The information contained within this announcement is deemed to constitute inside information as stipulated under the Market Abuse Regulation (EU) No. 596/2014, as incorporated into UK law by the European Union (Withdrawal) Act 2018. Upon the publication of this announcement, this inside information is now considered to be in the public domain.

17 January 2024

Beowulf Mining Plc

("Beowulf" or the "Company")

Update for the development of Graphite Anode Materials Plant in the GigaVaasa area

Beowulf (AIM: BEM; Spotlight: BEO), and its wholly owned Finnish subsidiary Grafintec Oy ("Grafintec"), are pleased to provide an update for the Graphite Anode Materials Plant ("GAMP") in the GigaVaasa area.

Highlights

- Updated strategy to fast-track full GAMP process to capture more of the anode material production value-chain and provide greater supply-chain security following the export controls imposed by China on graphite materials in December 2023.
- The full GAMP process consists of Spheronisation, Purification and Coating to produce Coated Spherical Graphite ("CSPG") for sale to anode manufacturers.
- Initially graphite concentrate will be sourced from third parties but ultimately the intention is to develop the Company's own deposits in Finland where preliminary metallurgical test-work has returned very encouraging results.
- An enhanced Pre-Feasibility Study ("PFS") on the full GAMP process is expected to be concluded during 2024, building on the PFS of the Coating stage of the process previously notified in July 2023 that demonstrated robust economics with a post-tax NPV_8 of US$242 million and a post-tax IRR of 39%.
- This enhanced PFS will be followed by a Definitive Feasibility Study ("DFS") during 2025 with first production still planned from 2027.

Ed Bowie, Chief Executive Officer of Beowulf, commented:

"Given the fast-moving nature of the global graphite market and the increasing need for supply-chain security, the Company has updated its development strategy for GAMP, fast-tracking the development of the full processing facility. This updated strategy builds on the PFS completed last year and, through capturing more of the value-chain, is expected to improve the already excellent economics. We look forward to updating the market with our ongoing test-work results and progress with the PFS in due course."

Rasmus Blomqvist, Managing Director of Grafintec, commented:

"I am very pleased with the progress we have made over the last 12 months. While the timeline for the Environmental Impact Assessment and PFS work has been extended due to Grafintec's change in

strategy, I am pleased that the overall timeline to production will remain the same. Introducing the full process chain from the start of production will significantly reduce our raw-materials supply risk and is likely to improve the project economics."

GAMP Strategy Update

The development plan for GAMP, announced on 26th September 2023, considered a three-phase development with the initial phase focused on the final processing stage in the production of graphite anode materials, namely the Coating stage. The plan for Phase 1 envisaged the import of spherical graphite ("SPG") from third parties, coating this material to produce 20,000 tonnes of anode material per year of Coated Spherical Graphite ("CSPG") for sale to anode manufacturers. Phase 2 of the development plan was to incorporate the full process comprising three stages into the plant. Graphite concentrate would be imported from third parties and this would then be Spheronised, Purified and Coated, producing 20,000 tonnes per year of CSPG. Phase 3 of the original plan envisaged an expansion of production to 60,000 tonnes per year of product.

The updated strategy for GAMP is to build the three-stage processing plant at the outset comprising Spheronisation, Purification and Coating effectively bypassing the previous Phase 1. Graphite concentrate feed will initially be sourced from third-party mines and the Company has letters of intent for this supply. The GAMP will then process this material and produce 20,000 tonnes of CSPG per year for sale to anode manufacturers for the battery industry. A future expansion to 60,000 tonnes per year of CSPG is then planned.

Figure 1: Updated GAMP strategy

Rationale for the Update in Strategy

The update in the Company's strategy has been driven by two principal factors. Firstly, the full process will capture a larger portion of the value chain. While the full process will have a higher initial capital cost than the Coating stage, which was estimated at US$117 million in the PFS released in July 2023, the full process is expected to be very value accretive, based on the development studies of comparable projects in the market. The updated GAMP plan is therefore also expected to be more attractive for potential funding partners.

Secondly, the full process provides greater supply chain security. China retains a significant market share in the production of graphite materials for anodes and, in particular, controls approximately 99% of global spherical graphite refining capacity. In December 2023, the Chinese government announced export controls on graphite products. While the full impact of these controls is not yet known, they do highlight the current dependence of the global battery industry on China. Graphite concentrate sourced from mines outside of China is, by contrast, more readily available and there are multiple potential sources. In line with the objectives of the EU's Critical Raw Materials Act, the Company's updated strategy seeks to mitigate the key supply chain risks.

Revised Development Plan

The Technical workstream comprises the following:

- The updated PFS technical workstream builds on the PFS completed for the Coating plant released in July 2023 which demonstrated robust preliminary economics with a post-tax NPV_8 of US$242 million and a post-tax IRR of 39%.
- Optimisation test-work and techno-economic studies of the full process are ongoing including state-of-the-art Spheronisation and chemical Purification technologies with our technology partner Dorfner Anzaplan GmbH (“Anzaplan”).
- On the conclusion of the PFS by end of 2024, the Definitive Feasibility Study (“DFS”) will be launched.
- The DFS is expected to take six to nine months to complete, and during this period, test-work will continue, generating product for battery manufacturers to complete pre-qualification testing.

The ongoing Environmental workstream comprises the following:

- As previously announced, Grafintec has appointed Finnish Engineering Consultancy AFRY Finland Oy ("AFRY") to undertake the Environmental Impact Assessment (“EIA”). The EIA will reflect the updated scope of the development plan and is aimed to be completed by the end of 2024.
- Following its submission, the local authority, the Centre for Economic Development, Transport and the Environment ("ELY"), will review the EIA before making a statement of their findings. The review process by ELY is anticipated to take approximately three months.
- Following completion and submission of the EIA, work will commence towards the Environmental Permit. The preparation of the Environmental Permit application, which will take approximately six months to compile, can partly be done as a parallel workstream with the EIA with the aim to speed-up the overall process.
- The Environmental Permit application is then submitted to the Regional State Administrative Agency. The processing of the Environmental Permit is expected to take approximately nine months, with the final decision anticipated towards the end of 2025.

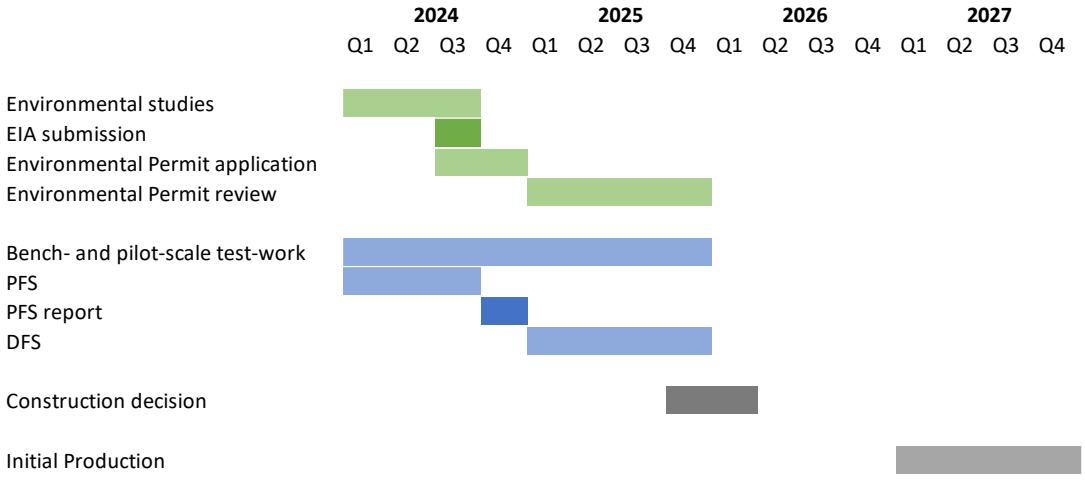

Figure 2: Updated GAMP timeline

The changes in Grafintec's development strategy will extend the time for the ongoing EIA process and PFS to include the Spheronisation and Purification process stages, however, the overall timeline for the GAMP remains on track for first production in 2027.

Sourcing Strategy Update

Grafintec initially plans to import natural graphite concentrate from third parties to feed the GAMP, with the longer-term strategy to be self-sufficient in raw-materials production from its 100% owned domestic natural graphite projects.

Aitolampi is one of Europe's largest known natural flake graphite resources with a reported Indicated and Inferred Mineral Resource Estimate of 26.7 million tonnes at 4.8% Total Graphitic Carbon ("TGC") for 1,275,000 tonnes of contained graphite (reported in accordance with the 2012 JORC Code). Previous Spheronisation and Purification test-work on Aitolampi graphite concentrate has proven that a purified SPG that meets industrial standards can be produced reaching a purity of minimum 99.95% TGC with low amounts of detrital impurities.

Grafintec is also investigating possible synergies between Aitolampi and Rääpysjärvi. Rääpysjärvi is an early-stage exploration project located only eight kilometres to the north-north-west of Aitolampi. Given their proximity, there are anticipated to be synergies for future development of these two sites, such as shared processing infrastructure. Previous results from fieldwork and laboratory test-work confirmed large extensive conductive zones associated with high-grade graphite (see polaris.brighterir.com/public/beowulf_mining_plc/news/rns/story/x5gz62w). Test-work from composite grab samples of boulders and outcrops with a head grade of 19.8% TGC was tested by SGS Mineral Services in Canada in 2017 producing a combined concentrate grade of 97.4% TGC, with 18.8% in the large and jumbo flake fraction (+180 micron). The concentrate grades from the Rääpysjärvi composite sample are similar to grades produced from Aitolampi drill core samples indicating that Rääpsyjärvi graphite should also be a suitable feed for anode materials production.

Enquiries:

Beowulf Mining plc
Ed Bowie, Chief Executive Officer — ed.bowie@beowulfmining.com

SP Angel
(Nominated Adviser & Joint Broker)
Ewan Leggat / Stuart Gledhill / Adam Cowl — Tel: +44 (0) 20 3470 0470

Alternative Resource Capital
(Joint Broker)
Alex Wood — Tel: +44 (0) 20 7186 9004

BlytheRay
Tim Blythe / Megan Ray — Tel: +44 (0) 20 7138 3204

About Beowulf Mining plc

Beowulf Mining is a mining company with main activities in exploration and development in Sweden, Finland and Kosovo. Beowulf's portfolio is diversified by commodity, geography and stage of development of the projects and consists primarily of iron ore, graphite, gold and base metals. Beowulf Mining is headquartered in London, England.

Cautionary Statement

Statements and assumptions made in this document with respect to the Company's current plans, estimates, strategies and beliefs, and other statements that are not historical facts, are forward-looking statements about the future performance of Beowulf. Forward-looking statements include, but are not limited to, those using words such as "may", "might", "seeks", "expects", "anticipates", "estimates", "believes", "projects", "plans", strategy", "forecast" and similar expressions. These statements reflect management's expectations and assumptions in light of currently available information. They are subject to a number of risks and uncertainties, including, but not limited to , (i) changes in the economic, regulatory and political environments in the countries where Beowulf operates; (ii) changes relating to the geological information available in respect of the various projects undertaken; (iii) Beowulf's continued ability to secure enough financing to carry on its operations as a going concern; (iv) the success of its potential joint ventures and alliances, if any; (v) metal prices, particularly as regards iron ore. In the light of the many risks and uncertainties surrounding any mineral project at an early stage of its development, the actual results could differ materially from those presented and forecast in this document. Beowulf assumes no unconditional obligation to immediately update any such statements and/or forecast**.**