ATLANTIC LITHIUM

EWOYAA PROJECT UPDATE

AIM: ALL, ASX: A11, OTCQX: ALLIF

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Definitive Feasibility Study Project Update
Staged Project Development and Mine Throughput Optimisation
Ewoyaa Lithium Project, Ghana

Atlantic Lithium Limited (AIM: ALL, ASX: A11, OTCQX: ALLIF, "Atlantic Lithium" or the "Company"), the funded African-focussed lithium exploration and development company targeting to deliver Ghana's first lithium mine, is pleased to provide an update on the Definitive Feasibility Study ("DFS"), including a staged project development plan focussing on optimised process flowsheet and mine throughput scenarios, for the Ewoyaa Lithium Project ("Ewoyaa" or the "Project) in Ghana.

The following planned developments to the Project result from the Company's increased Mineral Resource Estimate[1] ("MRE") to 35.3 Mt @ 1.25% Li_2O, announced on 1 February 2023, and ongoing work to optimise the Project's processes.

HIGHLIGHTS:

- **Staged developments to increase metal recovery and improve plant efficiency:**
  1. **Stage 1 – DFS Project Development, comprising:**
     - **Crushing and screening to three size fractions (from 1-10mm) in order to improve cyclone performance.**
     - **Retain sales of natural occurring fines as a direct shipping ore ("DSO") by-product.**
     - **Model various mine throughput scenarios to optimise Project outcomes.**
  2. **Stage 2 - Scoping Studies, comprising of three separate value-adding streams:**
     - **Evaluation of early lithium spodumene concentrate ("SC6") production opportunities through the rapid deployment of Modular Dense Media Separation ("DMS") units to capitalise on the current SC6 price environment.**
     - **Later-stage beneficiation of natural occurring fines to SC6.**
     - **Production of feldspar by-product to reduce waste and to supply Ghana's growing ceramics industry.**
- **Study to consider various mine throughput scenarios for the Project driven by the MRE[1] upgrade to 35.3 Mt @ 1.25% Li_2O.**
- **Work ongoing to further optimise the Project's processes and economics.**

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- **The PFS[1] delivers exceptional financial outcomes for a 2.0Mtpa throughput operation, producing an average c. 255,000tpa SC6 over a 12.5-year mine life, based on the previous 30.1 Mt at 1.26% Li_2O MRE:**
  - **LOM revenues exceeding US$4.84bn, Post-tax NPV_8 of US$1.33bn, IRR of 224% over 12.5 years.**
  - **US$125m capital cost with industry-leading payback period of <5 months.**
  - **Maiden Ore Reserve of 18.9 Mt at 1.24% Li_2O declared, demonstrating sound resources to reserve conversion.**
  - **Conventional DMS processing facility.**
- **Front-End Engineering Design ("FEED") and DFS for the Project progressing well; DFS remains on track for Q2 2023:**
  - **DFS to incorporate increased 35.3 Mt @ 1.25% Li_2O MRE[1] and is expected to significantly enhance the Project's economics.**

Commenting on the Company's latest progress, Keith Muller, Chief Operating Officer of Atlantic Lithium, said:

"Since commencing at Atlantic Lithium, the team has been working hard to assess all opportunities to enhance the Project's processes and potential economics. Alongside the increased MRE, the staged project development plan will focus on improved plant efficiency and increased metal recovery.

"The DFS will be based on a flow sheet that encompasses a crushing and screening process that produces three distinct size fractions, with a maximum size of 10mm. Utilising three different size fractions significantly improves cyclone performance as they operate more efficiently within a narrower size range. This optimisation leads to better metal recoveries in the processing plant, which is one of our key focus areas.

"Separate to the delivery of the DFS, we will be conducting initial studies on the use of Modular DMS units, to potentially shorten the timeline to initial production against a backdrop of current buoyant lithium pricing. We will also focus on the beneficiation of middlings, which will enable us to further enhance the final quantities of SC6 produced.

"Ghana has an existing market for the raw materials required for its ceramics industry; the Company intends to evaluate the potential to supply feldspar, another by-product of production, to the Ghanaian market. This initiative could make Ewoyaa a significant source of domestically produced feldspar. Our evaluation will ensure the most efficient utilisation of resources and contribute to the growth of both the Company and Ghana's ceramics industry.

"Work on the Front-End Engineering Design and Definitive Feasibility Study for Ewoyaa is progressing well, with the Company continuously assessing opportunities to enhance the Project's economics. The DFS, targeted for completion in Q2, will incorporate the latest upgraded Mineral Resource Estimate to 35.3 Mt @ 1.25% Li_2O and will model various throughput scenarios to optimise Project outcomes.

"In addition to the progress on the FEED and DFS, an update on the Stage 2 Scoping Studies will also be provided. Collectively, these updates will contribute to a more comprehensive understanding of the Project's potential,

allowing the Company to make well-informed decisions and ensure the Project's long-term success, as well as maximising returns for the Company's shareholders.

"With numerous positive milestones ahead, we expect 2023 to be a year in which we realise some of the significant value potential available to the Company. We look forward to providing further updates in due course."

The Company outlines the following steps in the planned development of the Project towards production.

Planned Stage 1 – DFS and Project Development

Results from the heavy liquid separation ("HLS") testwork series (***refer to the PFS announcement of 22 September 2022***) confirmed that crushing to an all-in top-size of 6.3 mm would produce superior results and that a simple gravity-only DMS would be suitable for the plant. However, crushing to one size limits the potential throughput of the plant. Further testwork has indicated that crushing and screening to three sizes, ranging from 1-10mm would maximise metal recovery and grade at the Project. This optimisation will lead to better metal recoveries in the processing plant.

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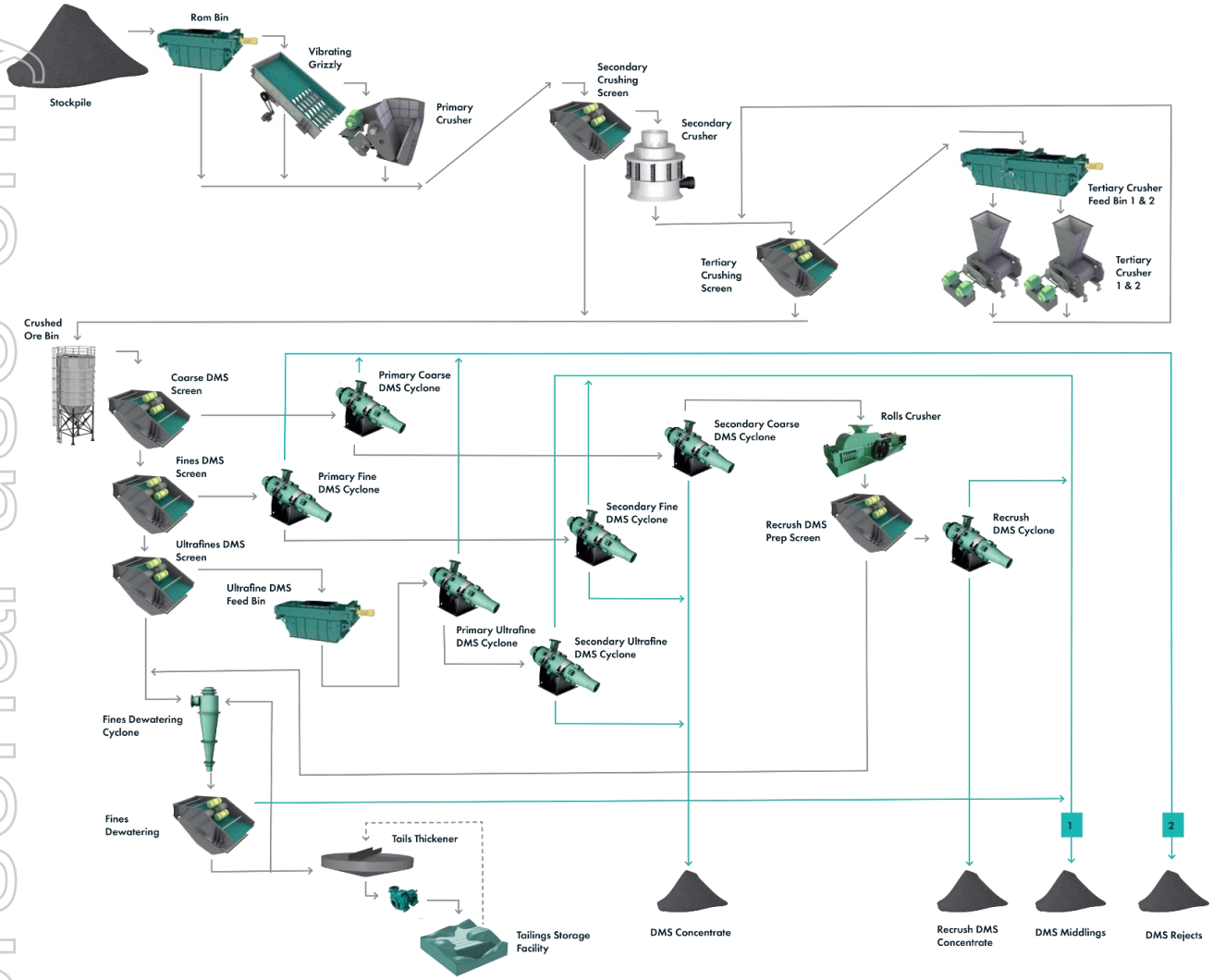

Figure 1: *Ewoyaa flowsheet*

The Ewoyaa flowsheet provides for the extraction of natural occurring fines, which still hold a relatively high head grade and metal credits. The natural occurring fines hold approximately 5% of the metal units reporting to the plant. The secondary cyclone 'rejects' or 'floats' produced through DMS at the Project have a relatively high grade, accounting for approximately 7% of the metal reporting to the plant. When combined with the natural occurring fines, this material is ideal for sale as a low-grade product, with a lithium content in the range of 1-1.2%.

As part of the Stage 2 Scoping Studies below, the Company will investigate the potential to beneficiate this material through a middlings beneficiation process, which could further improve value.

The Company will study various mine throughput scenarios for the DFS in line with the increased Mineral Resource Estimate[1] ("MRE") of 35.3 Mt @ 1.25% Li_2O.

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The exploration of additional processing and throughput options demonstrates the Company's commitment to resource optimisation and value maximisation for the Project, ultimately benefiting its stakeholders and contributing to the Company's growth.

Stage 2 - Scoping Studies

Separate to the delivery of the DFS, the Company is investigating three study streams, including the evaluation of early SC6 production opportunities, the beneficiation of middlings to produce SC6 and the production of commercial quantities of feldspar by-product to reduce waste at the Project site and to supply Ghana's growing ceramics industry.

As part of the development of the Project, the Company intends to conduct a study to evaluate the potential for early SC6 production through the deployment of Modular DMS units. The Company believes that the Modular DMS units can be easily installed, enabling earlier production in the current high lithium price environment.

The Company also intends to conduct a study to undergo beneficiation of middlings, which is a combination of naturally occurring fines produced and secondary floats from the cyclone process, which have consistently delivered lithium grades similar to the MRE. By optimising the processing of middlings, the Company aims to enhance SC6 production, adding value to the overall production process.

As detailed in the PFS[1], the Company believes that commercial quantities of feldspar may be produced from the plant - feldspar being defined as aluminosilicates containing a combined alkali content (Na_2O + K_2O) of greater than 10%. Ghana currently imports feldspar to supply its ceramics industry. The Company intends to evaluate the route to market of the feldspar produced as a by-product at Ewoyaa which could significantly enhance Ghana's ceramics industry. There is interest in Ghana to set up processing of the feldspar and this option is also being considered by the Company.

Simultaneously, work on the FEED and DFS is progressing well. The DFS is intended to be delivered in Q2 and will incorporate the upgraded MRE[1] of 35.3 Mt @ 1.25% Li_2O, expected to deliver enhanced economics for the Project.

End note:

[1] **Ore Reserves, Mineral Resources and Production Targets**

The information in this announcement that relates to production targets and Ore Reserves is extracted from the announcement dated 23 September 2022. The information in relation to Mineral Resources of 35.3 Mt @ 1.25% Li_2O for the Project is extracted from the announcement dated 1 February 2023. The MRE includes a total of 3.5 Mt @ 1.37% Li_2O in the Measured category, 24.5 Mt @ 1.25% Li_2O in the Indicated category and 7.4 Mt @ 1.16% Li_2O in the Inferred category. The Company confirms that all material assumptions and technical parameters underpinning the production targets, Mineral Resources and Ore Reserve estimates in the Announcements continue to apply and have not materially changed and it is not aware of any new information or data that materially affects the information included in the Announcements.

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Notes to Editors:

About Atlantic Lithium
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Atlantic Lithium is an AIM and ASX-listed lithium company advancing a portfolio of lithium projects in Ghana and Côte d'Ivoire through to production.

The Company's flagship project, the Ewoyaa Project in Ghana, is a significant lithium spodumene pegmatite discovery on track to become Ghana's first lithium-producing mine. The Company signed a funding agreement with Piedmont Lithium Inc. for US$103m towards the development of the Ewoyaa Project. Based on the Pre-Feasibility Study, the Ewoyaa Project has indicated Life of Mine revenues exceeding US$4.84bn, producing a spodumene concentrate via simple gravity only process flowsheet.

Atlantic Lithium holds 560km^2 & 774km^2 of tenure across Ghana and Côte d'Ivoire respectively, comprising significantly under-explored, highly prospective licences.