# **ASX Announcement**

Released 29 August 2024



# 6km of Drill Targets Generated at Bleiberg Lead-Zinc-Germanium Project in Austria

BM8 progress note on target generation and targeting at the Bleiberg Project,

Austria

#### **HIGHLIGHTS**

- **Expanded Drill Targets**: Battery Age Minerals Ltd (BM8) has identified multiple drill targets at its Bleiberg Lead-Zinc-Germanium Project in Austria, extending over a 6 km strike length based on historical datasets.
- Progress on Targeting Strategy: BM8 has advanced its targeting strategy by integrating 100+ years of historical geological data, confirming the presence of prospective mineralisation-hosting stratigraphy, and identifying several areas with historic mining evidence.
- **Historic Mining Insights**: The project area includes fault-bounded potentially mineralised horizons with significant depth extensions, and mapping has shown that some areas with historic mining are again within targetable depths or at the surface.
- **Upcoming Field Campaign**: BM8 plans a new field campaign to review all identified target areas, verify the geological-structural settings, and prepare for a maiden drilling program, which will be submitted for local and mining authority approval.
- Strategic Metal Prices Surge: Prices for germanium and gallium, like other export restricted minerals such as antimony, have significantly increased over the past 12 months, underscoring the strategic importance of these metals and highlighting the opportunity for BM8's Bleiberg Project to tap into the growing market.
- The Bleiberg mine was one of the largest germanium producers in the world whilst in production, and the area is host to some of the world's highest Germanium grades as well as Gallium mineralisation (90-110g/t)<sup>2</sup>.

Battery Age Minerals Ltd (ASX: **BM8**; "**Battery Age**" or "**the Company**") is pleased to advise that following the site visit conducted last month, the Company has progressed with the compilation and integration of historical data over the Bleiberg Project and advanced the prospectivity assessment and targeting strategy.

The historical geological information, as shown in the geological map (Figure 1), highlights the westwards continuation of the prospective stratigraphic units, modified by faults and thrusts during the Alpine orogeny. Given the strong stratigraphic control on the distribution of mineralisation (parallel to certain rock units) the first criteria for targeting is the identification and confirmation of the *target formation*.



The historic Bleiberg mining district is known to be located within a graben structure that preserved much of the mineralisation-hosting stratigraphy. When mining operations were suspended in the early 1990's, the underground operations had reached a major fault zone in the west, that locally terminated the ore system (Figure 1).

However, mapping further west showed that the main mineralisation-bearing horizons were again within targetable depth or at surface and that these localities were subject to old historic mining. BM8's technical team was able to confirm during its recent visit the sites of several of these very old mining activities (Figure 1, blue mining symbols).

The prospective stratigraphy is preserved within fault-bounded potentially mineralised horizons which have significant depth extensions. The historic map in Figure 1 shows several targetable areas, most of which are in excess of 2 km strike length, of prospective stratigraphy and with proof of historic mining.

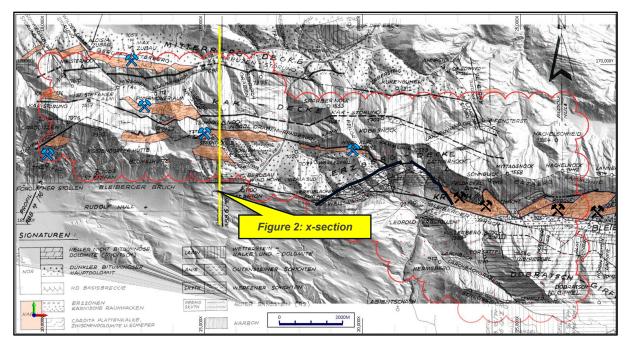


Figure 1: Geological map of the area underlying BM8's Bleiberg project area with outcropping target horizons in orange; (\*\times indicates the location of the Bleiberg Mining Shafts; \*\times indicates old historic mine workings and adits)

The geological cross section in Figure 2 exemplifies the structural geological and stratigraphic setting and provides an insight into the deformation, termination and preservation of rock formations in the central part of the project area. The cross section is located about 7 km west of the Bleiberg mine and shows a double syncline preserving prospective Raibler Horizons in a graben structure south of the Tschocklnock peak. This area was not visited by BM8 but has records of historic underground mining.



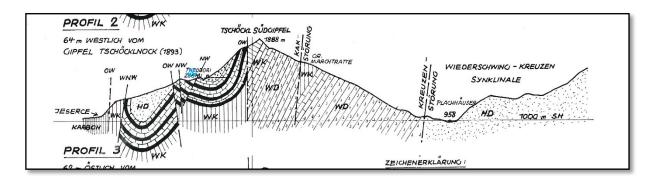


Figure 2: Geological profile of the central project area looking west (refer Figure 1).

BM8 plans to re-assess in its next field campaign all the identified target areas for verification of the geological-structural setting and support for the interpreted prospectivity. The field campaign will lead to the planning and budgeting of its maiden major work program which will be submitted to the local authorities.

The Company's technical team sees all the geological, mineralogical and stratigraphic favourable parameters materialised in the west, that made the historic Bleiberg area a world-class mining district, and to set an exploration target a probable outcome from its first drilling program.

# Germanium and Gallium: Strategic Significance and Opportunities

Over the past 18 months, prices for both germanium and gallium have experienced significant increases; According to *Strategic Metals Invest* Germanium has risen 29.63% since the beginning of 2024 and compared to January 2023, germanium is up +57.00%. Gallium has risen +20.31% since Jan 1st, 2024, and +41.90% since the start of last year<sup>10</sup>. This rise has largely been attributed to a combination of factors:

- **Supply Chain Disruptions:** Both metals have faced supply chain challenges, including reduced production and export restrictions. For instance, restrictions from major producers or geopolitical tensions have constrained supply.
- Increased Demand: Demand for germanium and gallium has surged due to their critical roles in high-tech applications. Germanium is used in fiber optics, solar panels, and electronics, while gallium is essential for semiconductors and LED technologies.
- Market Speculation: The growing interest and speculation in these metals have also contributed to price hikes. Traders and investors anticipating future shortages have driven prices higher.
- Geopolitical Factors: Trade policies and geopolitical tensions, particularly involving major producers like China, have influenced market stability and pricing.

These factors combined have led to a notable increase in the prices of both germanium and gallium over the last year.



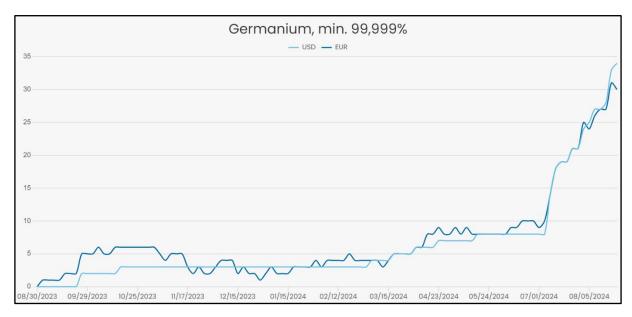


Figure 3: Relative 12-month price movement for Germanium 99.999%. Source Strategic Metals Invest.

The strategic importance of Germanium has been underscored by recent developments, including the Taiwan Semiconductor Manufacturing Company Limited (TSMC) announcing plans to increase Germanium use in next-generation Si-Ge chips due to its superior electron mobility compared to Silicon. Additionally, China's export restrictions on the mineral further enhance its strategic value. This positions BM8 favourably to explore and meet the growing demand for Germanium.

Gallium arsenide, essential in manufacturing semiconductor wafers, offers advantages over silicon, including higher frequency operation, heat resistance, and reduced noise at high frequencies. These properties make it valuable for radars, radio communication devices, satellites, and LEDs.

The U.S., EU, Japan, India, and Australia have all designated Germanium and Gallium as critical minerals due to their importance, concentration and scarcity. This highlights a significant strategic opportunity for Battery Age and the Bleiberg Project, which is well-positioned to disrupt the rigid supply chain for these vital semiconductor materials.



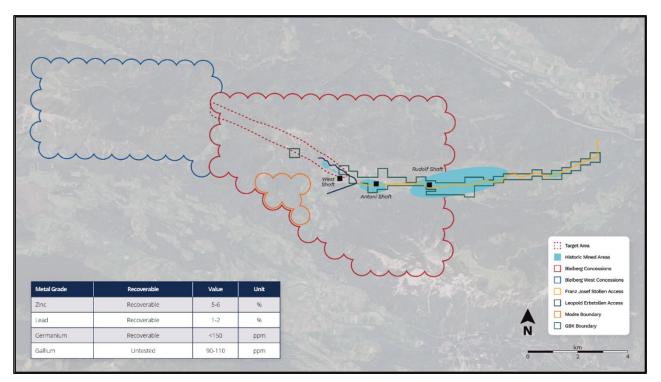


Figure 4 – Identified mineralised trend located along strike from historical workings. Inset table demonstrates historical data for the Bleiberg Mine from previous workings) 1,2,99.

#### **Battery Age CEO Nigel Broomham commented:**

"With the recent advancements in our exploration strategy and the identification of multiple high-potential drill targets at the Bleiberg Project, we are excited about the significant opportunities ahead. The historical data and geological insights confirm the presence of valuable mineralisation and strengthen our confidence in the project's potential. As we prepare for our upcoming field campaign and drilling program, the rising prices and strategic importance of germanium and gallium further enhance the project's lead and zinc value. We are committed to leveraging these opportunities to deliver strong results and aspire to contribute to the critical supply of these essential minerals."

Release authorised by the Board of Battery Age Minerals Ltd.

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#### **Forward-Looking Statement**

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#### **Compliance Statement**

This announcement contains information on the Bleiberg Project extracted from an ASX market announcements dated 8 December 2022, 2 February 2023, 13 July 2023, 26 February 2024, 26 March 2024, 23 April 2024 and 16 May 2024 released by the Company and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The original market announcement is available to view on www.batteryage. au and www.asx.com.au. Battery Age is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources (as that term is defined in the JORC Code) that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

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- Refer to earn-in terms and structure set out in the Company's Prospectus dated 7 December 2022, and announcement 16 May 2024.
- 10. Strategic Metals Invest; https://strategicmetalsinvest.com/germanium-prices/, August 2024.