

ASX ANNOUNCEMENT

By e-lodgement

Volt Resources Limited's Zavalievsky Graphite Business Benefits from Potential US-Ukraine Critical Minerals Agreement**Highlights**

- **Imminent US-Ukraine Critical Minerals Deal Enhances Market Access for Zavalievsky Graphite**
- **Builds on existing Strategic Partnership on Raw Materials between EU and Ukraine**
- **In 2023, Zavalievsky Graphite was recognized as a Strategic Asset in ERMA Investment Pipeline positioning Volt to support increased European graphite demand**
- **Operational Momentum at ZG with existing High-Purity Graphite production and Ultra High Purity Graphite production trials**

Volt Resources Limited (**ASX:VRC**) is pleased to provide an update on its 70%-owned Zavalievsky Graphite (ZG) operation in Ukraine, emphasizing its dual role in addressing critical mineral shortages in Europe and North America. The graphite business's recognition under the European Raw Materials Alliance (ERMA) investment pipeline, the Raw Materials Strategic Partnership between the EU and Ukraine, and its alignment with the impending US-Ukraine critical minerals agreement, positions ZG as a cornerstone of transnational battery supply chains.



Figure 1: Hauling Operations at Zavalievsky Graphite

Key Developments

1. US-Ukraine Critical Minerals Deal Enhances Market Access for Zavalievsky Graphite

The **US-Ukraine critical minerals agreement**, announced on 26 February 2025, positions Ukraine as a strategic supplier of battery-grade materials (e.g., graphite, lithium) to North American markets. While specific terms remain confidential, the pact includes:

- **Tariff reductions** for Ukrainian graphite exports to the US, enhancing ZG's competitiveness against Chinese-sourced materials.
- A **joint investment fund** to modernize Ukraine's mining infrastructure, with initial allocations targeting rail and port upgrades near ZG's operations.
- The Governments of Ukraine and the United States of America, with the aim of achieving lasting peace in Ukraine, intend to establish a **Reconstruction Investment Fund** (Fund), partnering in the Fund through joint ownership, to be further defined in the Fund Agreement
- **Streamlined export protocols** to accelerate shipments of high-purity graphite to US lithium-ion battery manufacturers.

Ukrainian Prime Minister Denys Shmyhal said "We are ready to sign the agreement that has been prepared regarding the establishment of the relevant investment fund in order to start working with the USA on a completely pragmatic, economic basis. This agreement has been approved by the government of Ukraine. We are ready to begin this cooperation at any moment."¹ The signing of the US-Ukraine critical minerals deal is likely to benefit Volt and is anticipated to reduce ZG's projected capital expenditures through grants for energy-efficient processing equipment.



2. Zavalievsky Graphite recognized as Strategic Asset in ERMA Investment Pipeline positioning Volt to support increased European graphite demand

In 2023, the [European Raw Materials Alliance \(ERMA\)](#) and [European Institute of Innovation & Technology \(EIT\)](#) formally designated ZG as a strategic asset for Europe's energy transition, positioning it among fewer than 50 projects prioritized to address the EU's critical materials deficit (refer *Figure 2: Raw Materials Projects Identified in ERMA Investment Pipeline*).

This followed an earlier MoU for a strategic partnership between the EU and Ukraine² which includes activities along the entire value chain of both primary and secondary critical raw materials and batteries, and in line with the objectives of the EU's Critical Raw Materials Action Plan. It will help diversify, strengthen, and secure both sides' supply of critical raw materials, essential for achieving the green and digital transitions. The partnership will also be decisive in preserving global competitiveness and developing resilience of EU and Ukrainian industry.

¹ <https://tvpworld.com/85392890/ukraine-ready-to-sign-minerals-deal-with-us-says-pm>

² <https://www.iea.org/policies/18056-ukraine-eu-strategic-partnership-on-raw-materials>

With European graphite demand projected to reach **over 1 million tonnes annually by 2030** and domestic supply forecasts at just 300,000 tonnes, Zavalievsky Graphite's operational readiness and scalability offer a near-term solution to this supply gap. The ERMA designation unlocks access to the EU's €2 billion Critical Raw Materials Fund, which aims to bolster regional autonomy in battery-grade graphite production.

ZG's inclusion in the ERMA pipeline underscores its potential to supply a material quantity of **Europe's projected graphite needs** by 2030. The project's existing transport infrastructure—including road, rail, and river transport networks - ensures reliable delivery to European gigafactories, reducing reliance on Chinese imports, which currently dominate 75% of global graphite supply.

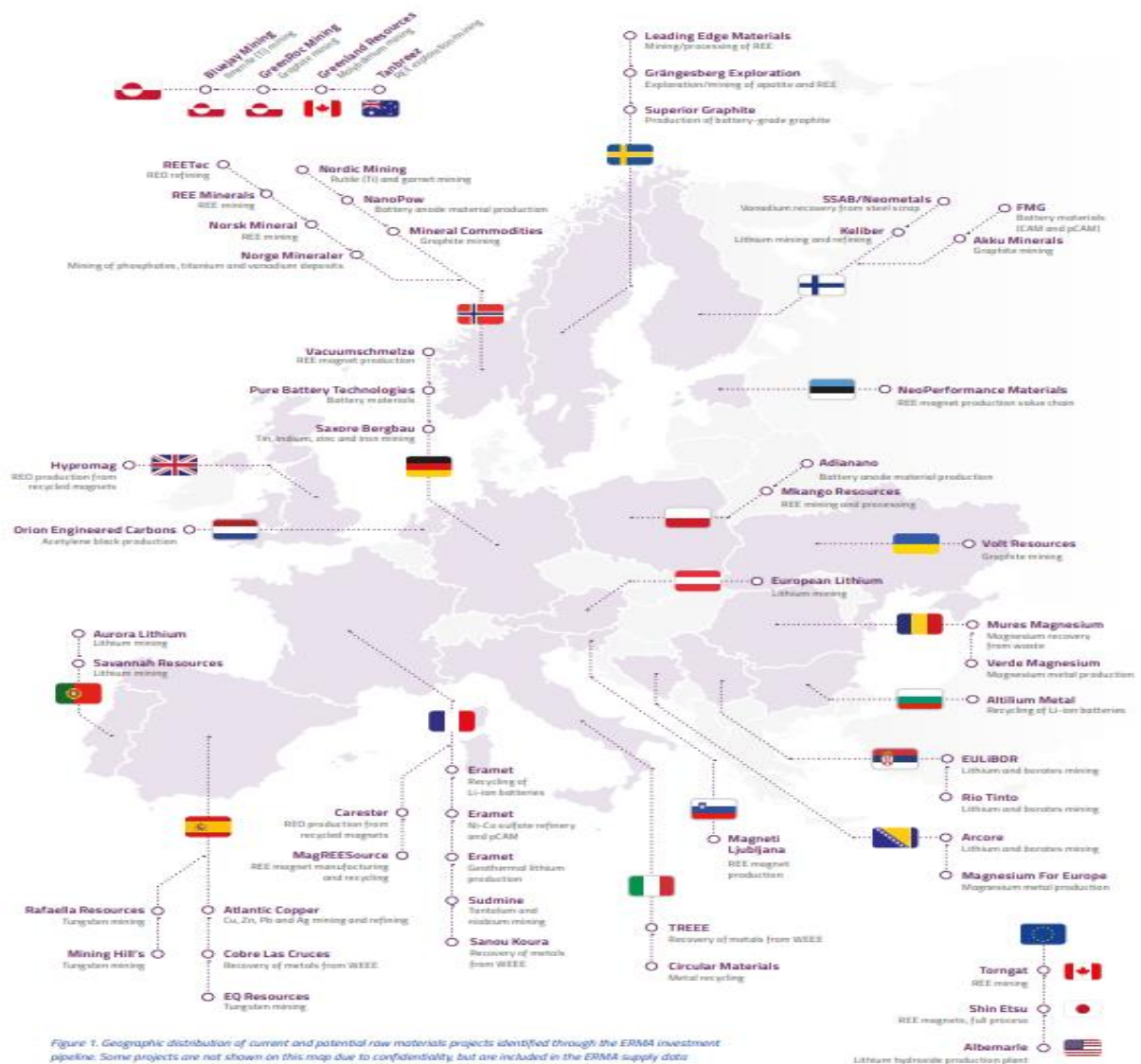


Figure 2: Raw Materials Projects Identified in ERMA Investment Pipeline



3. High-Purity Graphite Production: Technical Advancements and Market Differentiation

Zavalievsky Graphite has solidified its position as a premium graphite supplier through its ability to produce **99.5% purity micronized graphite**, achieving substantial price premiums compared to standard 94% carbon flake graphite.

Recent milestones include:

- Production exceeding **800 tonnes** of graphite during the quarter ending December 2024 (target was 550 tonnes).
- Ultra High Purity Graphite (UHPG) production trials started in Jan 2025 with Volt's new reactor, using patent-pending technology following the successful completion of bench scale testwork. These trials, via **patent-pending purification process** to achieve **99.95% purity**, are likely to continue till late 2025. The UHPG product testwork is to meet lithium-ion battery makers' requirements for impurity levels below **500 parts per million**.
- Ongoing upgrades to achieve **99.95% purity levels**, aligning with gigafactory requirements for electric vehicle and stationary energy storage batteries.

The project's technical edge is bolstered by its **over 85-year operational history** and a resource base of **22.9 million tonnes at 6.8% total graphitic carbon (TGC)**³, ensuring long-term scalability. Notably, 90% of ZG's output comprises fine-mesh graphite suitable as feedstock for the production of lithium ion battery anodes

Operational Scale and Expansion Potential

ZG's historical production peaked at **60,000 tonnes per annum (tpa)** in the 1980s, with 2017-2021 operations delivering on average **7,300 tpa** of graphite concentrate. Volt is evaluating expansion scenarios, contingent on securing offtake agreements and financing.

³ <https://voltresources.com/assets/zavalievsky-graphite/>



Figure 3 : Aerial view of Volt's 70% owned Zavalievsky Graphite mine

Strategic Implications

1. ERMA Recognition and EU-Ukraine Raw Materials Partnership

Zavalievsky Graphite's inclusion in the ERMA pipeline positions Volt as a strategic partner for EU battery manufacturers seeking to reduce reliance on Chinese graphite, which currently supplies over 75% of global requirement. The designation unlocks potential funding opportunities under the EU's €2 billion Critical Raw Materials Fund and strengthens ZG's negotiating position with European automakers.

2. US-Ukraine Deal Synergies

The impending US-Ukraine minerals agreement accelerates Zavalievsky Graphite's integration into transatlantic supply chains, with graphite included in the United States 2022 list of critical minerals⁴ essential to the US economy and national security.

Volt Resources is well-placed to leverage:

- Reduced tariffs for graphite exports to US markets under the draft deal.
- Joint infrastructure investments to optimize ZG's rail and river transport networks

⁴ <https://www.usgs.gov/news/national-news-release/us-geological-survey-releases-2022-list-critical-mineral>

Managing Director Commentary

Volt CEO & Managing Director, Prashant Chintawar, stated:

“Zavaliievsky Graphite’s dual recognition by ERMA and the imminent US-Ukraine partnership reflects its geopolitical significance in the global critical mineral race. With about 90% of ZG’s output already suitable (fine graphite) for anode material for lithium-ion batteries, we’re advancing purification capabilities to meet surging demand from customers seeking non-Chinese supply. The upcoming USA-Ukraine pact could reduce ZG’s operating and capital costs through targeted infrastructure grants. Our ability to deliver 99.5% purity material today, coupled with infrastructure upgrades under the minerals agreement, positions Volt to capture a share of Europe’s growing anode market by 2030.”

Authorized for release by the Board of Volt Resources Limited.

-ENDS-

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

For further information, please contact
contact@voltresources.com

About Volt Resources Limited

Volt Resources Limited ("Volt") is 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 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 granite 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) [5].

Volt acquired three licence applications that are prospective for lithium-borate mineralisation. The licence applications are in respect to a total area of 291 km², located in Serbia and are west and south-west of the Serbian capital, Belgrade[6].

Volt is also progressing the development of its large wholly owned Bunyu Graphite Project in Tanzania. The Bunyu Graphite Project is ideally located near critical infrastructure with sealed roads running through the project area and ready access to the deep-water port of Mtwara. In August 2023, Volt reported the completion of the revised Feasibility Study ("FS") for Stage 1 development of the Bunyu Graphite Project. The Stage 1 development is based on a mining and processing plant with annual throughput rate of 400,000 tonnes of ore to produce on average 24,780 tpa of graphite products [7]. Key objectives of Stage 1 development are to establish Bunyu Graphite Project as a world-class supplier of graphite products, grow Volt's existing natural flake graphite business, provide cashflow, and establish infrastructure in support of the development of the significantly larger Stage 2 expansion project.

Volt's wholly owned subsidiary, Volt Energy Materials LLC, is headquartered in EcoComplex "Clean Energy Centre" in New Jersey, US. EcoComplex has laboratories which provide bench space for wet chemistry, chemical hoods, vented hood, a clean room, separate gas storage, and laboratory refrigeration. This facility also offers 1,200 square feet, two story scale-up space, specifically designed for pilot scale demonstration of new clean technologies.

Information in this report that relates to the production target of the Bunyu Graphite Project was first released to the ASX on 14 August 2023 and is available to view on 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.

[5] Refer to Volt's ASX announcement titled "VOLT TO ACQUIRE EUROPEAN GRAPHITE BUSINESS FOLLOWING COMPLETION OF DUE DILIGENCE" dated 14 May 2021.

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

[7] 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.