

## BM8 Advances Integrated Germanium Strategy with Specification Evaluation and Sustainable Processing Pathways

Initiatives strengthen BM8's end-market readiness by aligning upstream germanium projects with downstream specification and sustainability requirements

### HIGHLIGHTS

- **Evaluation licence secured:** BM8 has secured an evaluation licence with NTUitive, the innovation and enterprise company of Nanyang Technological University, Singapore (NTU Singapore) to evaluate six germanium-related inventions and associated proprietary materials.
- **Germanium technology scope:** The inventions relate to Germanium (Ge) based optoelectronics and integration platforms within advanced semiconductor and optoelectronics device fabrication.
- **Specification & partnership lens:** BM8 will use the evaluation to better define purity, consistency and product parameters required in higher-value germanium end markets, supporting product positioning, specifications and potential strategic partnerships.
- **Sustainable processing pathways:** BM8 is progressing a parallel workstream assessing lower-impact germanium processing concepts aimed at reducing chemical intensity and energy input and improving process safety, supporting optionality for cleaner and more efficient production pathways over time.
- **Integrated “spec-to-process” approach:** The evaluation and sustainable processing workstream are intended to operate together as a specification-to-processing feedback loop, aligning future resource development and processing strategies with downstream qualification pathways in advanced semiconductor and photonics markets.
- **Portfolio-level leverage:** The evaluation will inform BM8's broader germanium strategy as the Company advances its two core Germanium projects:
  - **Bleiberg–Hochobir (Austria):** ~330 km<sup>2</sup> across two historic mining districts with germanium mineralisation and historic concentrate grades reported up to 1,500 g/t Ge, with Phase 1 drilling completed in H2 2025.<sup>i</sup> Bleiberg is recognised as one of the world's most significant historic zinc–germanium districts. The historic Bleiberg Mine reportedly produced approximately 5.5 million ounces of germanium prior to closure, ranking it among the largest global germanium producers and underscoring the district-scale significance of the project.<sup>ii</sup>
  - **Apex (Utah, USA):** 129 mining claims (~2,660 acres) surrounding the historic Apex Mine (world's first primary Ge–Ga mine), with historic grades reported up to 0.7% Ge (7,000 g/t) and 2% Ga (20,000 g/t) and ~180,000 oz of silver produced.<sup>iii</sup>

- **BM8's Multi-Year Germanium Strategy:** BM8 is pursuing a comprehensive, long-term plan to identify, advance, and align germanium resources in Western jurisdictions, adhering to downstream processing and supply-chain standards.
- **Strategic supply-chain tailwinds:** Amid rising export restrictions and geopolitical tensions affecting global germanium availability, BM8's EU and US Ge portfolio provides unique exposure to a critical technology material increasingly important to advanced computing and AI, data centres and communications infrastructure.

**Battery Age Minerals Ltd (ASX: BM8; “Battery Age” or “the Company”)** is pleased to announce that it is progressing its strategy to build exposure to a secure, Western-aligned supply of germanium, a critical material used across advanced technology supply chains.

As part of this strategy, the Company is advancing two complementary initiatives designed to strengthen the Company's end-market readiness as it progresses its germanium projects in Austria and the USA.

First, BM8 has secured an evaluation licence with NTUitive (Nanyang Technological University's commercialisation entity) to evaluate six germanium-related inventions and associated proprietary materials. This evaluation is intended to strengthen BM8's downstream specification and qualification know-how, an important capability in qualification-driven markets where purity, consistency and traceability can influence pricing, market access and long-term supply contracting.

Second, following on from the Company's announcement on 31 October 2025, the Company continues to progress a sustainable processing pathways workstream assessing approaches aimed at reducing chemical intensity and energy input compared with conventional methods, supporting optionality for cleaner, safer and potentially more cost-effective processing outcomes over time. This follows completion of the Company's maiden drill program at the Bleiberg Zinc-Germanium Project in Austria, with assays currently pending.

These initiatives build on BM8's sustained exploration focus on germanium over recent years. Since 2022, the Company has actively assembled and advanced a portfolio of germanium-prospective assets in Austria and the United States, undertaken geological and drilling programs, and engaged with downstream and policy stakeholders to support the development of secure, Western-aligned germanium supply pathways.

## **STRATEGIC RATIONALE – WHY THIS MATTERS FOR BM8**

Germanium is a strategically important material used across high-value and technologically critical applications, including fibre-optic networks, infrared optics and imaging, specialised electronics and advanced sensing systems. These end markets are typically specification-driven, with product purity, impurity thresholds and consistency influencing pricing, qualification and market access.

Global supply remains relatively concentrated and is increasingly influenced by geopolitics and export controls, reinforcing the importance of secure, Western-aligned sources and pathways. As demand for advanced computing, communications infrastructure and sensing technologies grows, the role of germanium as an enabling material across multiple technology stacks is expected to remain strategically significant.

Against this backdrop, BM8 is evaluating germanium-linked technologies to:

- clarify downstream product specifications and qualification requirements;
- inform product positioning and potential future pathway decisions; and

- support strategic engagement with potential partners through improved technical alignment.

## INTEGRATED APPROACH – FROM RESOURCE TO SPECIFICATION

Higher-value germanium markets are qualification-driven: small variations in purity and impurity control can materially impact device performance, yield and reliability. BM8's approach is therefore to build capability across two linked areas:

- **Downstream specification context:** to better understand the product parameters and qualification requirements that matter to end users; and
- **Upstream processing optionality (sustainable pathways):** to assess pathways that may reduce chemical intensity and energy input while supporting improved consistency and responsible sourcing outcomes.

Together, these initiatives are intended to support BM8's ability to engage end customers and strategic partners with a clearer, customer-led value proposition as BM8 progresses its core germanium projects.

This approach is intended to complement BM8's ongoing exploration programs by ensuring that resource development decisions are informed by long-term end-market and supply-chain considerations.

### Nanyang Technological University, Singapore (NTU Singapore)

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) is home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute and Energy Research Institute @ NTU (ERI@N).

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

NTUitive Pte Ltd, is the innovation and enterprise company - and a wholly-owned subsidiary – of NTU. NTUitive manages the University's intellectual property, promotes innovation, supports entrepreneurship, and facilitates the commercialisation of research.

BM8 will use the evaluation to refine its understanding of downstream specification requirements and potential collaboration pathways relevant to higher-value germanium applications, as the Company progresses its core projects at Bleiberg–Hochobir (Austria) and Apex (Utah, USA).

## EVALUATION PROGRAM – SCOPE

The evaluation licence provides a licence to evaluate six inventions in germanium (Ge) based optoelectronics and integration platforms within the field of advanced semiconductor and optoelectronics device fabrication, including:

### 1) Material Property Testing

The evaluated patents disclose material-level approaches for integrating germanium related material on silicon, including epitaxial growth methods, graded or step-graded buffer designs, strain management techniques, and wafer-scale uniformity considerations. The technical disclosures address lattice mismatch, thermal stress, defect formation, and impurity and contamination control during growth and processing.

BM8 is reviewing these disclosures to better understand how material quality, defect density and impurity thresholds influence downstream performance expectations and material specifications.

## 2) Device-Level Architectures and Performance Sensitivity

At the device level, the patents describe silicon-compatible optoelectronic architectures that utilise germanium based active layers, including resonant-cavity and strain-engineered structures intended to enhance optical absorption, sensitivity and wavelength-specific response. The disclosures highlight the dependence of device performance and yield on material quality, composition, interface control and process consistency.

BM8 is assessing these device concepts to understand how downstream performance and qualification requirements translate into tighter material and process control.

## 3) Platform Integration and System-Level Considerations

The evaluated patents also include platform-level concepts addressing integration of germanium-based materials and devices into broader photonic or sensing systems. These disclosures cover layer transfer, insulation schemes, stressor structures and waveguiding architectures designed to support system-level functionality within silicon-compatible processes.

BM8 is using these system-level disclosures to understand how application-specific integration and qualification considerations can shape end-user requirements and collaboration pathways.

## 4) Overall Technical Evaluation

Collectively, the patent disclosures across material, device and system domains provide BM8 with a structured technical reference for assessing advanced germanium technologies.

This evaluation enables BM8's ongoing efforts to refine product positioning and engagement strategies in specification-driven germanium markets.

# Overall Evaluation Programme Scope

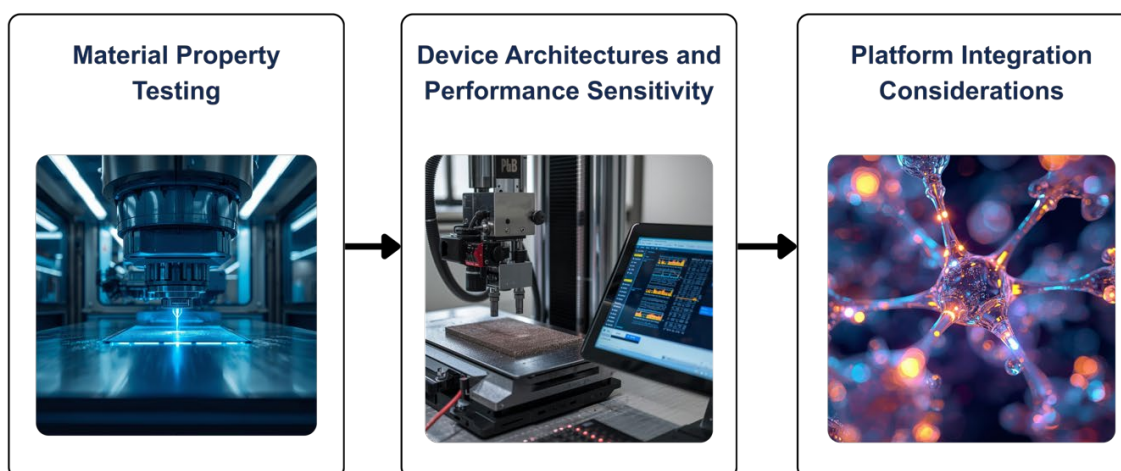


Figure 1: Abstract Graphic Representation of Evaluation Programme

## SUSTAINABLE PROCESSING PATHWAYS (EVALUATION STAGE)

BM8 is assessing environmentally sustainable germanium processing concepts aimed at reducing the hazardous reagent burden, lowering energy intensity and improving process safety versus conventional approaches. Concepts under review include:

- **Mechanochemical activation approaches** (e.g., ball milling-based activation to support extraction under milder conditions); and
- **Low-acid / organic-acid leaching concepts** (using milder organic acids to selectively dissolve germanium and reduce hazardous waste streams).

This workstream is being assessed to support optionality for cleaner processing pathways and to align with increasing customer and regulatory emphasis on responsible sourcing and lower-impact production. This is an evaluation/scoping program and does not represent a commitment to develop a specific processing facility or downstream manufacturing capability.

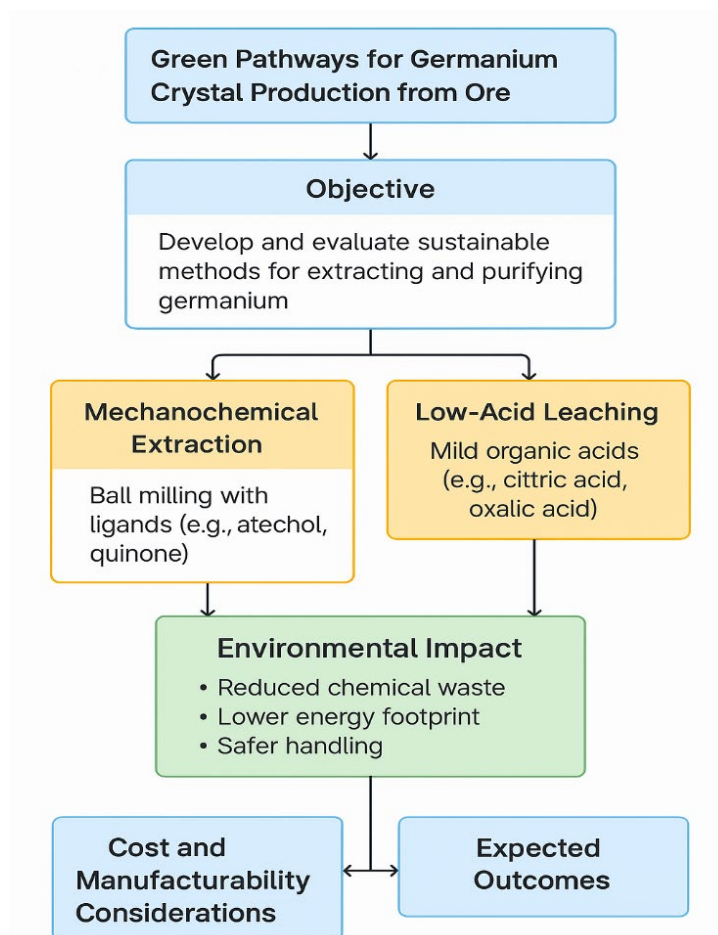


Figure 2: Impact of Pathways for Germanium Extraction

## **BM8's GERMANIUM LEADERSHIP**

BM8's germanium portfolio spans two historically significant districts:

- Bleiberg–Hochobir (Austria): BM8's landholding covers approximately 330 km<sup>2</sup> across two historical mining districts known for extensive lead-zinc production and associated germanium mineralisation, with historic concentrate grades reported up to 1,500 g/t Ge.
- Apex Project (Utah, USA): BM8 has staked 129 mining claims (~2,660 acres) surrounding the historic Apex Mine in the Beaver Dam Mountains. The Apex Mine (also known as the Dixie Mine) is recognised as the world's first primary germanium–gallium mine, with historic reporting of grades up to 0.7% Ge (7,000 g/t) and 2% Ga (20,000 g/t), alongside ~180,000 oz of silver produced.

As part of its ongoing long-term germanium strategy, BM8 intends to continue advancing exploration activities across its portfolio. At Bleiberg, the Company is planning further staged exploration programs during 2026, building on the Phase 1 drilling completed in H2 2025 and the multiple priority targets identified across the historic mining corridor. At the Apex Project in Utah, initial work programs are expected to focus on detailed geological mapping, surface prospecting and target refinement to support future exploration planning.

As BM8 advances work programs across Bleiberg–Hochobir and Apex, the Company's focus remains on building a secure, Western-aligned germanium supply chain. The NTU evaluation strengthens BM8's downstream specification and qualification know-how, while the sustainable processing pathways workstream supports optionality for cleaner and more efficient production outcomes. In combination, these initiatives are intended to improve BM8's "mine-to-market" readiness and support engagement with end customers and strategic partners seeking secure, compliant supply. BM8 will update the market on material outcomes as the evaluation progresses.

### **Key Transaction Terms:**

BM8 has secured an exclusive evaluation licence with NTUitive Pte Ltd (Nanyang Technological University's commercialisation entity), granting exclusive evaluation rights, and subject to exercise, an option to enter into a worldwide licence to the portfolio of advanced germanium-related inventions and associated proprietary materials (the "Evaluation Technology").

The licence introduced and assigned through 62 Capital Pty Ltd, initially provides for an evaluation-only period until 25 August 2026 (which may be extended by mutual agreement), within the defined field of application and establishes a structured pathway for BM8 to assess whether there is a basis to progress to a definitive commercial licence (if pursued). The licence requires the provision of data to NTUitive and NTU retains ownership of the underlying technology.

The evaluation licence is for evaluation purposes only and is intended to support BM8's assessment of downstream product specification requirements and potential partnership pathways relevant to BM8's germanium strategy.

In the event that BM8 exercises its option to enter into an exclusive worldwide licence, the parties have one month to negotiate a definitive licence, on commercially reasonable terms as follows:

- Licence: Exclusive, worldwide, advanced semiconductor and optoelectronics device fabrication
- In consideration for the licensed rights to the NTU IP, BM8 will pay NTUitive Pte Ltd:
  - (a) Evaluation fee: SGD\$30,000;
  - (b) Exclusive Licensing Fee of SGD\$620,000 across 9 years, with potential additional royalties against product sales revenue.

- (c) Patent costs: BM8 to reimburse patent prosecution and maintenance costs at signing of licence agreement.

*This release has been authorised by the Board of Battery Age Minerals Ltd.*

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### Compliance Statement

This report contains information on the Bleiberg and Hochobir Projects extracted from an ASX market announcement dated 8 December 2022, 2 February 2023, 13 July 2023, 21 August 2023, 26 February 2024, 26 March 2024, 23 April 2024, 16 May 2024, 29 August 2024, 18 December 2024, 22 January 2025, 29 January 2025 and 17 April 2025 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). This report contains information on the Apex Project extracted from an ASX market announcement dated 31 October 2025 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 announcements are available to view on [www.batteryage.au](http://www.batteryage.au) and [www.asx.com.au](http://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.

### Forward-Looking Statement

This announcement may contain certain forward-looking statements and projections. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. Battery Age Minerals Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projections based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Battery Age Minerals Limited or any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

## References

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- <sup>i</sup> Refer ASX Announcement 17 April 2025; Breakthrough Germanium Grades up to 1,500 g/t Identified in Bleiberg Concentrates
- <sup>ii</sup> Zeeh,S. and Bechstadt,T. (1994). Carbonate-Hosted Pb-Zn Mineralisation at Bleiberg-Kreuth (Austria): Compilation of Data and New Aspects. In: Fontbote,L. and Boni,M. editors, Sediment Hosted Pb-Zn Ores, Special Publication No. 10 of the Society for Geology Applied to Mineral Deposits. pp. 271-2962.
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- <sup>iii</sup> Refer ASX announcement 31 October 2025, BM8 Secures Strategic Critical Minerals Ge-Ga Tenure Apex, Utah, USA.
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- <sup>iv</sup> Refer to Bleiberg earn-in terms and structure set out in the Company’s announcement dated 16 May 2024 and Prospectus dated 7 December 2022.