high-value refined graphite products from a flexible feedstock base.

<sup>1</sup> Refer ASX announcement 17 June 2025

## Phased Development and Operating Strategy

Subject to securing project financing and a positive Final Investment Decision, Volt's current plan is to implement the Alabama Graphite Refinery in two stages.

- **Stage 1 – HPG production and near-term revenues**

In the initial stage and subject of the DFS, the refinery is planned to commence commercial production of HPG in Alabama, targeting near-term revenues from industrial and specialty graphite customers. The HPG production flowsheet will be based on the proven purification process employed at Volt's Ukraine-based Zavalievsky Graphite refinery, adapted and modified to comply with US regulatory, environmental, and operating standards. The Ukraine refinery has been in commercial production since 2017 and has supplied customers in Europe, Korea, and Japan, providing a strong operational and product qualification reference base.

- **Stage 2 – UHPG production using patent-pending process**

In the second stage, Volt expects to commence commercial-scale production of UHPG for battery and advanced applications using its patent-pending low-cost, HF-free two-step purification process (refer to ASX announcement dated 7 October 2025). This process is designed to deliver battery-grade purity ( $\geq 99.95\%$ ) with lower capital and operating cost, simplified permitting, and improved ESG performance compared with conventional hydrofluoric acid or high-temperature thermal process routes.

## Feedstock Flexibility and Supply Strategy

The Alabama Graphite Refinery is expected to be designed as a feed-flexible facility capable of processing a range of natural graphite sources. Anticipated feedstock sources include:

- Flake graphite supplied by Volt's 70%-owned Zavalievsky Graphite operation in Ukraine.
- Concentrate from Volt's wholly owned Bunyu Graphite Project in Tanzania once the project becomes operational.
- Graphite from operating mines in Africa and other third-party producers with whom Volt has been engaging and evaluating sample material.

## Appointment of Wave International as Lead DFS Consultant

The DFS will be led by [Wave International](#), a global advisory, engineering, and project delivery firm specialising in critical raw materials and battery minerals. Wave is recognised as a leader in graphite processing and purification and brings specific expertise in the type of purification flowsheet Volt plans to deploy at the Alabama Graphite Refinery. Wave is also actively working with multiple international companies pioneering midstream refining for critical materials in the US, providing valuable benchmarking and implementation experience for Volt's project.

Under the DFS mandate, Wave will be responsible for the preparation of the DFS report including process and plant design, capital and operating cost estimation to AACE Class III standard, project execution planning, integration of Volt's proprietary purification technology into a commercially scalable plant design and financial model.

### Next Steps

Key next steps for the Alabama Graphite Refinery include:

- Completion of the DFS by the June 2026 quarter.
- Ongoing engagement with potential customers and strategic partners to support future offtake and funding discussions.
- Progressing permitting, site-related due diligence, and incentives discussions in Alabama, in collaboration with regional economic development agencies.

### Volt Chief Executive Officer, Prashant Chintawar, said:

*“Launching a Definitive Feasibility Study for our Alabama Graphite Refinery is a major milestone in Volt's downstream strategy and reflects the strong technical and commercial foundation established through our recent work in the US and Europe. Our staged approach is designed to deliver early HPG revenues using proven technology, while paving the way for higher margin UHPG production using Volt's patent-pending purification process. The combination of flexible feedstock options from Ukraine, Tanzania, and other suppliers, together with strong policy support in the US for critical minerals refining, positions this project to play a meaningful role in North American and global graphite supply chains.”*

**-ENDS-**

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

**For further information, please email: [contact@voltresources.com](mailto:contact@voltresources.com)**

## **About Volt Resources Limited**

Volt Resources Limited (“Volt”) is a critical minerals and advanced materials company listed on the Australian Stock Exchange under the ASX code VRC. We are an established graphite producer and advanced materials developer.

In 2021, Volt acquired a 70% interest in each of the companies comprising the ZG Group, namely - Zavalievsky Graphite LLC (processing plant buildings, processing plant, mining equipment, power sub-station, and distribution), Stone Found LLC (crushed rock operations), and Graphite Invest LLC (holds a 79% interest in PJC Zavalievsky Graphite Kombinat – mine, land, main administration office building. It is this entity that holds the 636 hectares of freehold land on which the Zavalievsky mine, and other related buildings and facilities are located)<sup>2</sup>.

Volt holds two licence applications that are prospective for lithium-borate mineralisation. The licence applications are located in Serbia and are west and south-west of the Serbian capital, Belgrade<sup>3</sup>.

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 in southeast Tanzania is ideally located near 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 followed by a Feasibility Study Update published in August 2023. 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 24,780 tpa of graphite products. 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<sup>4</sup>.

The Guinea Gold Projects comprise three projects in Guinea, West Africa having a total area of 348 km<sup>2</sup>. The Projects are located in the prolific Siguiri Basin which forms part of the richly mineralised West African Birimian Gold Belt.

Volt’s wholly owned US subsidiary, Volt Energy Materials LLC, is headquartered in Alabama Entrepreneurship Institute at University of Alabama, Tuscaloosa, Alabama. and is focussed on the downstream graphite business including the high purity graphite processing technology. In June 2025 a Graphite Refinery Scoping Study confirmed strong project economics based on a staged development of refinery capacity. The Company is proceeding with plans for pilot plant trials, engaging with potential offtake partners, exploring government facilitation, and considering funding options as it moves forward with project development<sup>5</sup>.

Information in this report that relates to the production target of the Bunyu Graphite Project was released to the ASX on 14 August 2023 and is available to view on [www.asx.com.au](http://www.asx.com.au). Volt Resources Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions underpinning the production target continue to apply and have not materially changed.

<sup>2</sup> Refer to Volt’s ASX announcement titled “Volt to Acquire European Graphite Business Following Completion of Due Diligence” dated 14 May 2021.

<sup>3</sup> Refer to Volt’s ASX announcement titled “Strategic European Lithium Acquisition – Jadar North” dated 18 November 2021.

<sup>4</sup> Refer to Volt’s ASX announcement titled “Feasibility Study Update for Bunyu Graphite Project Stage 1, Tanzania Delivers Significantly Improved Economics” dated 14 August 2023.

<sup>5</sup> Refer to ASX announcement dated 17 June 2025 titled “Alabama Graphite Refinery Scoping Study Confirms Strong Project Economics”.