ATLANTIC LITHIUM

EXPLORATION UPDATE

AIM: ALL, OTC: ALLIF, ASX: A11

22 September 2022

Pre-Feasibility Study Delivers Robust Project Economics
Ewoyaa Lithium Project, Ghana, West Africa

Post-Tax NPV Increases to US$1.33bn
Internal Rate of Return Increases to 224%
Maiden Ore Reserve of 18.9Mt at 1.24% Li_2O Declared

Atlantic Lithium Limited (AIM: ALL, ASX: A11, OTC: ALLIF, "Atlantic Lithium", the "Company" or "ALL"), the funded African-focussed lithium exploration and development company targeting to deliver Ghana's first lithium mine, is pleased to announce the completion of the Pre-Feasibility Study ("PFS") on the Ewoyaa Lithium Project ("Ewoyaa", "ELP" or the "Project") in Ghana, West Africa, demonstrating the significant profitability potential of this stand-out project.

The PFS was managed directly by the Company, engaging experienced internationally recognised consultants, and incorporates the increased JORC resource of 30.1Mt at 1.26% Li_2O, as announced on 24 March 2022.

HIGHLIGHTS:

- **Post-tax NPV_8 of US$1.33bn with free cash flow of US$2bn from Life of Mine ("LOM") revenues of US$4.84bn.**
- **Internal rate of return of 224% and payback less than five months, with average LOM EBITDA of $248 million per annum.**
- **Maiden Ore Reserve of 18.9Mt at 1.24% Li_2O declared, demonstrating sound resource to reserve conversion.**
- **12.5-year mine life, 2Mtpa conventional dense media separation ("DMS") processing facility with average 255,000tpa 6% lithium spodumene concentrate ("SC6") production.**
- **C1 cash operating costs of US$278 per tonne of SC6 Free-On-Board ("FOB") Ghana Port, after by-product credits.**
- **In addition to SC6 production, the PFS incorporates two additional revenue streams from by-products:**
  - **A saleable direct shipping ore fines product ("DSO fines")**
  - **A saleable Feldspar by-product**
- **Capital cost estimate of US$125 million, including integrated 3-stage crushing facility ahead of the DMS processing facility; a major design change to the Scoping Study concept of contract crushing, reducing plant OPEX, improving operational control and reducing lithium losses.**

- **Key assumptions: Long-term average SC6 price of US$1,359/t FOB over 12.5 years, project funding via Piedmont agreement (*refer RNS of 31 August 2021*) and cost estimation at +/- 20% level of accuracy.**

- **First quartile cash costs; low capital and operating costs and low carbon footprint due to outstanding asset processes, logistics and access to infrastructure:**
    - **Conventional open cut mining operation from surface, LOM strip ratio of 8:1**
    - **Simple processing via conventional DMS only, producing a premium SC6 saleable product at a 10mm top size crush**
    - **Simple mineralogy and metallurgy with potential upside for improved DMS recoveries**
    - **Significant exploration upside potential within the 560km^2 portfolio**
    - **Skilled Ghanaian workforce readily available within the surrounding communities**
    - **Close proximity to excellent logistics and infrastructure – 110km by road from the deep-sea port of Takoradi, adjacent to highway and high voltage powerlines, including hydroelectric sources.**

Commenting on the Company's latest progress, Lennard Kolff, Interim Chief Executive Officer of Atlantic Lithium, said:

"We are delighted to release our Pre-Feasibility Study for the Ewoyaa Lithium Project in Ghana, which further illustrates Ewoyaa as an industry-leading lithium asset, generating in excess of US$4.84bn in revenues over a 12.5-year mine life.

"The Study outlines a robust 2Mtpa operation which can deliver excellent cash flows, an exceptional 20-week payback and a post-tax NPV$_8$ of US$1.33bn producing a coarse, premium DMS SC6 product including credits from DSO fines and feldspar by-products.

"The study used a long-term average SC6 price of US$1,359/t FOB Ghana, with recent equivalent grade prices as high as US$7,708/t being achieved on Pilbara Minerals Limited BMX platform and representing a mid-range forecast when compared to other commentators.

"Every US$100/t increase in SC6 price forecast results in an additional 9% increase to the post-tax NPV$_8$, highlighting the significant potential value uplift to the Project.

"We are also pleased to declare a maiden Ore Reserve of 18.9Mt at 1.24% Li_2O, presenting sound resource to reserve conversion and confirming the robust project fundamentals.

"Operating costs of US$278/t SC6, which include a discount of US$165/t for by-products, further demonstrate the attractive fundamentals of the Project. Ewoyaa benefits from simple mineralogy, low power and water consumption, a DMS-only process flow-sheet design, skilled workforce and proximity to operational infrastructure, including grid power, sealed road and deep-sea port. These fundamentals are arguably among the best in the world and enable a low carbon footprint project.

"CAPEX has increased from US$70 million to US$125 million in the PFS, primarily due to bringing the crushing circuit in-house as opposed to contract crushing. Additionally, the increased resource footprint resulted in increased costs, including the extended high-voltage power line re-alignment and inflationary cost pressures in line with the current market. The financial model, however, shows that the Project is currently not sensitive to inflationary and capital cost increases.

"Against the backdrop of buoyant global lithium demand, driven particularly by electric vehicle demand, we believe Ewoyaa will play a significant role in the role of sustainable lithium production. This PFS moves the Project another step closer to becoming Ghana's first lithium-producing mine.

"Supported by our funding agreement with Piedmont Lithium Inc., we are excited to continue advancing the Ewoyaa Lithium Project through the next stages of studies and permitting towards production. The resource infill and extensional drilling programme underway is nearing completion and we look forward to sharing updates on this and further Project developments shortly."

This announcement contains inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ("MAR"), and is disclosed in accordance with the Company's obligations under Article 17 of MAR.

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Notes to Editors:

About Atlantic Lithium
www.atlanticlithium.com.au

Atlantic Lithium (formerly "IronRidge Resources") is an AIM and ASX listed lithium exploration and development company advancing a portfolio of lithium projects and licenses in Ghana and Côte d'Ivoire.

The Company's flagship project, the Ewoyaa Project in Ghana, is a significant lithium spodumene pegmatite discovery targeted 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 a 560km^2 & 774km^2 tenure across Ghana and Côte d'Ivoire respectively, comprising significantly under-explored and highly prospective Birimian geology.

Cautionary Statement

The Mineral Resource referred to in this announcement is based on 68.1% Indicated Resources and 31.9% Inferred Resources from the JORC Mineral Resource Estimate released on AIM on 24 March 2022.

The Mineral Reserve referred to in this announcement is based on Indicated Resources only from the JORC Mineral Resource Estimate released on AIM on 24 March 2022. All stated Ore Reserves are completely included within the quoted Mineral Resources and are quoted in dry tonnes. Probable Ore Reserves were declared based on the Indicated Mineral Resources only contained within the pit designs.

The production targets referred to in this PFS announcement are based on an initial 12.5-year mining plan comprising 75.5% of Indicated Resources and 24.5% of Inferred Resources modelled from the JORC Mineral Resource Estimate released on AIM on 24 March 2022. It is noted that 9.2% of the Inferred Resources are mined within the first 24 months of the PFS mining schedule, this due to drilling access restrictions at the time of the Mineral Resource estimate, which will be resolved as part of the current in-fill drilling programme.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Inferred Mineral Resource is not the determining factor in the viability of the Ewoyaa Lithium Project as the Inferred Mineral Resource represents only 9.2% of the processed ore during the first 24 months of production, with a short pay-back period of 5 months. Additionally, even with Inferred Resources deferred to waste, and all mining and processing costs carried over life of mine for the Inferred Resources, the Project remains cash-flow positive on an annualised basis.

The mineralisation at Ewoyaa has been confirmed to be associated with spodumene bearing pegmatite as the main lithium bearing mineral. No significant petalite or lepidolite has been observed. The deposits show good continuity of the main mineralised units which provided for drill hole intersections to be modelled into coherent, geologically robust domains. Consistency is evident in the thickness of the structure, and the distribution of grade appears to be reasonable along and across strike.

It is considered that there are reasonable grounds for the conversion of Inferred to Indicated or Measured Resource status, providing reasonable confidence that the production targets outlined in the PFS will be achievable.

The Ore Reserve and Mineral Resource Estimate have been prepared by Competent Persons, with Competent Persons Statements at the end of the release and below the relevant tables. The Ore Reserves and Mineral Resources that underpin the production target have been prepared by a Competent Person that meets the requirements of the JORC code.

The PFS developed engineering designs to provide costs at a +/- 20% level of accuracy.

The Company has concluded that it has a reasonable basis for providing the forward-looking statements and forecasted financial information included in this announcement. The reasons for that conclusion are outlined throughout this announcement and all material assumptions, including JORC modifying factors (Appendix 1, JORC Table 1, Section 4) upon which the forecast financial information is based, are disclosed in the announcement. This announcement has been prepared in accordance with JORC code 2012, AIM and ASX listing rules.

All material assumptions relating to production and financial forecasts are detailed in this report. Material and economic assumptions are summarised in the body of this release.
Rounding may cause some computational discrepancies for totals in the tables in this announcement.

1. Project Summary

Atlantic Lithium plans to develop the Ewoyaa Lithium Project (the Project, “Ewoyaa”, “ELP”) in Ghana, West Africa through studies and permitting towards production. The PFS was carried out for the purpose of determining the PFS level criteria under which development of the Project may be considered potentially economic, and subsequently to support an application for a mining licence with the relevant authorities of the Government of Ghana.

The proposed Project development programme targets first production of lithium concentrate (“spodumene”) in Q3 2024, based on receiving a Mining Licence in Q3 2023, subject to meeting all statutory requirements.

The PFS was prepared in accordance with the disclosure and reporting requirements of AIM, a market operated by London Stock Exchange, the disclosure and reporting requirements of Australian Securities Exchange (“ASX”), and the Australasian Code for Reporting of Mineral Resources and Ore Reserves of December 2012 (“JORC Code”) as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy.

Ewoyaa is the Company’s flagship project and is targeted to be Ghana’s first lithium-producing mine, having secured project development funding via an off-take agreement with Piedmont Lithium Inc. (NASDAQ: PLL; ASX: PLL, refer ***RNS*** of ***31 August 2021***).

The original Scoping Study (*refer* ***RNS*** *of* ***19 January 2021***) was based on a maiden Mineral Resource Estimate (“MRE”) at Ewoyaa of 14.5Mt grading 1.31% Li_2O (189,000 tonnes of contained Li_2O). The Scoping Study Update (*refer* ***RNS*** *of* ***7 December 2021***) was based on an upgraded MRE of 21.3Mt at 1.31% Li_2O (278,000 tonnes of contained Li_2O). This PFS is based on a further upgraded MRE of 30.1Mt at 1.26% Li_2O (377,000 tonnes of contained Li_2O) (*refer* ***RNS*** *of* ***24 March 2022***).

Figure 1 provides a planned site overview of the ultimate pit outlines, waste dumps, process plant and associated infrastructure required for the mining operation.

Table 1 provides a summary of Reserves and Resources by status for the Project, where the Reserves are reported as part of the total Mineral Resource.

Table 2 provides a summary of the key Project metrics resulting from the PFS.

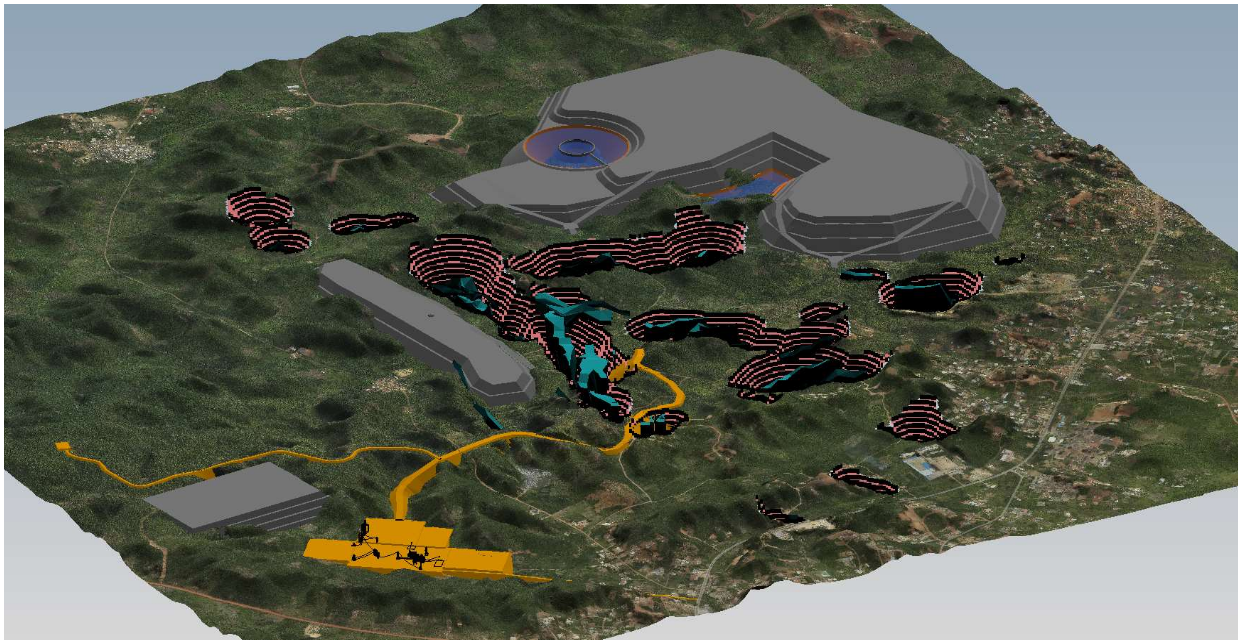

Figure 1: Ultimate mining operation overview showing all associated project development infrastructure

Table 1: Summary of Reserves and Resources by status

Category[2]	Gross			Net attributable[1]			Operator
	Tonnes (Mt)	Grade (% Li_20)	Contained Li Metal kt	Tonnes (Mt)	Grade (% Li_2O)	Contained Li Metal kt	
Ore/ Mineral reserves per asset							
Proven	-	-	-	-	-	-	-
Probable	18.9	1.24	109	8.5	1.24	49	ALL
Sub-total	18.9	1.24	109	8.5	1.24	49	ALL
Mineral Resources per asset							
Measured	-	-	-	-	-	-	-
Indicated	20.5	1.29	123	9.23	1.29	55	ALL
Inferred	9.6	1.19	53	4.32	1.19	24	ALL
Sub-total	30.1	1.26	176	13.55	1.26	79	ALL

[1]Whilst the asset is currently wholly owned by Atlantic Lithium Ltd, Piedmont Lithium Inc. can earn up to half the asset through the funding agreement, whilst the Government of Ghana has the right to a 10% free carry once in production.
*[2]Mineral Resources are inclusive of the Ore Reserves. The Competent Persons are Mr S. Searle of Ashmore Advisory Pty Ltd for Mineral Resources and Mr H. Warries of Mining Focus Consultants Pty Ltd for Ore Reserves. For full Competent Persons statements, refer to **Table 3** and **Table 8**.*

Table 2: Ewoyaa PFS key Metrics (100% project basis[1])

Item	Units	PFS Statistic
Mineral Resource[2]	Mt @ %	30.1Mt @ 1.26% Li_2O
Indicated Mineral Resource	Mt @ %	20.5Mt @ 1.29% Li_2O
Inferred Mineral Resource	Mt @ %	9.6Mt @ 1.19% Li_2O
Mine Life	Years	12.5
Ore Reserves (Probable)[2]	Mt @ %	18.9Mt @ 1.24% Li_2O
Total Material Movement LOM	Mt	225
Mined Waste	Mt	200
Mined Ore	Mt	25
Strip Ratio	W:O	8.0
DMS Plant Feed Rate LOM[3]	Mtpa	2.0
Li_2O Head Grade	%	1.22%
Average Whole of Ore Recovery SC6	%	62.5%
SC6 Produced	LOM, t	3,180,000
Feldspar Produced	LOM, t	4,120,000
DSO Fines Produced	LOM, t	3,740,000
Project Total Capital Cost	US$M	$125
SC6 Sell Price, LOM Average, FOB Ghana	US$/t	$1,359
DSO Fines Sell Price, LOM Average, FOB Ghana	US$/t	$85
Feldspar Sell Price, LOM Average, FOB Ghana	US$/t	$50
Revenue (including by-products)	US$M	4,845
IRR	%	224%
C1 Cash Cost, after by-product credits	US$/t	278
All In Sustaining Cost (AISC)	US$/t	460
Surplus Cashflow, Post Tax	US$M	1,999
NPV (8%) Post Tax	US$M	1,328
Payback	Months	5
NPAT, LOM	US$M	1,873

[1]Whilst the asset is currently wholly owned by Atlantic Lithium Limited, Piedmont Lithium Inc. can earn up to half the asset through the funding agreement, whilst the Government of Ghana has the right to a 10% free carry once in production.

*[2]Mineral Resources are inclusive of the Ore Reserves. The Competent Persons are Mr S. Searle of Ashmore Advisory Pty Ltd for Mineral Resources and Mr H. Warries of Mining Focus Consultants Pty Ltd for Ore Reserves. For full Competent Persons statements, refer to **Table 3** and **Table 8.***

[3]The Ore Reserves and Mineral Resources that underpin the production target have been prepared by a Competent Person that meets the requirements of the JORC code. The production targets referred to in this PFS announcement are based on an initial 12.5-year mining plan comprising 75.5% of Indicated Resources and 24.5% of Inferred Resources modelled from the JORC Mineral Resource Estimate released on AIM on 24 March 2022. It is noted that 9.2% of the Inferred Resources are mined within the first 24 months of the PFS mining schedule, this due to drilling access restrictions at the time of the Mineral Resource estimate, which will be resolved as part of the current in-fill drilling programme. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

2. Project Location

The Ewoyaa Lithium Project includes the Ewoyaa, Abonko and Kaampakrom deposits and is located in Ghana, West Africa, approximately 100km southwest of the capital of Accra. The Project area is immediately north of Saltpond, in the Central Region, and falls within the Mfantseman Municipality where Saltpond is the district capital (refer ***Figure 2***).

Access to the site from Accra is along the asphalt N1 Accra-Cape Coast-Takoradi highway which runs along the southern coastal boundary of the Project. Several laterite roads extend northwards from the highway and link communities in the Project area. The deep-sea port of Takoradi is within 110km west of the site, and accessible via the same highway (refer ***Figure 3***).

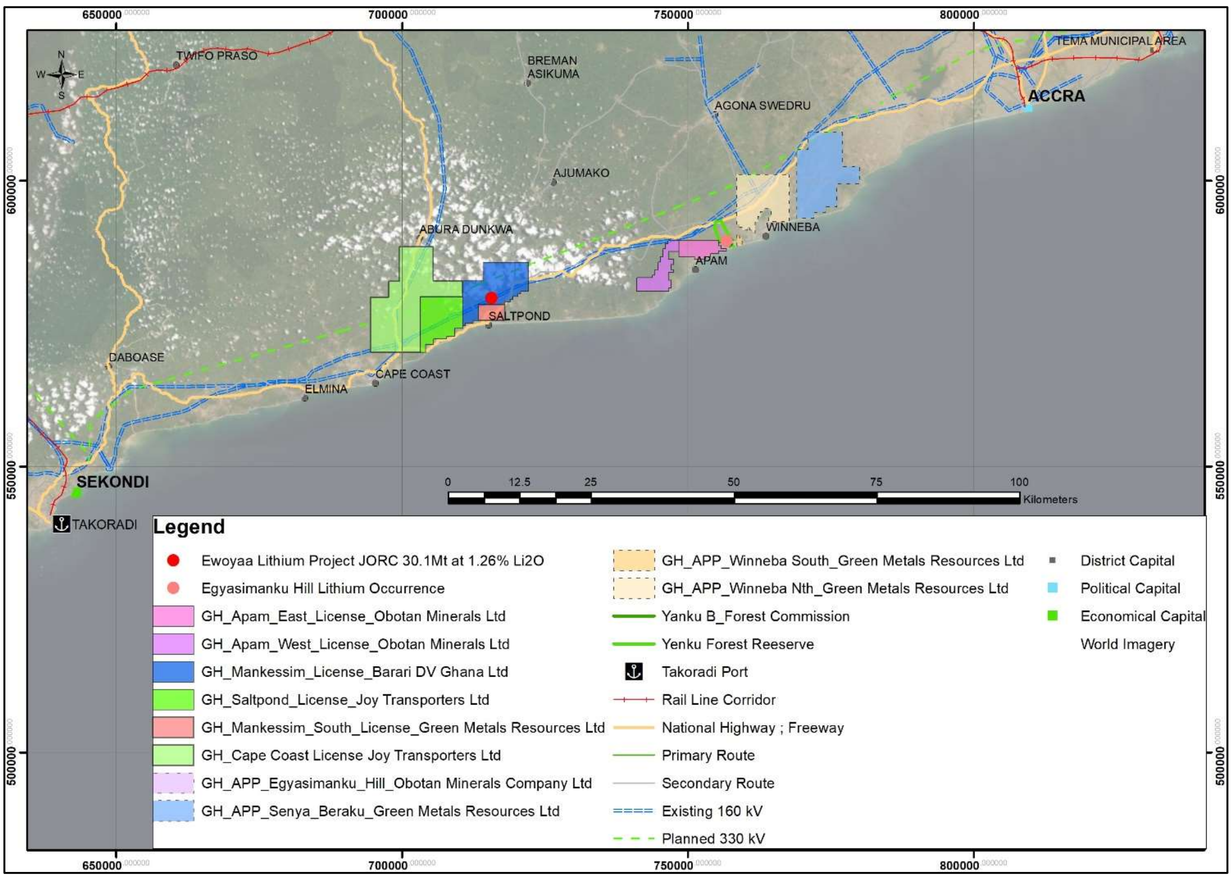

Figure 2: Project location and tenure, showing proximity to Takoradi Port, highway and grid power

The topography of the Project varies with steep hills surrounding low-lying valleys throughout the proposed mining area. The terrain of the Project area rises sharply from a narrow coastal plane to an undulating peneplane where elevation ranges from 20m to 120m above mean sea level.

Ghana is a republic within the Commonwealth. Ghana gained independence from colonial Britain in 1957, being the first sub-Saharan African country in colonial Africa to do so. Despite some turbulent history in the first decades following independence, Ghana has emerged since the 1990s as a stable, multi-party democracy.

Under the terms of the 1992 Constitution (Fourth Republic), executive power is vested in the President, who is Head of State and Commander-in-Chief of the armed forces. Legislative power is vested in a single chamber Parliament consisting of 275 members elected by direct election on a first-past-the-post basis for a four-year term. His Excellency Nana Akufo-Addo is the current President. He was elected in December 2020 for a four-year term.

Figure 3: High voltage power transmission lines, bitumen highway and deep-sea Takoradi port close to Project site

3. Mineral Resource

A JORC (2012) compliant Mineral Resource Estimate was prepared by Ashmore Advisory Pty Ltd using ordinary kriging methods for resource estimation with a 0.5% Li_2O cut-off. The MRE was commissioned as a result of an additional infill and extensional drilling programme conducted by ALL at the Project in support of the PFS deliverable. The JORC (2012) compliant Mineral Resource was released to market on ***24 March 2022*** and is shown in ***Table 3***.

Drilling at the deposit extends to a maximum drill depth of 319m and the mineralisation was modelled from surface to a depth of approximately 330m below surface. The estimate is based on good quality reverse circulation ("RC") and diamond core ("DD") drilling data. Drill hole spacing is predominantly 40m by 40m across the Project and up to 80m by 80m in parts of the lesser-known mineralisation.

The current MRE is based on a 0.5% reporting cut-off grade (constrained to above the -190mRL), within a 0.4% Li_2O wireframed pegmatite body. However, when assessing all pegmatite volumes (with no cut-off's applied), there is significant scope to increase the resource tonnage (*refer **RNS** of **24 March 2022***) in addition to exploration upside outside of the current resource volumes (*refer **RNS** of **2 August 2022***).

Mineralisation

The Project area has two clearly defined domains, or material types, of spodumene bearing lithium mineralisation. ALL has termed these material types as Pegmatite Type P1 and Pegmatite Type P2; viz:

- **P1**: Coarse grained spodumene material, the dominant spodumene bearing pegmatite encountered to date, exhibiting very coarse to pegmatoidal, euhedral to subhedral spodumene crystals (avg. >20mm) composing 20% to 40% of the rock (refer to ***Figure 4***).

- **P2**: Medium to fine grained spodumene material, where abundant spodumene crystals of a medium crystal size (avg. <20mm) dominates. The spodumene is euhedral to subhedral and can compose up to 50% of the rock. The spodumene can be bi-modal with some larger phenocrysts entrained within the medium grained spodumene bearing matrix. Minor other lithium bearing phases are present (refer to ***Figure 5***).

There are four geometallurgical domains; coarse grained type P1 and finer grained type P2 pegmatites and their weathered or fresh equivalents. It is noted that metallurgical recoveries differ between the four material types, which is discussed later in this announcement.

The estimated relative abundances, metallurgical recoveries and concentrate grades of the domains are summarised in ***Table 4***.

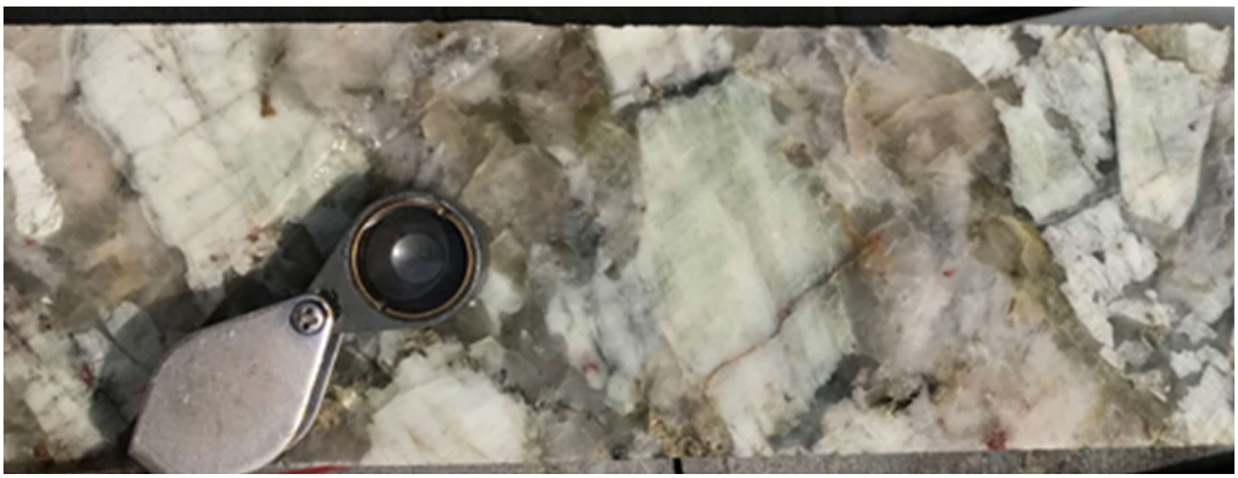

Figure 4: Typical P1 coarse grained spodumene (>20mm long crystals) pegmatite in half core (diameter of hand lens approx. 2cm)

Figure 5: Typical P2 finer grained spodumene (<20mm long crystals) pegmatite in half core (diameter of hand lens approx. 2cm)

Table 3: Ewoyaa MRE by Deposit and JORC Classification (0.5% Li_2O Cut-off, above -190mRL)

Deposit	**Indicated**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Abonko	1.1	1.30	14
Anokyi	2.2	1.46	33
Bypass	0.0	0.00	0
Ewoyaa	10.0	1.23	123
Ewoyaa Northeast	2.5	1.42	36
Grasscutter	3.3	1.19	39
Kaampakrom	0.4	1.43	5
Okwesi	0.6	1.48	9
Sill	0.4	1.34	5
Total	**20.5**	**1.29**	**265**
Deposit	**Inferred**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Abonko	0.7	1.18	8
Anokyi	1.1	1.29	14
Bypass	0.2	1.15	3
Ewoyaa	4.2	1.09	46
Ewoyaa Northeast	0.9	1.19	10
Grasscutter	1.5	1.28	19
Kaampakrom	0.6	1.31	8
Okwesi	0.3	1.34	4
Sill	0.1	1.57	1
Total	**9.6**	**1.19**	**114**
Deposit	**Total Mineral Resource**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Abonko	1.8	1.25	22
Anokyi	3.4	1.40	47
Bypass	0.2	1.15	3
Ewoyaa	14.2	1.19	169
Ewoyaa Northeast	3.4	1.36	46
Grasscutter	4.8	1.22	58
Kaampakrom	0.9	1.35	13
Okwesi	0.9	1.43	13
Sill	0.5	1.38	6
Total	**30.1**	**1.26**	**379**

Competent Persons Note:
The Mineral Resource Estimate has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

Competent Persons Note (cont'd):

All Mineral Resources figures reported in the table above represent current estimates. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

Table 4: Material Types, Recoveries and Concentrate Grades (at 10mm crush and laboratory setting)

Geomet Type	Weathered				
	Tonnage Mt	Li_2O %	Cont. Lithium Oxide kt	Recovery %	Conc. Grade Li_2O (%)
P1	1.7	1.13	20	68	6.0
P2	0.3	1.05	3	50	6.0
Total	**2.0**	**1.12**	**22**		
Geomet Type	**Primary**				
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**	**Recovery %**	**Conc. Grade Li_2O (%)**
P1	23.5	1.30	305	70	6.0
P2	4.7	1.11	52	50	5.5
Total	**28.1**	**1.27**	**356**		

Competent Persons Note: as per Table 2 above and metallurgical sign off in Competent Persons section at end of document.

4. Geology

The regional geology of western Ghana is characterised by a thick sequence of steeply dipping metasediments, alternating with metavolcanic units of Proterozoic age. These sequences, belonging to the Birimian Supergroup, extend for approximately 200km along strike in a number of parallel north-easterly trending volcano-plutonic belts and volcano-sedimentary basins, of which the Kibi-Winneba Belt and the Cape Coast Basin extend through the region around the Company's Mankessim licence area.

Within the mineralised Ewoyaa pegmatites, there are broadly two dominant pegmatite trends which have been observed: the roughly north-south en-echelon pegmatite array of the "Ewoyaa trend" and the roughly west northwest – east southeast trending intrusive swarm arrays of the "Abonko trend". Mineralised pegmatite intrusions occur as sub-vertical bodies within the two dominant trends. Pegmatite thickness varies across the Project, with thinner mineralised units intersected at Abonko and Kaampakrom between 4m and 12m; and thicker units intersected at Ewoyaa Main between 30m and 60m, and up to 100m at surface (refer to ***Figure 6*** and ***Figure 7***) that follows provides a cross – section through the Ewoyaa Main deposit.

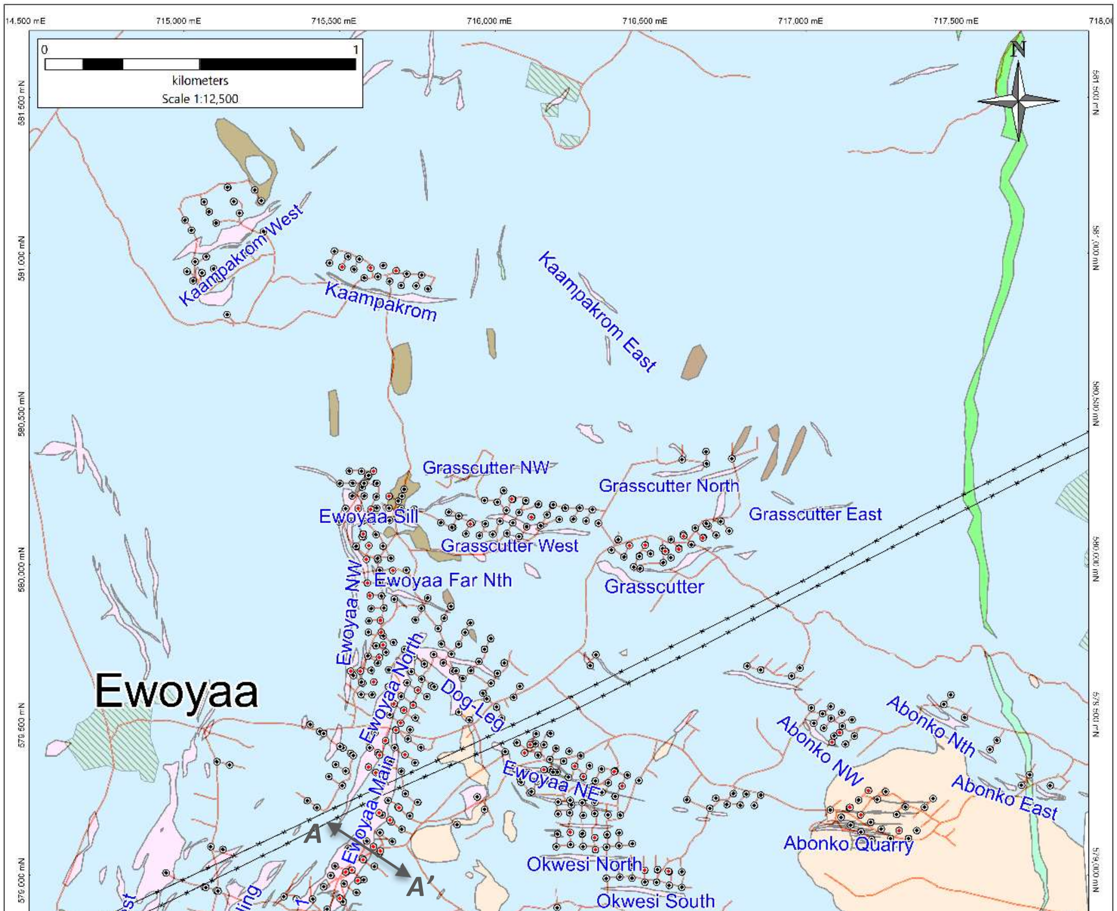

Figure 6: Deposit geology and prospect names at the Ewoyaa Lithium Project

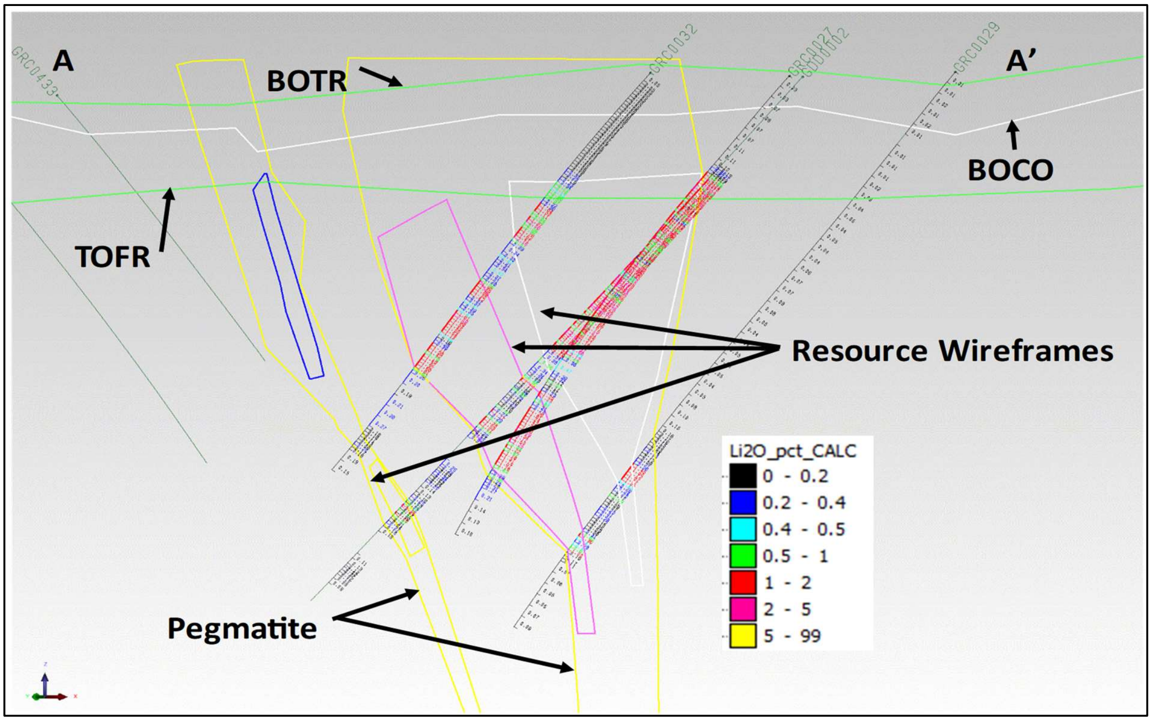

Figure 7: Cross section through the Ewoyaa Main deposit

5. Mining

Conventional open pit mining is considered as the preferred mining method for the Project since the ore presents near surface and there is space to construct waste dumps. A contract mining operation is proposed given the abundance of experienced well established local contractors in Ghana.

The PFS assumes that all material will require some form of drill and blast. Open pit mining will utilise three main 120t excavators and 90t dump trucks supported by an appropriate ancillary fleet. This equipment matches the scale of the operation and the mining environment across the distinct mining areas.

Effectively five mining areas including fourteen individual ultimate pits will be developed. A bench height of up to 10m, excavated in 2.5m flitches, is proposed to achieve acceptable levels of dilution and ore loss and to match the excavator size. Vegetation will be cleared and grubbed prior to topsoil stripping and later used to cover the topsoil stockpiles. Topsoil will be stockpiled and retained for later rehabilitation at the site.

The operation will employ a strategy of partial direct tipping with approximately 60% of crusher feed coming from rehandling run of mine ("ROM") ore. The lower recovery/grade long term stockpiles, predominantly comprising P2 material, will be rehandled and fed to the plant after the priority P1 materials have been processed, or if ore supply interruptions are experienced from the mine.

Mine Production Schedule

A pit optimisation process was undertaken on the entire MRE, using WHITTLE™ Four-X optimisation software. The key economic input parameters that were adopted for the pit optimisation are shown in ***Table 5***. These were selected prior to finalisation of operating costs as noted later in this RNS. Delineation of resources is outlined in ***Figure 8*** with the results of the total resource pit optimisation process depicted in ***Figure 9*** following.

Table 5: Summary of key pit optimisation input parameters

Item	***Unit***	***Value***
DMS Plant throughput	Mtpa	2.0
Spodumene price	$/t	1,000
Concentrate grade	%	6.0
Royalty	%	6.2
Processing Cost	$/t processed	13.50
General and Administration	$/t processed	3.20
Land freight	$/t conc.	25.00
Average Mining Cost	$/t mined	3.25
Rehandle cost	$/t	0.54
Sustaining capital	$/t processed	0.44
Closure cost	$/t processed	0.64
Mining recovery	%	97.0
Mining dilution	%	5.0
Overall Pit Wall Slope Angle (inclusive of a ramp system)	Degrees	Ranging from 34.8^{o} (Oxide) to 46.5^{o} (Fresh)

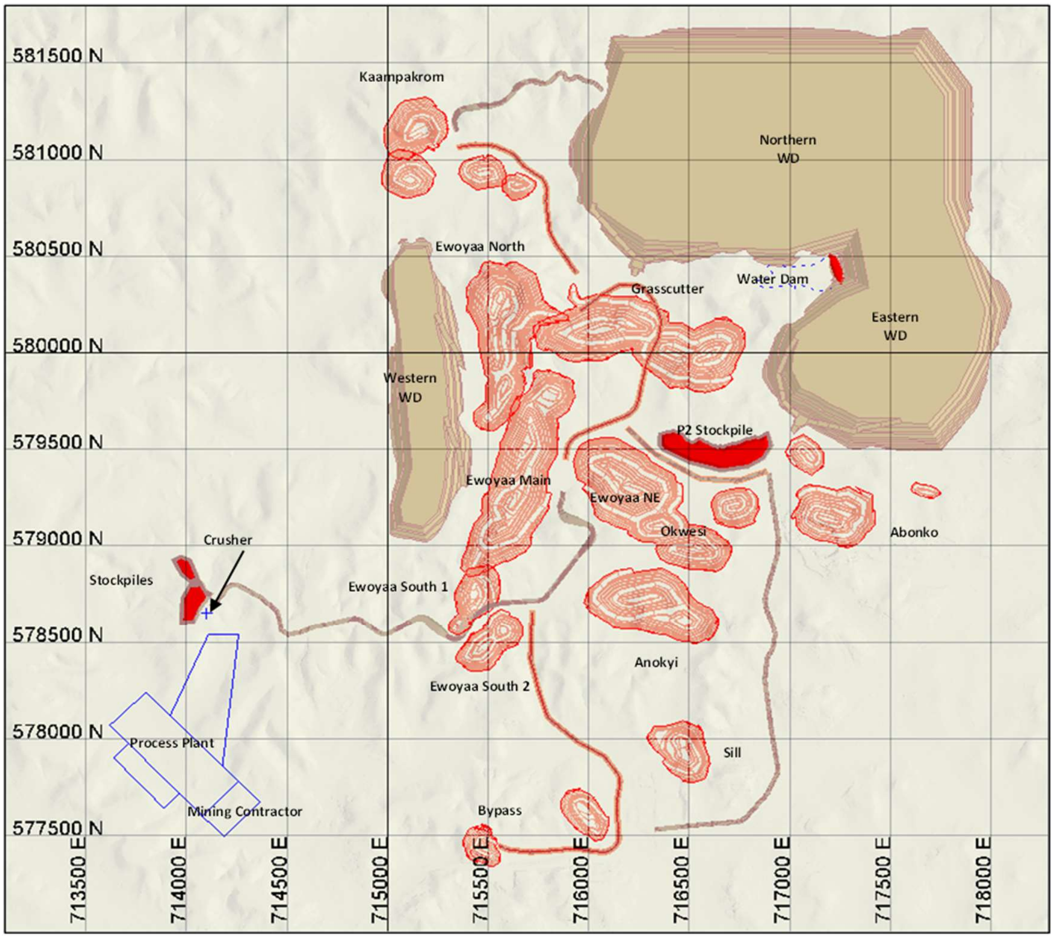

Figure 8: Delineation of resources

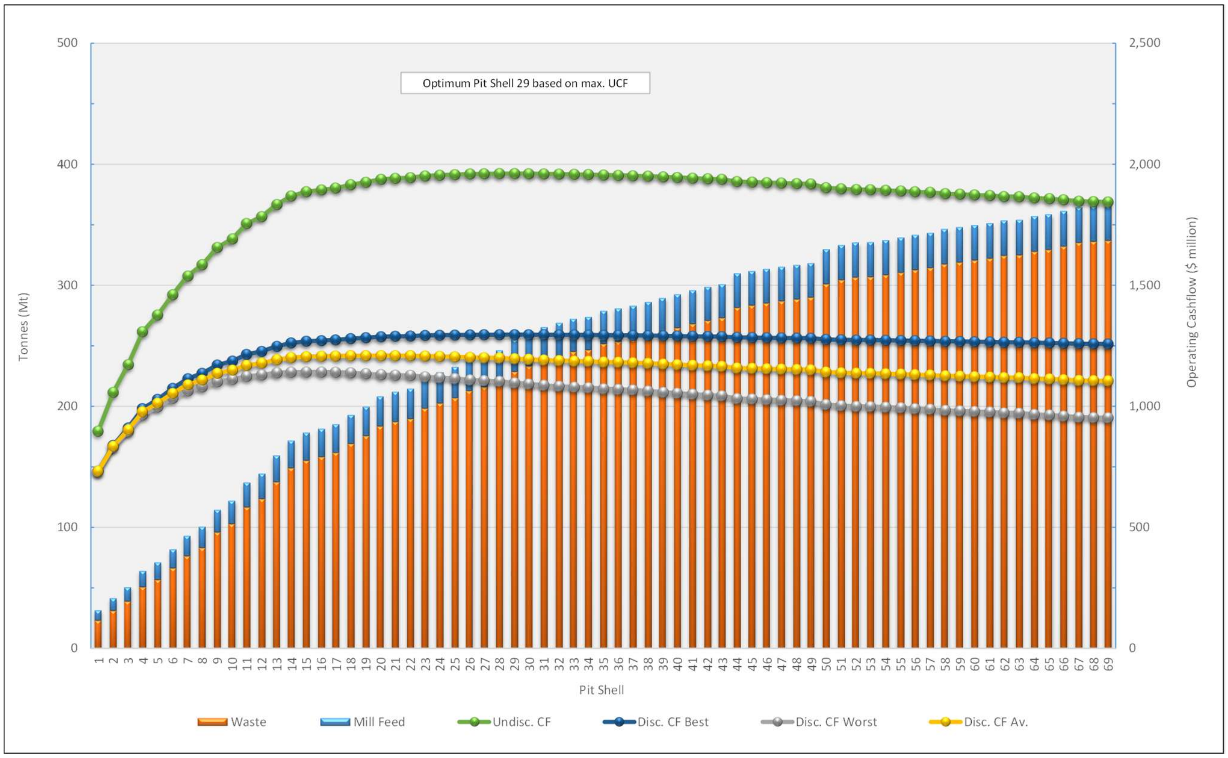

Figure 9: Pit Optimisation results; Indicated and Inferred resources

The main aim of the mining schedule was to provide 2.0Mtpa ore plant feed while adopting realistic material movements, deferring both of waste mining and processing of inferred resource as much as possible, and prioritising P1 material over P2.

Staged development of the pits is driven by the desire to maximise the grade of the initial plant feed, minimise waste pre-stripping and the requirement for consistent total material movement. Staged mining has a positive impact on the project NPV by reducing the duration of the pre-production phase and reducing the strip ratio in the early years of production.

The schedule included a three month ramp up period and processed all the ore in the ultimate pits. A total of 25Mt at 1.22% Li_2O of crusher feed is mined over LOM. This includes a total of 18.9Mt at 1.24% Li_2O of Indicated Resource (equivalent to 75.5% of the total plant feed) and a total of 6.1Mt at 1.14% Li_2O of Inferred Resource (equivalent to 24.5% of the total plant feed). The Ore Reserves and Mineral Resources that underpin the production target have been prepared by a Competent Person that meets the requirements of the JORC code.

There are a total of six major haul road segments that connect the pits with the crusher and the waste dumps. All bar one traverse over moderately sloping terrain and do not require major earthworks. The main road connecting the pits with the crusher will traverse through some steeper terrain.

The results of the mining schedule are shown in ***Table 6***. The average total material movement for the first five years is 14Mtpa, representing a waste to ore strip ratio of 5.2, after which it increases to 22Mt. The increase in total material movement in Year 6 is due to mining higher strip ratio pits. A summary of the annual total material movement by pit area is represented graphically in ***Figure 10***.

P2 ore equates to 17% of the total plant feed with the bulk of P2 ore contained within the Ewoyaa Main pit (64% of the total). However, through stockpiling the P2 ore ratio at Ewoyaa Main can be maintained at 20% for the first few years when the majority of the plant feed is sourced from Ewoyaa Main.

Table 6: Summary Mine Production Schedule

Year	*Total Material*	*Waste*	*Strip Ratio*	*Crusher Feed Mined*		*Ore processed*	
				Tonnes	*Li_2O*	*Tonnes*	*Li_2O*
	[Mt]	*[Mt]*	*[W:O]*	*[Mt]*	*[%]*	*[Mt]*	*[%]*
Pre-prod	0.8	0.6	4.5	0.14	1.12		
1	10.7	8.0	3.0	2.6	1.27	1.9	1.33
2	12.2	9.9	4.3	2.3	1.25	2.0	1.27
3	15.6	13.3	5.8	2.3	1.09	2.0	1.12
4	15.3	12.9	5.3	2.4	1.12	2.0	1.14
5	15.6	14.2	10.0	1.4	1.37	2.0	1.28
6	20.4	18.5	9.8	1.9	1.30	2.0	1.29
7	20.9	19.4	12.7	1.5	1.38	2.0	1.31
8	21.4	18.9	7.5	2.5	1.12	2.0	1.14
9	22.3	20.9	15.1	1.4	1.32	2.0	1.24
10	22.8	21.1	12.5	1.7	1.12	2.0	1.11
11	21.8	19.5	8.7	2.3	1.19	2.0	1.20
12	22.7	20.7	10.3	2.0	1.23	2.0	1.23
13	2.8	2.4	5.2	0.5	1.20	1.1	1.11
Total	**225.2**	**200.3**	**8.0**	**25.0**	**1.22**	**25.0**	**1.22**

Cautionary Statement:
The production targets referred to in this PFS announcement are based on an initial 12.5-year mining plan comprising 75.5% of Indicated Resources and 24.5% of Inferred Resources modelled from the JORC Mineral Resource Estimate released on AIM on 24 March 2022. It is noted that 9.2% of the Inferred Resources are mined within the first 24 months of the PFS mining schedule, this due to drilling access restrictions at the time of the Mineral Resource estimate, which will be resolved as part of the current in-fill drilling programme.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Ore Reserves and Mineral Resources that underpin the production target have been prepared by a Competent Person that meets the requirements of the JORC code.

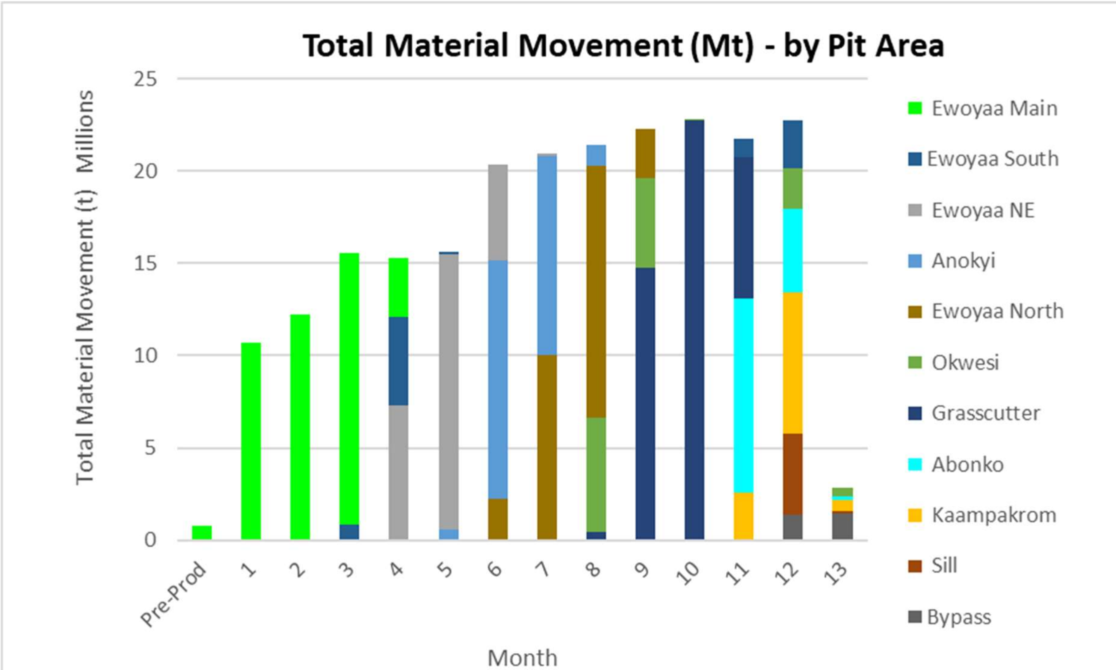

Figure 10: Total material movement by pit

Mining Costs

Estimation of direct mining costs was developed on the basis of a mining contractor operation, under the management of the ALL site operations team and based on the following general assumptions:

- Contract mining costs established via a request for quotation ("RFQ") process involving eight established mining contractors active in the region for the full scope of contract mining services, excluding grade control drilling. Contract grade control costs were provided by the exploration drilling company that conducted the resource drilling at the Project (Geodrill).
- Capital works relating to mobilising and establishing mining operations were requested as part of the RFQ process.
- Owner's operations mining management team costs were estimated by ALL.

The average mining costs per tonne are summarised in ***Table 7***.

Table 7: Mining operating cost summary

Mining Cost per unit of Material	Units	US$ Rate
Average contract mining cost per tonne (TMM)	$/tonne	$3.40
Average mining management cost per tonne (TMM)	$/tonne	$0.16

Ore Reserves

A total of 25Mt at 1.22% Li_2O of crusher feed is mined over LOM. This includes a total of 18.9Mt at 1.24% Li_2O of Indicated Resource (equivalent to 75.5% of the total plant feed) and a total of 6.1Mt at 1.14% Li_2O of Inferred Resource (equivalent to 24.5% of the total plant feed).

The Ore Reserves were determined as part of the mine planning work that Mining Focus Consultants Pty Ltd undertook for ALL as part of the PFS. The PFS was completed by Atlantic and this Ore Reserve Statement is a result of the PFS. The PFS was undertaken by a team of industry professionals as listed below and shown in ***Table 27***.

- Resource Estimate — Ashmore Advisory Pty Ltd
- Mine Engineering — Mining Focus Consultants Pty Ltd
- Geotechnical investigation — SRK Consulting Ghana
- Metallurgy and Processing — DRA Sth Africa, Trinol Pty Ltd, Nagrom
- Hydrogeology — SRK Consulting South Africa & Ghana
- General site infrastructure — Geocrest, Resource Engineering Consultants (REC)
- Tailings storage facility — Geocrest and REC
- Legal tenure — Atlantic Lithium Limited
- Social and Environmental — NEMAS Consult Limited, Environmental and Social Sustainability (ESS)
- Market Research — Atlantic Lithium Limited
- Financial Modelling — Atlantic Lithium Limited

The Ore Reserves as determined for the Project were based on the Modifying Factors as summarised in ***Table 8*** and detailed further in subsequent sections of this announcement. Conversion of Mineral Resources to Ore Reserves has been by the application of appropriate mining factors and assumptions based on the PFS. All currencies are denominated in United States of America dollars, unless specifically stated otherwise.

Table 8: Summary Modifying Factors used for Ore Reserve determination

Item		Unit	Value	
			P1 Pegmatite	P2 Pegmatite
Mill throughput		Mtpa	2.0	
Spodumene price (LOM average)		$/t	1,269	
Concentrate grade		%	6	
Royalty		%	6	
Marketing and insurance (% of gross sales)		%	1	
Processing recovery	Transition Fresh	%	68 70	51 50
Processing Cost		$/t milled	7.74	
General and Administration		$/t milled	2.93	
Lithium Concentrate Transport Costs		$/t conc.	29.82	
Average Mining Cost (Contract mining)		$/t mined	3.56	
Mining recovery		%	97	
Mining dilution		%	5	
Overall Pit Wall Slope Angle (inclusive of a ramp system)		Degree	Ranging from 34.8° (Oxide) to 46.5° (Fresh)	
Capital expenditure		$M	125	
Sustaining capital		$M	83	
Discount rate		%	8	

It is proposed to mine the resource utilising conventional open pit mining methods and the geotechnical parameters used for pit wall design were developed by a specialist geotechnical consultant. Pit optimisations were completed and the results of which were used to identify the final pit limits.

The mine plan was based on Indicated Resources and Inferred Resources with 24.5% of Inferred Resources included. This Inferred Resource is not considered material to the value of the Project and is not included as part of the Ore Reserve. The mine plan incorporates a three-to-five-month mining ramp-up, with steady state production of 2.0Mtpa of mill feed.

The proposed metallurgical process incorporates well-tested technology and utilises conventional dense media separation techniques. Processing will be conducted in a newly constructed plant adjacent to the mining operations. The metallurgical test work indicated that, based on the processing flow chart adopted, the process plant will produce processing recoveries of around 70% for P1 fresh material and around 50% for P2 material, before processing dilution and discounting of 4% utilised in the financial model.

The Project is located approximately 1km from the N1 national bitumen highway and 110km from the operating deep-sea port of Takoradi. Water supply for the process will be sourced from a combination of pit dewatering, water capture and the nearby reservoir for makeup water.

Baseline environmental and heritage studies have been conducted and environmental licensing is not currently identified to pose a restriction to the planned activities. There are reasonable grounds to expect that future agreements and Government of Ghana approvals will be granted and maintained within the necessary timeframes for successful implementation of the project.

The community has been actively engaged throughout the exploration and resource evaluation stages with ongoing community engagement meetings, local employment from within the affected communities and a community development programme initiated. The project based on its footprint does not envisage the requirement to relocate villages but will require to relocate individual households impacted by the proposed project design. Labour is expected to be sourced locally within Ghana and proximal to the project site.

The mine plan described above includes 6.1Mt of Inferred Resources at 1.14% Li_2O or 24.5% of the total DMS plant feed. In order to determine whether the Project was still economically viable when plant feed that was classified as Inferred was excluded from the mine plan (and re-categorised from plant feed to waste) ALL developed a cash flow model with all Inferred excluded from plant feed and re-assigned as waste. This alternative cash flow model indicated that the Project is still financially robust when all Inferred plant feed is treated as waste with an All-In-Sustaining Cost (AISC) of US$656/t.

Based on the above, Probable Ore Reserves were declared for the Project. All stated Probable Ore Reserves are completely included within the quoted Mineral Resources and are quoted in dry tonnes. Probable Ore Reserves were declared based on the Indicated Mineral Resources only contained within the pit designs. The financial analysis showed that the Project is economically viable and the risk analysis did not identify any insurmountable risks. ***Table 9*** provides a summary of the Ore Reserves that were determined for the Ewoyaa Lithium Project.

Table 9: Ore Reserve – As of 12 September 2022

Classification	Ore Reserve	
	Tonnes (Mt)	Li_2O Grade (%)
Probable	18.9	1.24

Table 9 Competent persons note*:*
All stated Ore Reserves are completely included within the quoted Mineral Resources and are quoted in dry tonnes. The reported Ore Reserves have been compiled by Mr Harry Warries. Mr Warries is a Fellow of the Australasian Institute of Mining and Metallurgy and an employee of Mining Focus Consultants Pty Ltd. He has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' of December 2012 ("JORC Code") as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia. Mr Warries gives Atlantic Lithium Limited consent to use this reserve estimate in reports.

6. Processing

Metallurgical Testwork

Subsequent to the preliminary metallurgical test work, which was conducted between March and July 2019, additional diamond drilling was carried out from June to July 2021 to provide samples for PFS testwork series. Testing was conducted at the Nagrom Laboratories in Western Australia and included density, uniaxial compressive strength ("UCS"), crushing work index ("CWi"), size by analysis, crush size establishment, variability heavy liquid separation ("HLS") testing and DMS250 pilot scale testing.

For the PFS, 31 diamond drill holes were utilised for the metallurgical sampling programme. A total of 375 pegmatite samples for a total of 450m of half HQ and PQ core were selected from the PFS drilling programme. The sampling was used to generate a total of 64 composite pegmatite samples across the Ewoyaa and Abonko trends, adding to the 95 samples for 17 composites tested previously (as reported in the Scoping Study ***RNS*** of ***7 December 2021***).

Before core composites were crushed, key physical parameters were tested from five deposits as summarised in ***Table 10***. The CWi and UCS values confirm the P1 ore is more crystalline and easier to crush than P2.

Table 10: Summary of ore physical parameters

Test Parameter	Unit	Deposit				
		Ewoyaa Starter		Ewoyaa Main		Anokyi
		P1 fresh	P2 fresh	P1 fresh	P2 fresh	P1 fresh
CWi	kWh/t	10.9	11.0	7.8	10.5	8.4
UCS	MPa	84	124	82	127	105

12 composites from the first three deposits to be mined were crushed to 10mm and 6.3mm to compare the HLS results. These results confirmed that crushing to a top-size of 6.3mm would produce superior results in terms of recovery and concentrate grade. However, the practicalities of achieving a 6.3mm crush at the 2Mtpa throughputs envisioned with higher fines generation, larger proportion of coarse grained P1 mineralisation in the resource than previously modelled and ability to generate a SC6 product with good recoveries at a top size 10mm crush, resulted in this sizing being adopted for the PFS study. The crushing facility has been designed with a target crushed product top-size of 10mm as a key criteria, which based on crushing simulation modelling conducted, should provide a particle size distribution P_{80} of approximately 7.0mm.

64 composites were made up from 12 of the identified deposits at Ewoyaa. All the composites were crushed to 10mm and screened at 0.5mm for HLS comparisons in order to benchmark the deposits. The results are summarised in ***Table 11***.

Table 11: Comparison of gravity response for all deposits at a 10mm crush size

Deposit	P1 Content	Lithology	Primary Concentrate			
			Grade		Overall Lithium Recovery	Overall Mass Yield
			% Li_2O	% Fe_2O_3		
Ewoyaa Starter	69%	P1 Fresh	6.42	0.81	59.3%	16.1%
		P1 Trans	6.71	0.73	47.4%	9.5%
		P2 Fresh	5.52	0.86	20.4%	4.4%
		P2 Trans	5.69	0.82	14.8%	4.0%
Ewoyaa Main	56%	P1 Fresh	6.39	0.81	56.8%	10.9%
		P2 Fresh	5.60	0.91	24.9%	4.6%
Ewoyaa NE	94%	P1 Fresh	6.53	0.89	70.9%	17.5%
		P1 Trans	6.90	0.66	79.3%	28.6%
		P2 Fresh	5.16	0.83	13.8%	4.5%
Ewoyaa South 2	93%	P1 Fresh	6.02	1.15	52.6%	12.5%
		P2 Fresh	5.78	0.71	21.2%	4.3%
Ewoyaa South 1	51%	P1 Fresh	5.89	0.66	44.2%	8.7%
		P1 Trans	5.41	0.69	16.6%	4.7%
Anokyi Main	98%	P1 Fresh	6.25	0.78	65.4%	21.1%
		P1 Trans	6.51	0.73	39.0%	7.1%
Grasscutter E	100%	P1 Fresh	5.90	0.60	56.6%	16.6%
Okwesi N	100%	P1 Fresh	6.69	0.92	55.7%	13.6%
Okwesi S	100%	P1 Fresh	5.59	0.78	54.0%	16.6%
Abonko NW	90%	P1 Fresh	6.77	0.72	80.6%	25.6%
Abonko Quarry	100%	P1 Fresh	6.75	0.88	79.4%	26.8%
EWNW North	100%	P1 Fresh	5.74	0.37	57.3%	14.6%
		P2 Fresh	5.02	0.56	16.5%	5.1%

These results demonstrate variable recovery response of 50% to 80% to gravity processing for P1 fresh ores (with the exception of Ewoyaa South 1). P1 Fresh ore makes up approximately 80% of the MRE. There were insufficient density fractions tested in the HLS work to normalise these recovery results to 6% concentrates, however the concentrate grades were well in excess of 6% on most results. The implication of high >6% concentrate grades is that the corresponding recoveries at 6% would improve significantly. Further possible improvements may potentially be gained from re-crushing the middlings or lowering the crush size.

The results to date were highly encouraging and provide justification for proposing a gravity-only plant for the PFS, particularly if the sales of DSO fines and Feldspar by-product is achievable.

A feature of the testwork has been the consistently good quality of lithium concentrates produced. In the main, the results show the iron content of the concentrates, as expressed by % Fe_2O_3, as being consistently below 1% and total alkalis ($Na_2O + K_2O$) to be less than 3%. Coupled with the coarse size of the concentrates, these are desirable properties for off-takers in addition to the very favourable Project logistics.

Recovery

The PFS recoveries for P1 and P2 materials were based on HLS and DMS 250 test results and on calculation of assumed additional Lithium recovery from middlings.

Ore recoveries selected for the DMS Plant process design criteria are summarised in ***Table 12***. The recoveries interpreted from laboratory results were discounted by 4% to simulate the typical loss of recoveries from laboratory conditions to on-site, large-scale operations. The final recoveries stated in ***Table 12*** were used for estimation of production rates and Project economics.

Recoveries for P1 material into primary concentrate at a 10mm crush were 50-80% from the HLS test work with an average 68% recovery for weathered and 70% for the fresh used for the PFS before discounting (*refer **RNS** of **7 June 2022***).

A P2 recovery of 50% was used for weathered and fresh for the purpose of the PFS study. In the Scoping study, HLS tests on P2 weathered and fresh material at a 6.3mm crush size gave recoveries of 46-61% (*refer **RNS** of **25 November 2020***). Recoveries of P2 to primary concentrates at 10mm crush size ranged from 7-30% and averaged 20% (*refer **RNS** of **7 June 2022***).

The middlings contained ~60% of the lithium and it is expected that after finer crushing (as was done in the Scoping study), at least 50% of this will be recovered giving an overall recovery of 50% before discounting. No samples high in P2 content have been processed through the larger scale DMS100 or DMS 250 plant as yet, and this will be conducted during the next study phase.

Table 12: Final DMS recoveries used for the PFS

Ore Type	% of Ore	Laboratory Recovery	Final Recovery
P1 Transition Material	7%	68%	64%
P1 Fresh Material	76%	70%	66%
P2 Transition Material	1%	50%	46%
P2 Fresh Material	16%	50%	46%

Products

Due to the current buoyant lithium market conditions, considerable interest has been shown from potential off-takers in DSO streams or sources of lower-grade materials from the plant.

In addition is the potential quantities of feldspar that may be produced from the plant – feldspar being defined as aluminosilicates containing a combined alkali content ($Na_2O + K_2O$) of greater than 10%. The products from the DMS250 runs were nominally high in iron content – good feldspar should contain less than 0.1% Fe_2O_3. Following testwork processed via high intensity magnetic separation (WHGMS) at 17,000 gauss, the iron content was lowered to 0.04% for the loss of only 3.1% mass. The feldspar grade, measured by the combined alkalis, increased from 10.1% to 10.2%.

This demonstrated low iron products could be produced where required. Samples before and after magnetic separation were prepared and sent to a potential off-taker in Europe for initial assessment. The feedback confirmed that feldspar from Ewoyaa was considered a saleable material. Negotiations are continuing with off-takers for price and quantity indications for the material.

Based on work done to date and indicated by the DMS250 results, a Feldspar DMS circuit was included in the process plant circuit design. The DSO fines material is produced from the plant as standard from the primary sizing screen as explained further in the next section.

The potential sales volumes of suitable materials are shown in ***Table 13***. The quantity and grade of the DSO Fines and Feldspar products will be examined in more detail in the next testwork series, planned for the last quarter of 2022. The average annual quantities noted below were used for the financial analysis but are considered conservative with reasonable upside potential for increased tonnages.

Table 3: Estimate of potential products

Product	Average Annual Quantity (tpa)	% of plant feed tonnage	Size range (mm)	Grade % Li_2O
Spodumene Concentrate	255,000	~10% - 15%	-10+1	6.00
DSO Fines from the plant	300,000	~15% - 20%	-1.0	1.2 - 1.5
Feldspar	330,000	~20% - 40%	-10+1	n/a

7. Process Plant

The processing facility has been designed in accordance with accepted industry practice and the flowsheet incorporates unit operations that are well proven in the industry and commensurate with the testwork conducted and results achieved to date. The testwork supports a flowsheet that utilises conventional DMS processing to recover spodumene to a saleable concentrate.

The plant layout provides ease of access to all equipment for operating and maintenance requirements while maintaining a compact footprint to minimise construction costs *(refer **Figure 11**)*. The key Project and ore specific design criteria for the processing facility design are as follows:

- 2,000,000tpa of Run-of-Mine ("ROM") ore through the crushing plant operating at 65% utilisation (5,694h/y).
- DMS plant utilisation of 90% (7,884h/y) supported by crushed ore storage and standby equipment in critical areas.
- Sufficient automated plant control to minimise the need for continuous operator interface and allow manual override and control if and when required.

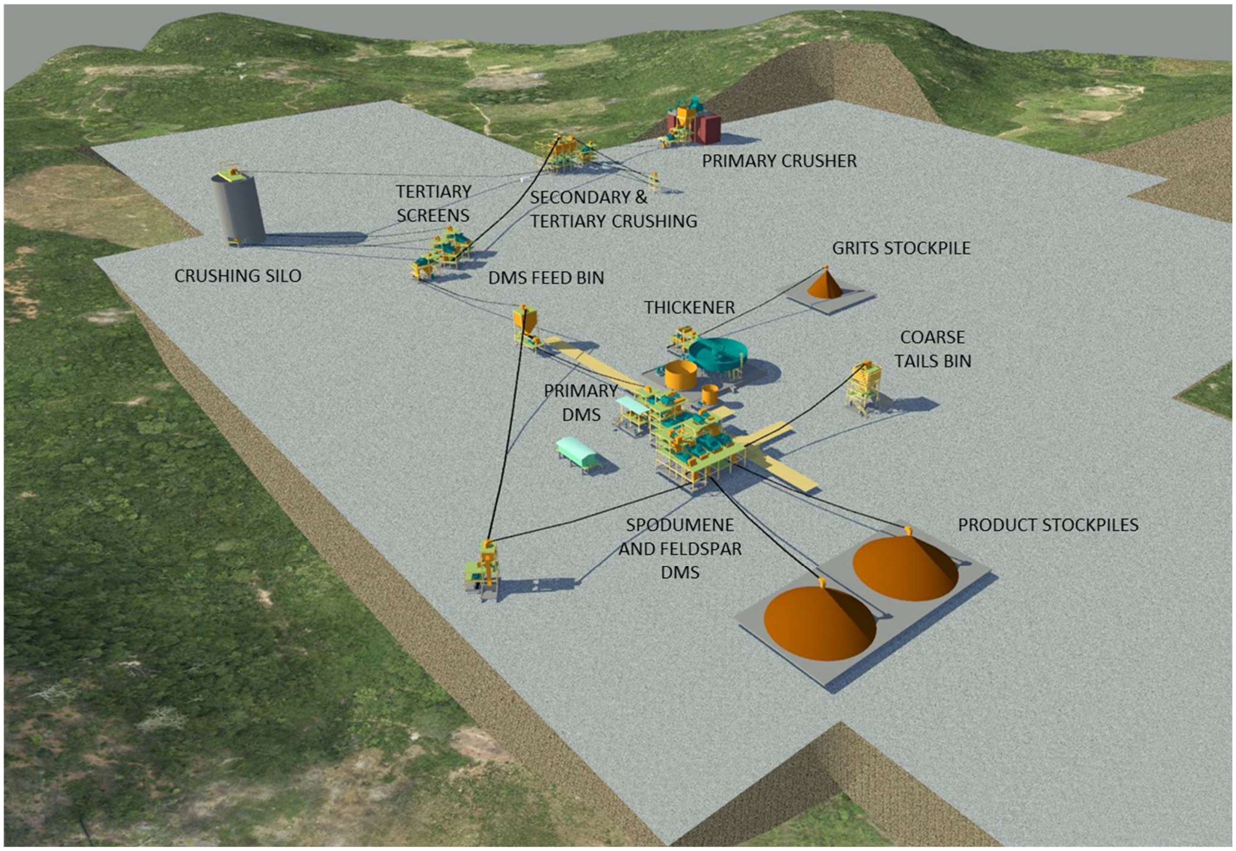

Figure 11: Process plant viewed from the south, looking northwards.

Crushing Flowsheet

ROM feed material will either be direct tipped or loaded by front-end loader into a ROM feed bin. Ore will be withdrawn from the feed bin and scalped on a vibrating grizzly. The oversize reports to the primary jaw crusher. The jaw crusher product is combined with the grizzly undersize and conveyed to the secondary crusher circuit.

The primary crusher product is screened ahead of the secondary crusher. The screen oversize is conveyed to the secondary crusher. The secondary crusher operates in open circuit. The screen undersize bypasses the secondary crusher circuit and is combined with the secondary and tertiary crusher product and conveyed to the crushing silo.

Material is withdrawn from the crushing silo (two streams in parallel) and conveyed to the tertiary crusher screens. The screen oversize is conveyed to the tertiary crusher circuit. The crusher product is conveyed back to the crushing silo i.e. closed circuit tertiary crushing.

The screen underflow is pumped to a dewatering screen with the dewatered product conveyed to the DMS feed bin and the screen undersize pumped to a degrit circuit. The block flow diagram below summarises the crushing circuit configuration (*refer* ***Figure 12***).

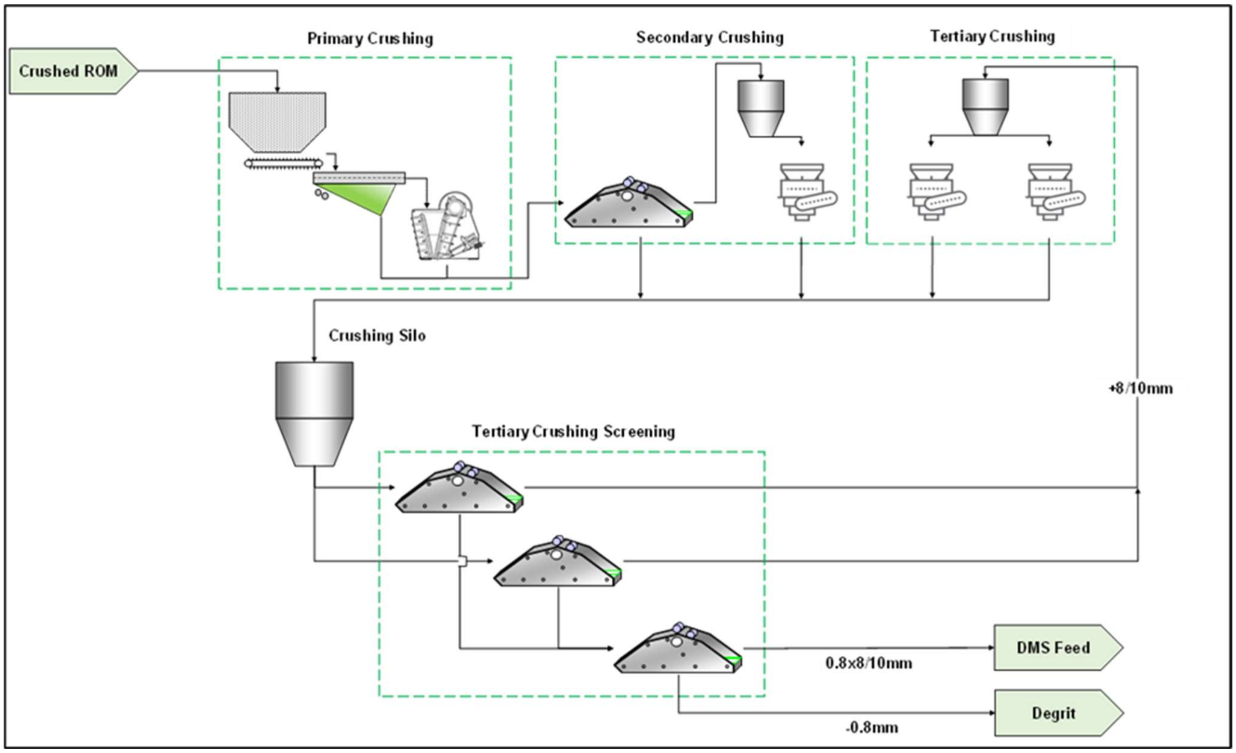

Figure 12: Crushing circuit flowsheet

Flowsheet Development

Crushed ore is processed through a conventional and proven three-stage DMS beneficiation circuit. The Primary DMS module produces a low-density fraction that is further processed in the Feldspar DMS to produce a low-density Feldspar product and a waste fraction.

The Primary DMS sinks is further upgraded in the Spodumene DMS with the sinks reporting as a Spodumene concentrate and the floats screened at 3.5 mm. The +3.5 mm fraction is fed to a middlings re-crush circuit. The re-crush product is recirculated back to the Primary DMS. The -3.5 mm fraction reports to the tails circuit.

The screened out -0.8 mm fraction is pumped to the degrit circuit. The underflow or grits fraction is dewatered and conveyed to the grits stockpile. The dewatered grits will be sold as a DSO Fines product. Should the market for DSO Fines diminish, this stockpiled material could alternatively be retained for future flotation plant processing. The flowsheet makes provision for an optional spiral plant to potentially upgrade the grits fraction however this was not included in the base case and not costed in the CAPEX, however the layout provides space for the possible retrofit of this circuit in the future.

The degrit cyclone overflow or slimes fraction is laundered to the thickener. The thickener underflow is pumped to the slimes/tailings disposal facility. The process tailings will be a mix of fine (< 1mm) material and water used in the DMS recovery process. There are no toxic chemicals used in the DMS circuit and therefore the tailings itself is chemically and biologically inert.

The design includes for all associated infrastructure and services, including water services, reagents and consumables, offices, workshops, etc.

The overall process flowsheet is depicted in ***Figure 13***, followed by 3D modelled overviews showing the major plant components design concepts.

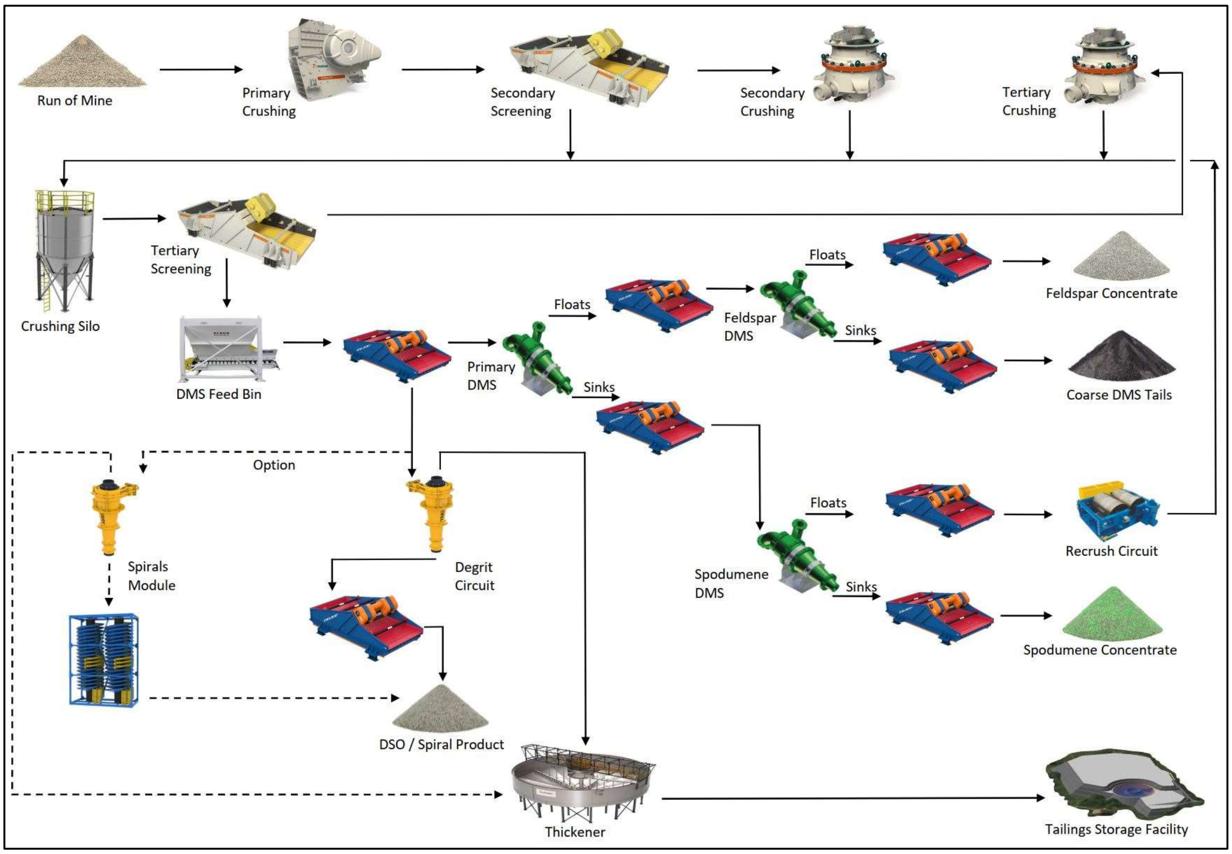

Figure 13: Overall simplified process flowsheet

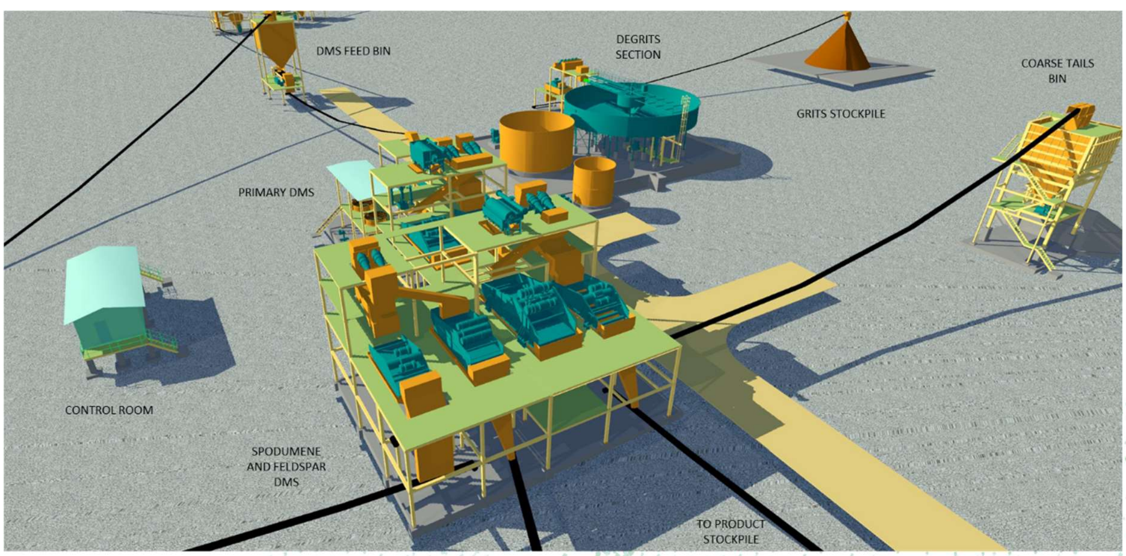

Figure 14: DMS plant layout showing key structures

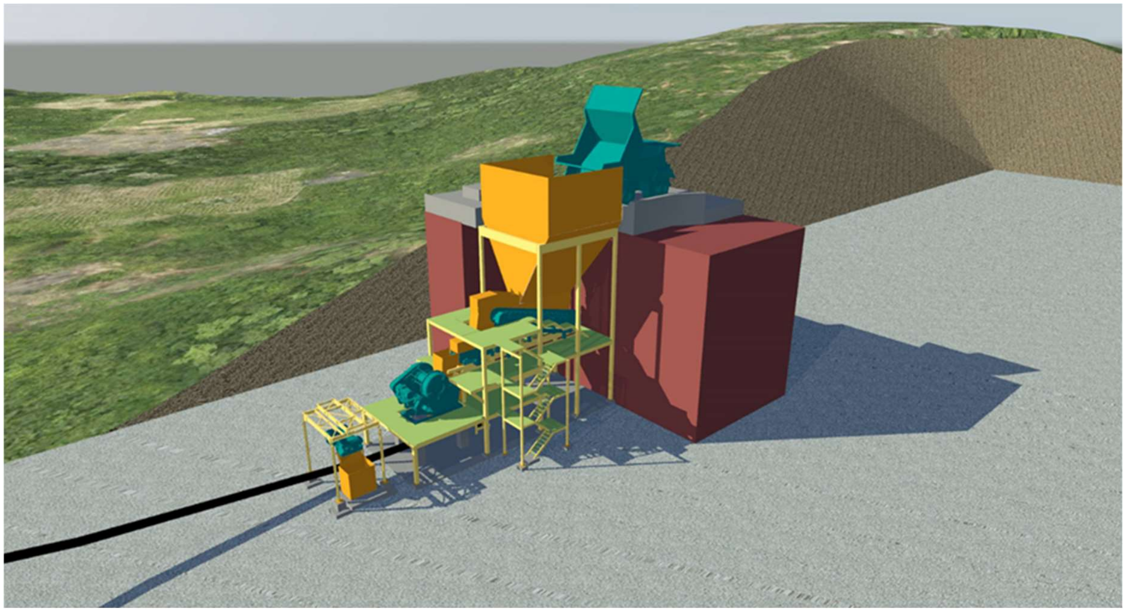

Figure 15: Primary crusher

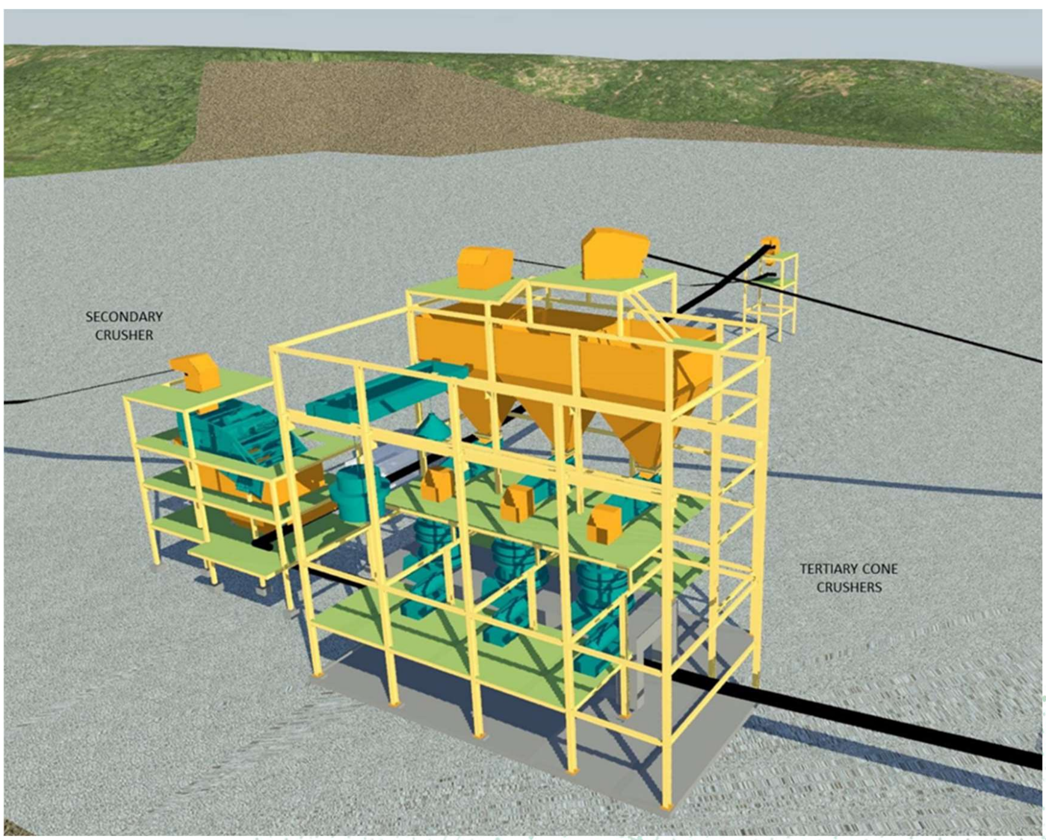

Figure 16: Secondary and tertiary crushing building

8. Infrastructure

Access to the site from Accra is along the asphalt N1 Accra-Cape Coast-Takoradi highway which runs along the southern boundary of the Project. Several laterite roads extend northwards from the highway and link communities in the Project area. The port of Takoradi is within 110km to the west from the site, and accessible via the same highway. ***Figure 17*** depicts the full extent of infrastructure at the Project site.

The Project benefits from the proximity of the deep-sea port of Takoradi, even during peak times being less than 4 hours' drive from the Ewoyaa site. The three products from the DMS process plant will be stockpiled on site and removed by front end loader onto 35t tipper trucks for transport to Takoradi.

ALL solicited assistance from established freight forwarding and transport companies established at the port to provide the transport solution on an FOB Incoterms basis. There is no capital cost allowance for trucks and loaders to handle the product export needs, as these groups confirmed they have the capacity to provide the necessary equipment. It is proposed that a combination of warehousing and outdoor storage be utilised proximate to the port.

In the vicinity of 900,000 tonnes of product will be exported annually. This equates to a nominal trucking fleet of fifty 35t tipper trucks. Based on working day shifts only, it is envisaged that two front end loaders will service the product load out requirement, equating to an average cycle time of 15 minutes.

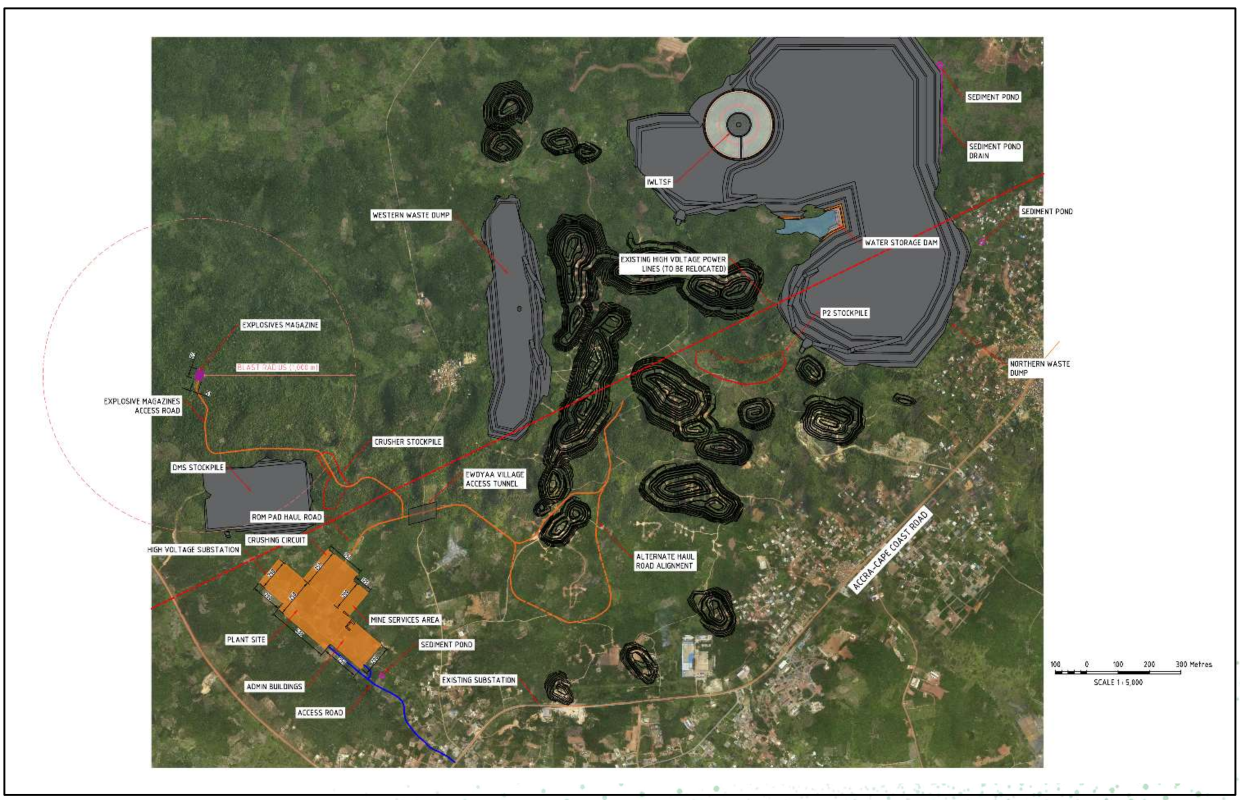

Figure 17: Overall Ewoyaa project infrastructure layout

Water

Raw water supply for the Project will be sourced from passive inflows to the various pits, runoff inflows to the water storage dam ("WSD") and tailings storage facility ("TSF"), augmented via a pump and pipeline from Lake Agege, 7km north of the proposed WSD location. An overall site water balance was completed for the Project, predicting raw water makeup volumes at an average 24.1 m^3/h for the life of mine.

Raw water will be distributed throughout the process plant, mine and infrastructure to meet demand. The groundwater inflows into the pits were modelled for the PFS. The combined inflows from all the pits gradually increases from 9 m^3/h during pre-production, to a peak of 188 m^3/h by year 11. Therefore, the reliance on Lake Agege for providing water to the operation is expected to be a short-term requirement.

Given the relatively low inflows, additional active dewatering from ex-pit boreholes is considered unnecessary. Once additional geological structural information is available and these are exposed in the pit, horizontal drain holes targeting these structures from inside the pit could be used to manage inflows into the Ewoyaa Main and North-East pits.

Although the zone of drawdown does not extend a large distance from the mining area, there are some settlements near the mining area. There is a risk, although deemed low, of some reduction in water levels. ALL has installed monitoring bores for mapping these impacts.

Power

The power supply is planned to come from the electricity grid in Ghana at an average operating cost of $US0.14/kWh. Installed power to the operation is estimated at 6,290 kW and an average continuous load of 4,270kW. The Ghana Grid Company Ltd (GRIDCo) owns the National Interconnected Transmission System in Ghana, and Volta River Authority (VRA) is the primary energy provider in Ghana augmented by other IPP power generation companies providing alternative sources of energy which can be wheeled through the grid.

Ghana currently has 12 commercial power generation facilities with total generation capacity of 2,831MW. This is made up of three hydro power plants at Akosombo, Kpong and Bui representing 56% of generation capacity, an array of thermal plant including combined cycle gas turbines, simple cycle gas turbines and diesel generators representing about 44% of total generation capacity and solar power representing less than 0.1% of total generation capacity.

The preferred option for providing power to the Ewoyaa Project is to construct a 34.5kV single circuit transmission line from the Ewoyaa plant site to Saltpond where there is a 161/34.5kV substation. The transmission line length would be approximately 2km.

Two 161kV transmission lines pass through the mining area and will be diverted around the planned mining areas. Refer ***Figure 17***. The revised route will be approximately 10km in length and requiring 20km of new transmission lines and a major shutdown to decommission the existing lines and connect the replacement lines.

Electrical power will be received from the mine's consumer substation and distributed to the various electrical substations around the plant.

Tailings Management

The TSF proposed is an Integrated Waste Landform (IWL) design (Refer ***Figure 17***), which takes advantage of the proposed northern waste dump and the natural landforms. The WSD comprises of a low permeability face situated on the southwestern face of the waste dump. The embankments of the TSF are proposed to be constructed using excavated and borrowed low permeability material and waste rock, with borrowed material to be used to construct the WSD.

The Project processing schedule will comprise of a 12.5-year life with a tailings design basis production rate of 400ktpa into the TSF. It is noteworthy that the TSF design capacity provides spare capacity in the event that the DSO Fines product cannot be sold. Therefore, there is sufficient excess capacity in the TSF to accommodate this worst-case scenario and so represents a conservative approach to managing tailings at the Project.

The operation of these facilities is based on an anticipated high recovery, at least 70% of the slurry water volume entering the TSF. The decant pumping system (return water pumps and pipelines) will be designed to accommodate a water return of up to 80% of the tailings slurry water to the process plant. The results of high-water recovery can be directly attributed to a small decant pond, high in-situ dry density of the deposited tailings and minimal seepage losses.

In accordance with the DMP Code of Practice (CoP) (DMP, 2013), the IWLTSF and WSD is assessed as a 'Medium' Category with a classification of 'Category 1'. Tailings will be deposited from the perimeter embankments of the TSF in a sub-aerial manner in thin lifts and beaching towards the decant/rock ring decant at the centre of the facility to form a decant pond away from the main embankment.

The TSF and WSD have capacity for the 1:200-year annual exceedance probability (AEP) 72-hour storm event in accordance with the GISTM requirements, Government of Ghana, and DMP required freeboard. These design objectives have been developed to ensure that premises are decommissioned and rehabilitated in an ecologically sustainable manner in accordance with the DMIRS principal closure objectives for rehabilitated mines and the EPA's objective for Rehabilitation and Decommissioning.

Site Access

A range of road types will be required to and within the Project site to meet a wide range of duties. The hierarchy of road types includes dedicated mine haul roads, the main access roads, general access roads and minor use roads and tracks. Some of the roads will border service corridors, e.g. raw water supply pipe lines, or tailings pump line access. Hence, road alignments also need to consider service routes in addition to transport requirements.

The road widths and construction details have been selected to match the required duties. The main haul road will intersect the existing dirt road that connects the Ewoyaa village to the main highway. A tunnel is proposed for the existing road, so that haul trucks delivery ore to the plant will not interact with local light vehicles and pedestrians.

Buildings / Other

New administration buildings, workshops and warehouses will be established for all plant and mining services. Accommodation of the workforce is proposed utilising the available accommodation in the region.

Fuel storage and distribution will be controlled by the mining contractor as the main user of fuels and lubricants at the site. ALL will make use of locally available services for maintenance of light vehicles, and to support the basic administrative supplies requirements for the operation.

Communications, consisting of phone, internet and radio communications, will be established for the site.

9. ESIA and Permitting

Legislation and Guidelines

Under Ghanaian environmental and social legislation, all undertakings, including mining and allied activities, must be compliant with the Environmental Protection Agency Act 1994, Act 490, and the Environmental Assessment Regulations 1999 (LI 1652). In addition to these two key national legislations, there are over 40 other environmental and social related legislations that any undertaking must be compliant with, depending on the nature, scope, and location of the undertaking.

The ELP holds considerable international outlook, and as such has adopted critical international environmental and social guiding principles and benchmarks. Among these include:

- Equator Principles (EP); EP3 – EP10;
- International Finance Corporation Performance Standards (IFC PS); PS1 – PS6 & PS8;
- WB EHS Guidelines (General) (2007) & WB EHS Guidelines (Mining) (2007);
- International Labour Organisation (ILO) Conventions.

Regulatory Framework and Approvals Process

The Ghana Environmental Protection Agency (EPA) is the legally authorised body for the granting of Environmental Permits to undertakings in the country. Ghanaian environmental approval requirements for mining require a full Environmental and Social Impact Assessment (ESIA). The ESIA and permitting process commences with the registration of the project with EPA. The EPA then screens the application and decides on the need for further study based on the scope of the project, potential environmental and social impacts, and the consent and support of various stakeholders within the project footprint. After this, is a scoping stage, once EPA has requested the conduct of a detailed ESIA study.

A Scoping Report, which includes a Terms of Reference for the ESIA and a description of any issues raised during the consultation process, and how they will be addressed in the ESIA, will be developed and submitted to the EPA for review and approval. The Scoping Report will also be made publicly available.

The ESIA study will cover potential positive and negative impacts on environmental, social, economic, and cultural aspects in relation to the different phases of the project, including transboundary impacts. Upon completion of the ESIA Study, a draft Environmental Impact Statement (EIS) will be developed and submitted to the EPA for review and approval. The approval of the EIS by EPA will be premised on their satisfaction with the identified impacts, and mitigation and management measures outlined in the EIS. The EPA after reviewing the draft EIS may also recommend amendments to the report or the conduct of further studies to warrant the approval of the EIS. Once the EPA is satisfied and approves the EIS, an Environmental Permit for the project will be issued.

Existing Environmental Setting

Topography and Geology

Generally, the Project area landscape is undulating with isolated hills at different locations with an elevation of between 15m to 110m above sea level. The area geologically lies within the Birimian Supergroup, a Proterozoic volcano-sedimentary basin located in western Ghana. The site is also classed as B and C under the Euro Code 8 seismic site classification for soil which consists of outcrop rock masses or very rigid soils and medium-dense sand, gravel, or stiff clay respectively. Analyses of ground vibration data within the Project area indicate that generally the peak particle velocity (PPV) recorded do not pose an elevated seismic vulnerability risk.

Climate

The Ewoyaa area experiences mild temperatures that average between 24 and 28 degrees Celsius all year round and relative humidity of about 70% due to its proximity to the ocean. The area experiences double maximum rainfall with peaks in May-June and October. Annual total rainfall ranges between 90cm and 110cm in the coastal savannah areas and between 110cm and 160cm in the interior close to the margin of the forest zone. Dry seasons usually occur from December to February and from July to September.

Hydrology and Hydrogeology

Within the ELP area, the natural drainage indicates the possibility of several streams and rivers existing or flowing through the area. Nonetheless, very few surface water bodies are actually encountered on the ground, with the majority being dugouts or water holding areas that temporarily dry out during the dry season. Water from dugout sources normally is a mixture of surface runoff and groundwater mostly from the unsaturated zone. No perennial streams or rivers occur within the immediate project area. The British Geological Survey (BGS) hydrogeological description for the Project area is low to moderate groundwater potential with localised highs. Specifically, groundwater yields are poor except where there is thick weathering of the basement rocks allowing groundwater flow. Typical borehole yields are from 0.1 to 0.5l/sec. Surveys conducted in the Project area indicate that the water chemistry is predominantly alkaline, with elevated fluoride levels which is normal for basement geology, and high nitrate levels which indicate contamination from human and animal waste.

Air Quality and Noise

The results of air quality monitoring conducted in the Project area since 2021 to date revealed that prevailing air quality of the ELP area generally falls within the recommended Ghana EPA and WHO levels. On the other hand, noise levels in some areas monitored exceed Ghana EPA and IFC/WHO recommended levels. This observation has been attributed to the proximity of the communities/sampling areas to the Accra-Cape Coast Highway (N1) which is a significant source of noise pollution.

Long-Term Environmental Monitoring

The Project has gathered extensive environmental baseline data from 2019 to date, which provides a snapshot of the quality and nature of the environment. Additionally, the Project has instituted and is implementing a long-term environmental monitoring programme (exploration phase through to closure phase) which will afford prompt detection of deteriorating and/or improving environmental conditions within the Project area to enable appropriate action to be taken where required.

Existing Social Setting

Traditional Ownership of Land

The ELP communities where land ownership is likely to be affected are Abonko, Anokyi, Ewoyaa, Krofu, Krampakrom and Lower Saltpond. Land title in these communities is predominantly held by families, rather than chiefs and stools, as is common in Ghana. Family lands, implicitly inferred by the 1992 Constitution as private property, are devoid of extensive government regulatory mechanisms compared to stool or skin lands. Traditional authorities however have played a key role in resolving and/or mediating conflicts that have arisen in land ownership.

Population

A survey conducted in 2020 on communities within a 2-kilometre radius from the active areas of mineralisation estimated that over 3,562 people were living within that 2-kilometre boundary. The area surveyed included communities like Abonko, Anokyi, Ewoyaa, Krofu, Krampakrom, Ansaadze, and Afrangua.

Cultural Heritage and Archaeology

Cultural heritage and archaeological studies conducted in the Project area reveal that 33 archaeological and heritage resources are located within the Project area. These heritage resources are shrines believed to be a link between the living and dead. All the shrines in these communities are networked, and rituals for one can be performed at another. Almost all the shrines share common ritual items, functions, and taboos. There may be a need to relocate some of these resources, but this is to be done in consultation with the various Deity-Heads to avoid social disruption and prevent potential non-cooperation.

Health, Safety, Environment and Communities Management System (HSECMS)

The Project has developed a number of mechanisms to facilitate the sustainable and effective management of HSEC concerns within its footprint. This includes documented plans, agreements, toolkits, and registers that provide the framework to manage the HSEC management system of the project.

- **Stakeholder Engagement Plan (SEP)**: Describes the applicable regulatory and/or other requirements for disclosure, consultation and ongoing engagement with the Project's stakeholders, and provides the framework to build a two-way communication between the Project, the potentially affected communities and other project stakeholders through a clear, simple and effective communication strategy.
- **Community Development Plan (CDP)**: Aimed at ensuring inclusive decision-making with host communities, supporting environmental and socio-economic development, enhancing community wellbeing, and expanding the capabilities of communities to effectively engage with the Project, government, and Community-Based Organisations (CBOs) on development issues that concern the communities.
- **Emergency Response Plan (ERP)**: Identifies potential emergency scenarios likely to occur in association with the Project and their likely consequences, preventive strategies, response procedures, and corresponding responsible parties/persons, including resource requirements for efficient emergency response and response timing and reporting channels and procedures.
- **HSEC Risk Register**: Details all the identified risks of the ELP (Exploration Phase) and the potential impacts or consequences of those risks occurring. It furthermore outlines control and management measures for each identified risk, and the responsible parties for managing those risks.
- **Baseline Exceedance Level Tracking**: Serves as a proactive monitoring tool to identify deteriorating or improving environmental conditions (air and water quality, and noise levels) within the ELP footprint based on data from monthly environmental monitoring.

10. Operating Costs

Operations

Unlike the many gold projects in Ghana, the Project is located close to the coast in a semi-urban location. Therefore, the Project will not need to be as self-sufficient as would be the case in a remote location. It is expected that the local Ghanaian workforce will have previous mining and plant operation experience, likely from similar sized gold operations in the region, however Ewoyaa will be the first lithium production operation in the country.

The operation will seek to predominantly employ a core group of experienced Ghanaian management and supervision, supplemented by a small number of expatriates with specific expertise in lithium production which will be critical for the initial training and management of the operation and plant commissioning.

A small expatriate team of nominal five senior personnel has been included for start-up, commissioning, operational readiness and establishment of steady-state production. The expatriates are expected to remain with the operation for one to three years, after which time it is anticipated that the operation will employ 100% Ghanaian personnel.

Ghanaian plant operating personnel will be provided with pre-operations training from experienced expatriates to become familiar with DMS operating procedures and problem-solving techniques in advance of commissioning. This will be followed by coal-face experience on the plant during testing, commissioning and ramp-up to nameplate production.

It is estimated that upward of 300 new jobs will be created at the Project.

Economic development will be encouraged within the local community and the region in general. Local contracts will be let where possible, and ALL will work actively with existing and emerging companies in Ghana to achieve this aim.

Operating costs were developed from first principles, utilising a combination of database information from similar projects (both in Ghana and other lithium projects) and from Project specific budgetary quotations from experienced suppliers/contractors active in the region *(refer **Table 14**)*.

OPEX

Project operating costs have been developed using the parameters specified in the plant process design criteria and the contract mining estimate. The operating cost estimate includes all direct costs for the production of lithium concentrate at the Ewoyaa plant site, plus Feldspar and DSO Fines by-products. The operating cost target accuracy is ±20% as at Q2 2022.

Corporate costs associated company overheads, Ghana administration office costs, project financing costs, sunk costs, escalation and foreign exchange rate fluctuations are excluded. Corporate Tax and VAT are addressed separately in the cash flow model (refer section 12 of this RNS).

An allowance has been made for contract laboratory costs based on a quotation received for the design, site establishment, commissioning, and ongoing operations. Reagent consumptions have been derived from recent metallurgical testwork and benchmarking against similar operations. Generally, reagent unit costs were obtained from relevant suppliers with most DMS consumables sourced from South Africa.

The operating cost breakdown is summarised in ***Table 14*** through to ***Table 21*** and ***Figure 18***. Following these are separate tables providing more detailed level breakdowns of each component of OPEX.

Table 14: Summary of project operating costs

Cost Centre	Cost Basis US$	Comment
Mining Costs	$3.56 / tonne	Per tonne of material mined (ore and waste), including Mine Management team
Processing Cost	$7.77 / tonne	Per tonne of ore processed
General & Administration Costs	$2.87/ tonne	Per tonne of ore processed
Lithium Concentrate Transport Costs	$29.82 / tonne	Per wet tonne of concentrate produced
Feldspar Transport Costs	$29.82 / tonne	Per wet tonne of feldspar produced
DSO Fines Transport Costs	$32.66 / tonne	Per wet tonne of DSO fines produced
	Other Costs	
Government Royalty	5%	Of receipts from product sales
Local Partner Royalty	1%	Of receipts from product sales
Surface taxes / permitting costs	$57,444	Per annum for LOM
GET Fund	2.5%	Of non-exempt goods & services cost
NHIL Fund	2.5%	Of non-exempt goods & services cost
COVID 19 HRL	1%	Of non-exempt goods & services cost
CDA Fund (community development)	1%	Of profit
Corporate tax	35%	Of earnings before tax

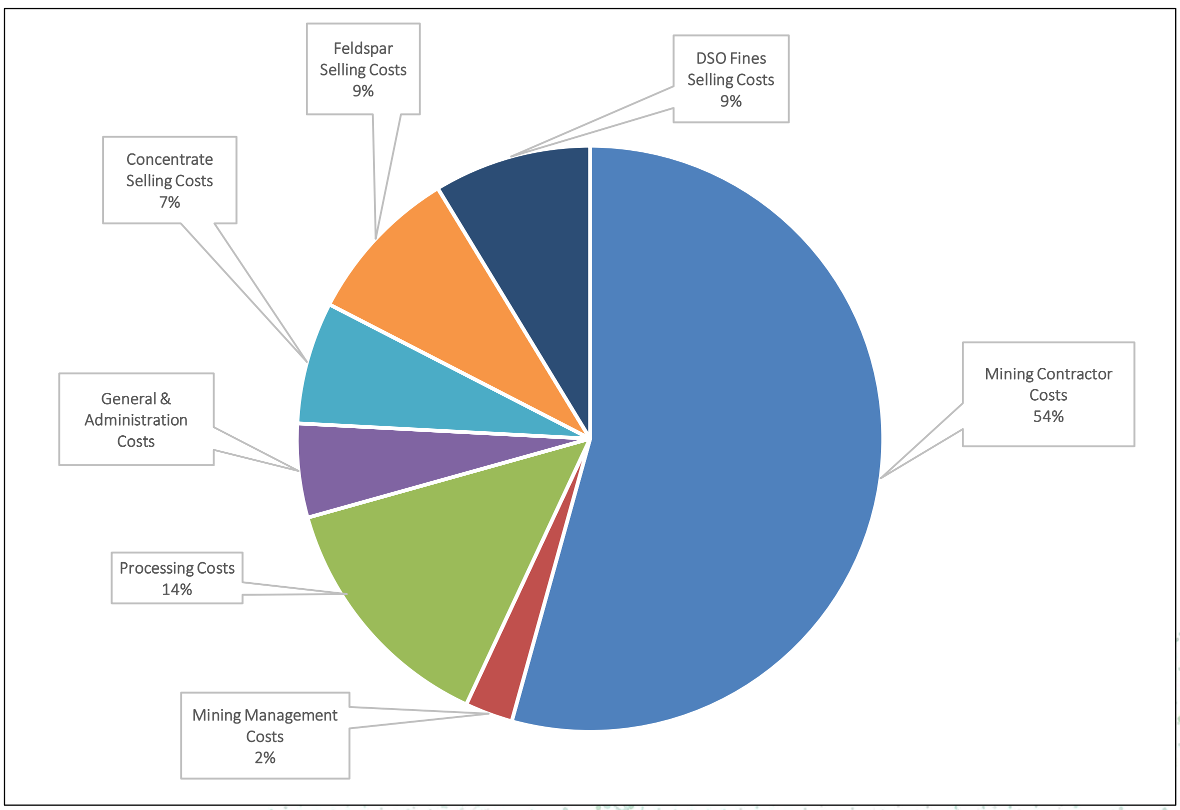

Figure 18: Proportions of operating cost

Table 15: Summary of process operating costs

Item	US$/y	US$/t Feed
Processing Labour	4,322,011	2.16
Power (@ $0.14/kWh)	3,916,070	1.96
Maintenance	2,793,224	1.40
Reagents and Consumables	2,691,142	1.35
Miscellaneous (includes Laboratory)	1,761,540	0.88
General and Administration (incl. Labour)	5,850,388	2.93
Total	**21,334,375**	**10.67**
Total with General & Administration Removed		**7.74**

Table 16: Power cost summary

Area	Total Cost	
	US$/y	US$/t
ROM Feed & Crushing	1,327,511	0.66
DMS Feed Circuit	107,366	0.05
Primary DMS	650,082	0.33
Feldspar DMS	535,340	0.27
Spodumene DMS	382,599	0.19
Thickening & Degrit Circuits	134,934	0.07
Water Reticulation	185,326	0.09
Product and Discard Handling	60,948	0.03
Services	531,965	0.27
Total	**3,916,070**	**1.96**

Table 17: Summary of maintenance materials and specialist costs

Area	Total Cost	
	US$/y	US$/t
ROM Feed & Crushing	1,581,944	0.79
DMS Circuits	374,115	0.19
Thickening & Water Circuits	446,224	0.22
Piping, Electrical & Instruments	514,172	0.26
Services	11,602	0.01
Total	**2,928,056**	**1.46**

Table 18: Laboratory cost summary (including mine)

Area	Number of units	Unit cost US$	US$/y	US$/t
Contract Laboratory costs	12 months	52,755.00	633,060	0.32
Assays per sample per day	200	3.76	274,480	0.14
Feldspar assays per day	40	40.00	584,000	0.29
Total per annum:			**1,491,540**	**0.75**

Table 19: General and administration costs

	Item	Allowance	Basis	Annual Costs US$
Site Office	Telecommunications			135,000
	Office Suppliers, etc	1,767	per month	21,200
Insurances	Operational		per annum	706,000
Financial	Banking Charges, Legal fees, audit			68,700
Consultants	Environmental Consultants	2,000	per month	24,000
	Consultants and Vendors	4,000	per month	48,000
	Environmental Compliance Testing			30,000
Personnel	Recreational and Local Facilities			20,000
	Entertainment			10,000
	Safety Clothing			47,600
	Training			45,000
Contracts	IT Service Contract	4,000	per month	48,000
	Security Contract	12,000	per month	144,000
	LV Maintenance Contract	12,000	per month	144,000
General	Community Relations Expenses	4,500	per month	54,000
	Bussing Contract - Village to Site			124,800
	Miscellaneous			30,000
TOTAL	**$0.85/t processed**			**1,700,300**

Table 20: Labour costs summary

Department	Employee Numbers	Employee per Shift	Expat Numbers	Senior Ghanaian	Local Ghanaian	OPEX US$/year
Finance & Administration	62	23	0	3	59	1,351,288
Human Resources	4	4	0	1	3	172,531
OHS & Security	108	30	0	2	106	1,922,480
Supply and Logistics	12	6	0	1	11	325,246
Environmental & Social	11	11	0	2	9	378,543
Operations Management	2	2	1	0	1	472,592
Process Management	2	2	1	0	1	350,806
Metallurgy	10	4	0	6	4	794,360
Process Operations	66	18	0	2	64	2,177,805
Plant Maintenance	15	15	0	1	14	526,447
Mine Management	4	4	2	1	1	704,680
Mine Planning	8	8	0	1	7	355,396
Mine Operations	7	4	0	5	2	517,259
Mine Geology	7	4	0	2	5	380,890
Exploration Team	21	21	1	1	19	999,806
Labour Totals	**339**	**156**	**5**	**28**	**306**	**$11,430,130**

Table 21: Summary of concentrate transport costs

Item	SC6 ($/t)	Feldspar ($/t)	DSO Fines ($/t)
Stockpiling on site	0.96	0.96	0.96
Loading and trucking to port	13.00	13.00	13.00
Storage at port	2.17	2.17	2.17
Loading onto ship.	4.70	4.70	4.70
Sampling at port	0.23	0.23	0.23
Port charges	5.24	5.24	5.24
Warehousing	2.10	2.10	2.10
Total, dmt basis	28.40	28.40	28.40
Moisture content (%)	5%	5%	15%
Total, wmt (moisture content applied)	**29.82**	**29.82**	**32.66**

11. Capital Costs

The scope of the capital cost estimate comprises the engineering and design effort to a level supportive of a capital cost estimate of overall accuracy ±20%.

The high-level scope of plant facilities comprises of a crushing circuit, which receives ROM ore from the mining operation, a DMS plant and the various stockpiles for the concentrates and grits, as well as truck discharge bin for the coarse tailings stream. Support services and infrastructure facilities includes the TSF, WSD, overland piping, power supply and powerline relocation work, and all roads and buildings to support the mining operation.

The mining contractor mobilisation, site establishment and pre-production costs will be amortised across the first year of operation, in negotiation with the mining contractor, in order to minimise upfront capital cost. The impact of these deferred costs is incorporated in the financial modelling applying an interest rate of 7%.

Estimate Basis

The estimate has been presented in United States dollars currency as at Q2 2022. Prices obtained in other currencies has been converted to US$ using applicable exchange rates. Fluctuations in exchange rates from the date of quotation to the date of indent have not been taken into consideration.

The estimates have been set up in such a way as to facilitate a PFS level of detail. For this level of study, the estimate has been produced using budget quotations for major items and where required, in-house data, and is based on the engineered plant design and associated infrastructure and facilities described herein.

The capital cost estimate does not include for the following and is summarised in ***Table 22***:

- Corporate costs and associated company overheads
- Project financing costs
- GST, VAT, or other taxes or duties
- Sunk costs

Table 22: Capital cost summary, US$ ±20%

Area	US$
1. Construction Preliminaries & General	4,496,225
2. 3-Stage Crushing Facility	26,994,765
3. DMS Plant & Services	23,646,756
4. Infrastructure	19,198,194
5. Mining	1,462,185
6. Management Costs	13,817,535
7. Owners Cost	18,313,913
8. Working Capital	2,732,243
Sub Total	**110,661,817**
9. Contingency	14,206,513
Grand Total	**124,868,329**

12. Financial Analysis

A PFS financial model was developed for the purpose of evaluating the economics of the Project. Summary results from the financial model outputs are presented in tables within this section, including financial analysis, cash flow projections and sensitivities.

The main sensitivity factor in the financial analysis is the SC6 price forecast which was based on an average consensus pricing across financial institutions and independent price forecasts available in the public domain or through membership and listed in ***Table 23***. All costs are presented in current US Dollars.

Table 23: PFS Study SC6 consensus pricing FOB Ghana used for the 2025 through 2037 period.

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
PFS SC6 US$	**2,300**	**1,800**	**1,400**	**1,300**	**1,300**	**1,200**	**1,200**	**1,200**	**1,200**	**1,200**	**1,200**	**1,200**	**1,200**
Min US$	1,300	1,100	1,100	1,100	980	850	850	850	850	850	850	850	850
Mean US$	2,284	1,747	1,392	1,332	1,260	1,225	1,226	1,226	1,226	1,226	1,226	1,226	1,226
Max US$	3,525	2,725	2,100	1,809	1,614	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500

The Project is funded under a co-development agreement made with Piedmont Lithium Inc ("PLL") on 1 July 2021, where Piedmont has the right to earn up to 50% at the project level and 50% SC6 offtake at market rates by solely funding US$17m towards studies and exploration and US$70m towards mine capex. Piedmont also subscribed in Atlantic's shares, investing £11.52m (US$16.0m) to receive a 9.9% interest in the Company. Any cost overruns or cost savings for the development of the Project (i.e. where the development costs are more or less than the funding in the agreement) will be shared equally between the Company and PLL.

The funding for the Project has been included on the premise that all project development requirements will be funded by the PLL agreement, and any additional funding required by the company will be via cash or equity. Revenue was based on a consensus lithium selling price as stated in ***Table 23*** ("PFS SC6 US$" row) that averaged US$1,359/t over the LOM for SC6, FOB Ghana port of Takoradi (refer tables below).

As outlined above, operating costs for processing and administration were derived from estimates generated by budget quotations or benchmarking from similar operations and first principle estimates based on plant operating data. No funding for exploration work during operations was included.

Mining costs are based on the contractor mining RFQ process. The mining contractor mobilisation and site establishment costs are amortised over the first year of production, incurring interest of 7% in order to defer the capital cost in negotiation with the mining contractor.

Depreciation and amortisation have been expensed at the rates applicable for tax deductibility under the Ghana fiscal regime for mining companies.

The Project would be subject to standard Ghana corporate taxation arrangements for exploitation companies. The model provided for the inclusion of a corporate tax rate of 35% and royalties paid to the Government based on a percentage of the return from production.

A 5% royalty is payable to the Ghana government on sale of SC6. Additional royalties for the concessions are payable to one joint venture partner; 1% for LOM to the Ewoyaa, Abonko and Kaampakrom deposit JV partner, and an additional 1% that is capped at US$2m.

A cash flow model was prepared by ALL, and the results of the financial analysis summarised in ***Table 24***, ***Table 25*** and ***Table 26***.

Table 14: Cash Flow model inputs summary

Variable	Units	2.0Mtpa
Life of Mine	yrs	12.5
Waste Mined	kt	200,273
Ore Mined	kt	24,966
Strip Ratio, first 5 Years	W:O	5.2
Strip Ratio, LOM	W:O	8.0
LOM Average Resource Grade (Li_2O)	%	1.22%
LOM Average Resource Recovery	%	62.5%
% of P1 Material	%	83.0%
6% Spodumene Production, LOM	kt	3,181
LOM Average Product	ktpa	255
Annual estimated power consumption	MW	27,970
Capex	US$M	124.87

Table 25 provides a summary of the operating cash costs contained within the cash flow model.

Table 25: Operating cash costs summary LOM

LOM Variable	Units	2.0Mtpa
Mining Costs Total	US$M	801.9
Processing Costs Total	US$M	194.1
General & Admin Costs Total	US$M	71.6
Freight & Selling Costs Total	US$M	340.0
GET, NHIL, HRL, CDA Funds Contribution	US$M	30.2
Sub Total Operating Expenditure	**US$M**	**1,437.7**
Royalties (Government & NSR)	US$M	285.1
Rehabilitation Provision	US$M	27.0
Land Taxes & Fees	US$M	0.7
Corporate taxes paid	US$M	1,008.8
Import Duties, Non-mining Goods	US$M	4.2
Sustaining Capital Costs	US$M	83.0
Net Operating Costs	**US$M**	**2,846.5**

Table 26 provides the results of pre- and post-tax cash flows, NPV's and Internal Rate of Returns ("IRR") for the base case, using an annual average SC6 selling price of US$1,359/t FOB Ghana port. For annualised pricing assumptions refer to ***Table 23***.

Table 26: Cash Flow model key results

Variable	Units	2.0Mtpa
Lithium SC6 Concentrate Revenue	US$M	4,321
Revenue By-products	US$M	524
IRR, Post Tax	%	224%
C1 Cash Cost	US$/t	277.70
NPV (8%) Pre-Tax	US$M	1,999
NPV (8%) Post-Tax	US$M	1,328
EBITDA	US$M	3,095
Payback	Months	4.9
NPAT, LOM	US$M	1,873
NPAT / year average	US$M	150
Surplus Cashflow, Pre-Tax	US$M	3,008

Cash Flow Sensitivities

The Post-Tax Net Present Value ('NPV') sensitivity results are represented in ***Figure 19***.

Project cash flows are most sensitive to changes in concentrate selling price where a 10% change in price resulted in a 17.0% change to the Post-Tax NPV. This was closely followed by sensitivity to changes in recovery or grade at 15.4%.

Sensitivity adjustments of project expenses demonstrated that mining costs, which made up the largest portion of operating expenditure, resulted in the most significant movements in project NPV followed by processing, concentrate transport and was least sensitive to changes in capital cost.

The +/-25% sensitivity range over average LOM SC6 pricing shown in ***Figure 19*** below equates to an approximate US$1020 to US$1700/t price range.

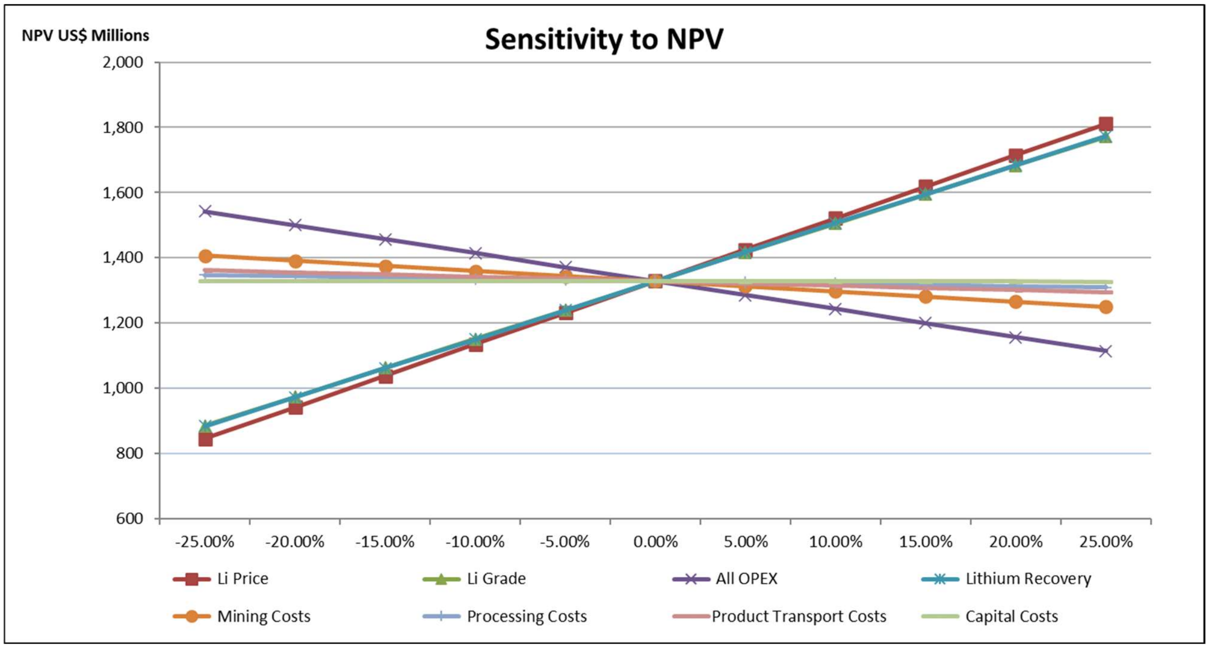

Figure 19: Cash flow sensitivities graph, NPV_8 basis

13. PFS Contributors

ALL engaged various experienced and specialist technical consultants to assist their project team in managing and coordinating the preparation of the PFS. Contributors to the PFS, and their areas of contribution, are listed in ***Table 27***.

Table 27: Pre-Feasibility Study contributors

Area	Contribution by	
Geology & Resources	Atlantic Lithium	
Mineral Resources	Ashmore Advisory	
Mine Geotechnical, Hydrology & hydrogeology	SRK Consulting Ghana & RSA	

Area	Contribution by	
Mine Engineering	Mining Focus Consultants	
Metallurgical Testwork	Trinol (supervision) and NAGROM (laboratory)	
Comminution Testwork	Orway Minerals Consultants	
Metallurgy & Crushing Assessment	DRA (South Africa)	
Site Geotechnical, TSF, WSD	Geocrest & Associates, REC Engineering	
ESIA Management	ESS	
ESIA Study	NEMAS Ghana	
Process Plant Engineering	DRA (South Africa)	
Power Supply	ECG Engineering	
Infrastructure	Geocrest, REC Engineering, DRA, Atlantic Lithium	
Project Implementation	DRA, Atlantic Lithium	
Operating Cost	DRA, Atlantic Lithium, ACC Logistics, Bolloré Africa, Glen Falloch Consulting	

Area	Contribution by	
Capital Costs	DRA, Atlantic Lithium, REC Engineering	
Risks and Opportunities	Atlantic Lithium, Zivvo Pty Ltd	Zivvo Pty Ltd
Financial Analysis, Zivvo Pty Ltd	Atlantic Lithium	

Glossary of Terms and Abbreviations

Assay	Measure of valuable mineral content using an accredited laboratory.
AISC	The All In Sustaining Cost (AISC) is a mining metric that estimates all direct and recurring costs required to mine a unit of ore.
Block Model	A three-dimensional structure into which parameters are interpolated during the resource estimation process.
C1 Cash Cost (C1)	represents the cost for mining, processing and administration after accounting for movements in inventory (predominantly ore stockpiles). It includes net proceeds from by-product credits, but excludes the cost of royalties and capital costs for exploration, mine development and plant and equipment.
Comminution	the reduction of solid materials from one average particle size to a smaller average particle size, by crushing, grinding, cutting, vibrating, or other processes.
Competent Person	A 'Competent Person' is a minerals industry professional who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a 'Recognised Professional Organisation' (RPO), as included in a list available on the JORC and ASX websites. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member. A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking. If the Competent Person is preparing documentation on Exploration Results, the relevant experience must be in exploration. If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources. If the Competent Person is estimating, or supervising the estimation of Ore Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Ore Reserves.
Concentrate	Ore concentrate, dressed ore or simply concentrate is the product generally produced by metal ore mines where the raw ore is usually crushed and/or ground to smaller particles in various comminution operations and gangue (waste) is removed, thus concentrating the metal component.
Core	a solid, cylindrical sample of rock typically produced by a rotating drill bit, but sometimes cut by percussive methods.

Cut-off grade	The lowest grade of mineralised material that qualifies as ore in a given deposit; rock of the lowest assay included in an ore estimate.
Deposit	An occurrence of economically interesting minerals.
Dip	the angle at which a bed, stratum, or vein is inclined from the horizontal, measured perpendicular to the strike and in the vertical plane.
DMS	Dense Medium Separation is an industrial scale technique used to separate particles of higher specific gravity from particles of lower specific gravity in the presence of an artificially manufactured slurry medium usually consisting of milled ferrosilicon and water. The process is often enhanced by pressure created by pumping the mixed slurry medium and ore particles through a cyclone separating device. The process is used widely in industry for the beneficiation of coal, iron ore, diamonds, lithium and industrial minerals.
Drillhole	technically, a circular hole drilled by forces applied percussively; loosely and commonly, the name applies to a circular hole drilled in any manner.
Drilling	the operation of making deep holes with a drill for prospecting, exploration, or valuation.
DSO	Direct Shipping Ore Fines fines are produced when fine material of around less than 1mm (can be 0.5mm to 2mm) in size is screened out before ore is processed in a gravity DMS plant, as this fine ore is generally too fine to respond to the DMS process. The fines so produced have a head grade of the naturally occurring ore and markets exist for this material without further processing at site. The material is referred to as Direct Shipping Ore Fines.
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation. EBITDA is net income (earnings) with interest, taxes, depreciation, and amortisation added back. EBITDA can be used to track and compare the underlying profitability of companies regardless of their depreciation assumptions or financing choices.
Exploration	The act of investigation for the location of undiscovered mineral deposits.
Geotechnical engineering	the study of the behaviour of soils under the influence of loading forces and soil-water interactions. This knowledge is applied to the design of foundations, pit walls, wate dumps, retaining walls, earth dams, clay liners, and geosynthetics for waste containment.
Grade	the relative quantity or the percentage of ore-mineral or metal content in an orebody.
FOB	FOB is a shipping term that stands for “free on board.” If a shipment is designated FOB (the seller's location or port), then as soon as the shipment of goods leaves the seller's warehouse or port, the seller records the sale as complete. The buyer owns the products en-route to its warehouse and must pay any delivery charges.
Free cash flow (FCF)	is the cash a company generates after taking into consideration cash outflows that support its operations and maintain its capital assets.
HLS	Heavy Liquid Separation is a simple sink/float laboratory technique that profiles particles in a crushed ore sample according to bands of specific gravity (SG). Synthetic liquids with SG’s ranging from 2.3 to 3.5 can be used to separate the ore into bands of SG. When particles are added to a liquid of a certain SG, particles with lower SG float and particles of higher SG sink – hence the term sink/float analysis is often referred to.
Hydrogeology	(hydro- meaning water, and -geology meaning the study of the Earth) is the area of geology that deals with the distribution and movement of groundwater in the soil and rocks of the Earth's crust (commonly in aquifers). The terms groundwater hydrology, geohydrology, and hydrogeology are often used interchangeably.

Hydrology	the study of the distribution and movement of water both on and below the Earth's surface, as well as the impact of human activity on water availability and conditions.
Indicated Mineral Resource	that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.
Inferred Mineral Resource	that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
IRR	Internal rate of return (IRR)is a financial metric used to measure the profitability of an investment that takes into account the time value of money. It indicates the annualised rate of return for a given investment—no matter how far into the future—and a given expected future cash flow. The internal rate of return (IRR) is the annual rate of growth that an investment is expected to generate and is used in financial analysis to estimate the profitability of potential investments.
JORC Code	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, Prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC").
Life of Mine	Life of Mine or "LOM" means the time in which, through the employment of the available capital, the ore reserves, or such reasonable extension of the ore reserves as conservative geological analysis may justify, will be extracted.
Measured Mineral Resource	that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.
Metallurgical	describing the science concerned with the production, purification and properties of metals and their applications.

Middlings	That part of the product of a washery, concentration, or preparation plant that is neither clean mineral product nor reject (tailings). It consists of fragments of ore mineral and gangue and is often sent back for crushing and/or retreatment.
Mineral Resource	a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories
Mineralisation	The process by which minerals are introduced into a rock. More generally, a term applied to accumulations of economic or related minerals in quantities ranging from weakly anomalous to economically recoverable.
Modifying Factors	considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
NPV	Net present value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in capital budgeting and investment planning to analyse the profitability of a projected investment or project. If the NPV of a project or investment is positive, it means its rate of return will be above the discount rate.
Ore	the naturally occurring material from which a mineral or minerals of economic value can be extracted profitably or to satisfy social or political objectives. The term is generally but not always used to refer to metalliferous material, and is often modified by the names of the valuable constituent.
Ore Reserves	is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.
P1/P2 Fresh/Trans	P1 and P2 type pegmatites as described and logged at the Ewoyaa lithium project, where P1 pegmatites are coarse grained (>20mm average spodumene crystal length) and P2 pegmatites are finer grained (<20mm average spodumene crystal length) and occur in an approximate 80% to 20% P1:P2 distribution in the mineral resource estimate. Fresh and Transitional ("Trans") refer to their degree of weathering where Fresh is un-weathered and Transitional is partially weathered.
Pre-Feasibility Study	The pre-feasibility is an early-stage analysis of a potential mining project. Conducted by a small team of consultants, the PFS is designed to provide company stakeholders with key information such as logistics, capital requirements, and key challenges; all needed to help guide the decision-making process
Recovery	proportion of valuable material obtained in the processing of an ore, often stated as a percentage of the material recovered compared with the total material present.
Run of Mine	the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralised zone of a lease area.
SC6	6% Li_2O lithium concentrate -A typical concentrate derived from spodumene lithium ore contains around 6% Li_2O. This has become the internationally accepted standard concentrate content and is referred to as SC6 for brevity.

Scoping Study	Scoping studies are an initial appraisal carried out early in the life of a resource project. They are based on initial drilling and informed assumptions, and commonly include an elementary mine plan. Scoping studies determine whether, and how much, further pre-development efforts are warranted.
Sighter test-work	When designing a metallurgical test programme on ores of unknown response characteristics, it is customary to do initial tests using test conditions that are known to work on other applications or similar ores, and to refine the test procedure from there. This is referred to as sighter test-work.
Strike	the course or bearing of the outcrop of an inclined bed, vein, or fault plane on a level surface; the direction of a horizontal line perpendicular to the direction of the dip.
Whittle Optimisation	the Four-X Whittle Optimisation process uses the Lerchs-Grossmann algorithm to determine the optimal shape for an open pit in three dimensions. Based on the economic input parameters selected it can define a pit outline that has the highest possible total value, subject to the required pit slopes.
Wireframe	three dimensional solids representing geological/mineralogical domains.

Abbreviations:

A11	Atlantic Lithium Limited (ASX code)
AC	Aircore drilling
AIM	a sub-market of the London Stock Exchange
ALL	Atlantic Lithium Limited (AIM code)
AN	ammonium nitrate
ASX	Australian Securities Exchange
BDV	Barari Developments Limited Ghana (CS134902018)
bn	Billion
Capex, CAPEX	capital cost estimate / expenditure
CCLP	Cape Coast Lithium Portfolio
CCM	compacted cubic metre
COG	cut-off grade
CP	Competent Person, as defined by the JORC Code
csv	comma separated values
Cwi	crushing work index
DC	diamond core (drilling method)
DD	diamond drilling
DDH	diamond drill hole
deg.	degrees
DFS	definitive feasibility study
DGPS	differential global positioning system
DMS	Dense media separation
dmt	dry metric tonne (i.e. exclusive of water content)
ELP, "the Project"	Ewoyaa Lithium Project
EPCM	engineering, procurement & construction management
ESIA	environmental and social impact assessment

EW	east-west
Excl	excluding
FEED	front-end engineering design
FEL	front end loader
FOB	Free on Board
G&A	general and administration
g/t	grams per metric tonne
GMR	Green Metal Resources Ghana (CS080712016)
H&SMP	health and safety management plan
Ha	hectares
HLS	heavy liquid separation
HSE	health, safety and environment
Incl	including
IRR	Internal rate of return (annualised)
IWL	integrated waste landform (TSF)
JORC	Australian Joint Ore Reserves Committee
JORC 2012	current JORC reporting standard
kg	kilograms
km	kilometres
KSA	kinematic stability analyses
kt	thousand metric tonnes
kVA	kilo-volt amperes
kWh	kilo-watt hours
LAN	local area network
LCM	loose cubic metre
LEA	limit equilibrium analysis
Li	chemical symbol for lithium
Li2O, Li_2O	lithium dioxide
LOM	Life of Mine
M	Million
m	metres
MFC	Mining Focus Consultants Pty Ltd
mg/L	milligrams per litre
MIF	measured, indicated and inferred
MMF	monthly management fee
MRE	mineral resource estimate (JORC 2012)
Mt	million metric tonnes
Mtpa, Mt/y	million tonnes per annum
Nagrom	Nagrom the Mineral Processor (testwork laboratory)
NAV	net asset value
Nc	critical speed
NPV	net present value
NS	north-south

NSR	net of smelter royalty
OH&S, OHS	occupational health and safety
OMC	Orway Mineral Consultants
Opex, OPEX	operating cost estimate / expenditure
P1	Material type 1 - characterised by coarse grained spodumene
P2	Material type 2 - characterised by medium grained spodumene
P80	percentage passing 80%
pf	power factor
PFS, "the Study"	this pre-feasibility study
PPE	personal protective equipment
ppm	parts per million
Project, "Ewoyaa"	Ewoyaa Lithium Project, Ghana
PSD	particle size distribution
QA	quality assurance
QC	quality control
RC	reverse circulation (drilling method)
REC	REC Engineering, Perth based TSF, geotechnical consultant
RL	reduced level
ROM	Run of mine
RQD	rock quality designation
S.G. or SG, SGs	specific gravity, specific gravities
SMU	selective mining unit
Spod	spodumene
Surpac	GEOVIA Surpac™ geology and mine planning software
t	metric tonne
t/m^3	tonnes per cubic metre
TSF	tailings storage facility
TVA	value added tax
UCF	undiscounted cashflow
UCS	uniaxial compressive strength
V	volt
Vol / GTD	volcanic / granitoid
w/w	weight percentage as fraction of total solution weight
w:o	waste to ore mine stripping ratio
WAN	wide area network
WBS	work breakdown structure
wmt	wet metric tonne (i.e. inclusive of water content)
WRD, WRD's	waste rock dump(s)
WSF, WSD	water storage facility / dam
$	United States dollars unless otherwise noted
~	symbol for "approximately"
µm	microns
3D	three dimensional

Appendix 1 - JORC Code (2012) Table 1, Sections 1, 2, 3 and 4

The following extract from the JORC Code 2012 Table 1 is provided for compliance with the Code requirements for the reporting of Ore Reserves.

'JORC Code 2012 Table 1' Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections).

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• RC drill holes were routinely sampled at 1m intervals with a nominal 3-6kg sub-sample split off for assay using a rig-mounted cone splitter at 1m intervals. • DD holes were quarter core sampled at 1m intervals or to geological contacts for geochemical analysis. • For assaying, splits from all prospective ore zones (i.e., logged pegmatites +/- interburden) were sent for assay. Outside of these zones, the splits were composited to 4m using a portable riffle splitter. • Holes without pegmatite were not assayed. • Approximately 5% of all samples submitted were standards and coarse blanks. Blanks were typically inserted with the interpreted ore zones after the drilling was completed. • Approximately 2.5% of samples submitted were duplicate samples collected after logging using a riffle splitter and sent to an umpire laboratory. This ensured zones of interest were duplicated and not missed during alternative routine splitting of the primary sample. • Prior to the December 2018 - SGS Tarkwa was used for sample preparation (PRP100) and subsequently forwarded to SGS Johannesburg for analysis; and later SGS Vancouver for analysis (ICP90A). • Post December 2018 to present – Intertek Tarkwa was used for sample preparation (SP02/SP12) and subsequently forwarded to Intertek Perth for analysis (FP6/MS/OES - 21 element combination Na_2O_2 fusion with combination OES/MS). • ALS Laboratory in Brisbane was used for the Company's initial due diligence work programmes and was selected as the umpire laboratory since Phase 1. ALS conducts ME-ICP89, with a Sodium Peroxide Fusion. Detection limits for lithium are 0.01-10%. Sodium Peroxide fusion is considered a "total" assay technique for lithium. In addition, 22 additional elements assayed with Na_2O_2 fusion, and combination MS/ICP analysis.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Five phases of drilling were undertaken at the Project using RC and DD techniques. All the RC drilling used face sampling hammers. • Phase 1 and 2 programmes used a 5.25-inch hammers while Phase 3 and 5 used a 5.75-inch hammer. • All DD holes were completed using PQ and HQ core from surface (85mm and 63.5mm). • All DD holes were drilled in conjunction with a Reflex ACT II tool; to provide an accurate determination of the bottom-of-hole orientation.

Criteria	JORC Code explanation	Commentary
		• All fresh core was orientated to allow for geological, structural and geotechnical logging by a Company geologist.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• A semi-quantitative estimate of sample recovery was completed for the vast majority of drilling. This involved weighing both the bulk samples and splits and calculating theoretical recoveries using assumed densities. Where samples were not weighed, qualitative descriptions of the sample size were recorded. Some sample loss was recorded in the collaring of the RC drill holes. • DD recoveries were measured and recorded. Recoveries in excess of 95.8% have been achieved for the DD drilling programme. Drill sample recovery and quality is adequate for the drilling technique employed. • The DD twin programme has identified a positive grade bias for iron in the RC compared to the DD results.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All drill sample intervals were geologically logged by Company geologists. • Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering using a standardised logging system that captured preliminary metallurgical domains. • All logging is qualitative, except for the systematic collection of magnetic susceptibility data which could be considered semi quantitative. • Strip logs have been generated for each drill hole to cross-check geochemical data with geological logging. • A small sample of washed RC drill material was retained in chip trays for future reference and validation of geological logging, and sample reject materials from the laboratory are stored at the Company's field office. • All drill holes have been logged and reviewed by Company technical staff. • The logging is of sufficient detail to support the current reporting of a Mineral Resource.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• RC samples were cone split at the drill rig. For interpreted waste zones the 1 or 2m rig splits were later composited using a riffle splitter into 4m composite samples. • DD core was cut with a core saw and selected half core samples dispatched to Nagrom Laboratory in Perth for preliminary metallurgical test work. • The other half of the core, including the bottom-of-hole orientation line, was retained for geological reference. • The remaining DD core was quarter cored for geochemical analysis. • Since December 2018, samples were submitted to Intertek Tarkwa (SP02/SP12) for sample preparation. Samples were weighed, dried and crushed to -2mm in a Boyd crusher with an 800-1,200g rotary split, producing a nominal 1,500g split crushed sample, which was subsequently pulverised in a LM2 ring mill. Samples were pulverised to a nominal 85% passing 75µm. All the preparation equipment was flushed with barren material prior to the commencement of the job. Coarse reject material was kept in the original bag. Lab sizing analysis was undertaken on a nominal 1:25 basis. Final pulverised samples (20g) were airfreighted to Intertek in Perth for assaying. • • The pulps were submitted for analysis by Sodium peroxide fusion (Nickel crucibles) and Hydrochloric acid to dissolve the melt. Analysed by Inductively Coupled Plasma Mass Spectrometry (FP6MS) / Inductively

Criteria	JORC Code explanation	Commentary
		Coupled Plasma Optical (Atomic) Emission Spectrometry (FP6/OE). The analytical suite consisted of Al, B, Ba, Be, Ca, Cs, Fe, K, Li, Mg, Mn, Nb, P, Rb, S, Si, Sn, Sr, Ta and Ti. • The vast majority of samples were drilled dry. Moisture content was logged qualitatively. All intersections of the water table were recorded in the database. • Field sample duplicates were taken to evaluate whether samples were representative and understand repeatability, with good repeatability. • Sample sizes and laboratory preparation techniques were appropriate and industry standard.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Analysis for lithium and a suite of other elements for Phase 1 drilling was undertaken at SGS Johannesburg / Vancouver by ICP-OES after Sodium Peroxide Fusion. Detection limits for lithium (10ppm – 100,000ppm). Sodium Peroxide fusion is considered a "total" assay technique for lithium. • Review of standards and blanks from the initial submission to Johannesburg identified failures (multiple standards reporting outside control limits). A decision was made to resubmit this batch and all subsequent batches to SGS Vancouver – a laboratory considered to have more experience with this method of analysis and sample type. • Results of analyses for field sample duplicates are consistent with the style of mineralisation and considered to be representative. Internal laboratory QAQC checks are reported by the laboratory, including sizing analysis to monitor preparation and internal laboratory QA/QC. These were reviewed and retained in the company drill hole database. • 155 samples were sent to an umpire laboratory (ALS) and/assayed using equivalent techniques, with results demonstrating good repeatability. • ALL's review of QAQC suggests the SGS Vancouver and Intertek Perth laboratories performed within acceptable limits. • No geophysical methods or hand-held XRF units have been used for determination of grades in the Mineral Resource.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections were visually field verified by company geologists and Shaun Searle of Ashmore during the 2019 site visit. • Drill hole data was compiled and digitally captured by Company geologists in the field. Where hand-written information was recorded, all hardcopy records were kept and archived after digitising. • Phase 1 and 2 drilling programmes were captured on paper or locked excel templates and migrated to an MS Access database and then into Datashed (industry standard drill hole database management software). The Phase 3 to 5 programmes were captured using LogChief which has inbuilt data validation protocols. All analytical results were transferred digitally and loaded into the database by a Datashed consultant. • The data was audited, and any discrepancies checked by the Company personnel before being updated in the database. • Twin DD holes were drilled to verify results of the RC drilling programmes. Results indicate that there is iron contamination in the RC drilling process. • Reported drill hole intercepts were compiled by the Chief Geologist. • Adjustments to the original assay data included converting Li ppm to Li_2O%.

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The collar locations were surveyed in WGS84 Zone 30 North using DGPS survey equipment, which is accurate to 0.11mm in both horizontal and vertical directions. All holes were surveyed by qualified surveyors. Once validated, the survey data was uploaded into Datashed. • RC drill holes were routinely down hole surveyed every 6m using a combination of EZ TRAC 1.5 (single shot) and Reflex Gyroscopic tools. • After the tenth drill hole, the survey method was changed to Reflex Gyro survey with 6m down hole data points measured during an end-of-hole survey. • All Phase 2 and 3 drill holes were surveyed initially using the Reflex Gyro tool, but later using the more efficient Reflex SPRINT tool. Phase 4 and 5 drill holes were surveyed using a Reflex SPRINT tool. • LiDAR survey Southern Mapping to produce rectified colour images and a digital terrain model (DTM) 32km2, Aircraft C206 aircraft-mounted LiDAR Riegl Q780 Camera Hasselblad H5Dc with 50mm Fixfocus lens. • Coordinate system: WGS84 UTM30N with accuracy to ±0.04. • The topographic survey and photo mosaic output from the survey is accurate to 20mm. • Locational accuracy at collar and down the drill hole is considered appropriate for resource estimation purposes.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The RC holes were initially drilled on 100m spaced sections and 50m hole spacings orientated at 300° or 330° with dips ranging from -50° to -60°. Planned hole orientations/dips were occasionally adjusted due to pad and/or access constraints. • Hole spacing was reduced to predominantly 40m spaced sections and 40m hole spacings. Holes are generally angled perpendicular to interpreted mineralisation orientations at the Project. • Samples were composited to 1m intervals prior to estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The drill line and drill hole orientation are oriented as close as practicable to perpendicular to the orientation of the general mineralised orientation. • Most of the drilling intersects the mineralisation at close to 90 degrees ensuring intersections are representative of true widths. It is possible that new geological interpretations and/or infill drilling requirements may result in changes to drill orientations on future programmes. • No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	• Samples were stored on site prior to road transportation by Company personnel to the SGS preparation laboratory. • With the change of laboratory to Intertek, samples were picked up by the contractor and transported to the sample preparation facility in Tarkwa.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Prior to the drilling programme, a third-party Project review was completed by an independent consultant experienced with the style of mineralisation. • In addition, Shaun Searle of Ashmore reviewed drilling and sampling procedures during the 2019 site visit and found that all procedures and practices conform to industry standards.

'JORC Code 2012 Table 1' Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Project cover two contiguous licences the Mankessim (RL 3/55) and Mankessim South (PL3/109) licence. • The Mankessim is a joint venture, with the license in the name of the joint venture party (Barari DV Ghana); Document number: 0853652-18. The Mineral Prospecting license and was renewed on the 27 July 2021 for a further three-year period, valid until 27 July 2024. • The Mankessim South is a wholly owned subsidiary of Green Metals Resources. Mineral Prospecting license and was renewed on the 19 Feb 2020 for a further three-year period, valid until 18th Feb 2023. • The tenement is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical trenching and mapping were completed by the Ghana Geological survey during the 1960's. But for some poorly referenced historical maps, none of the technical data from this work was located. Many of the historical trenches were located, cleaned and re-logged. No historical drilling was completed.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Pegmatite-hosted lithium deposits are the target for exploration. This style of mineralisation typically forms as dykes and sills intruding or in proximity to granite source rocks. • Surface geology within the Project area typically consists of sequences of staurolite and garnet-bearing pelitic schist and granite with lesser pegmatite and mafic intrusives. Outcrops are typically sparse and confined to ridge tops with colluvium and mottled laterite blanketing much of the undulating terrain making geological mapping challenging. The hills are often separated by broad, sandy drainages.

Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ◦ *easting and northing of the drill hole collar*
	  ◦ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ◦ *dip and azimuth of the hole*
	  ◦ *down hole length and interception depth*
	  ◦ *hole length*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No Exploration results are being reported.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	• No exploration results are being reported. • No metal equivalent values are being reported.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The drill line and drill hole orientation are oriented as close to 90° degrees to the orientation of the anticipated mineralised orientation as practicable. • The majority of the drilling intersects the mineralisation between 60° and 80° degrees.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All hole collars were surveyed WGS84 Zone 30 North grid using a differential GPS. All RC and DD holes were down-hole surveyed with a north-seeking gyroscopic tool.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions. • Geological observations are included in the report.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Follow up RC and DD drilling will be undertaken. • Further metallurgical test work may be required as the Project progresses through the study stages. • Drill spacing is currently considered adequate for the current level of interrogation of the Project.

‘JORC Code 2012 Table 1’ Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in sections 2, also apply to this section).

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The database has been systematically audited by ALL geologists. • All drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the database a report of the collar, down-hole survey, geology, and assay data are produced. This is then checked by an ALL geologist and any corrections are completed by the database manager.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was conducted by Shaun Searle of Ashmore during February 2019. Shaun inspected the deposit area, drill core/chips and outcrop. During this time, notes and photos were taken. Discussions were held with site personnel regarding drilling and sampling procedures. No major issues were encountered.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is considered to be good and is based on visual confirmation in outcrop and within drill hole intersections. • Geochemistry and geological logging have been used to assist identification of lithology and mineralisation. • The Project area lies within the Birimian Supergroup, a Proterozoic volcano-sedimentary basin located in Western Ghana. The Project area is underlain by three forms of metamorphosed schist; mica schist, staurolite schist and garnet schist. Several granitoids intrude the basin metasediments as small plugs. These granitoids range in composition from intermediate granodiorite (often medium grained) to felsic leucogranites (coarse to pegmatoidal grain size), sometimes in close association with pegmatite veins and bodies. Pegmatite intrusions generally occur as sub-vertical dykes with two dominant trends: either east-northeast or north-northeast and dip sub-vertically to moderately southeast to east-southeast. Thickness varies across the Project, with thinner mineralised units intersected at Abonko and Kaampakrom between 4 to 12m; and thicker units intersected at Ewoyaa Main between 30 to 60m. • Infill drilling has supported and refined the model and the current interpretation is considered robust. • Observations from the outcrop of mineralisation and host rocks; as well as infill drilling, confirm the geometry of the mineralisation. • Infill drilling has confirmed geological and grade continuity.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Project Mineral Resource area extends over a north-south strike length of 3,850m (from 577,380mN – 581,230mN), and includes the 210m vertical interval from 80mRL to -170mRL.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes*	• Using parameters derived from modelled variograms, Ordinary Kriging (“OK”) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Cape Coast Mineral Resource due to the geological control on mineralisation. The extrapolation of the lodes along strike and down-dip has been limited to a distance of 40m. Zones of extrapolation are classified as Inferred Mineral Resource.

Criteria	JORC Code explanation	Commentary
	appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• It is assumed that there are no by-products or deleterious elements as shown by metallurgical test work. • Li_2O (%), Ta (ppm), Fe (%), Nb (ppm), Sn (ppm), Cs (ppm), K (%), Al (%), Si (%), P (%) and S (ppm) were interpolated into the block model. • A Surpac block model was created to encompass the extents of the known mineralisation. The block model was rotated on a bearing of 30°, with block dimensions of 10m NS by 10m EW by 5m vertical with sub-cells of 2.5m by 2.5m by 1.25m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis and also in consideration of two predominant mineralisation orientations of 30° and 100° to 120°. • An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography derived from Domains 1, 2, 3, 4, 7 and 8. Up to three passes were used for each domain. First pass had a range of 50m, with a minimum of 8 samples. For the second pass, the range was extended to 100m, with a minimum of 4 samples. For the third pass, the range was extended to 200m, with a minimum of 1 or 2 samples. A maximum of 16 samples was used for each pass with a maximum of 4 samples per hole. • No assumptions were made on selective mining units. • Correlation analysis was conducted on the domains at Ewoyaa Main. It is evident that Li_2O has little correlation with any of the other elements presented in the table, apart from weak negative correlations with caesium and potassium. • The mineralisation was constrained by pegmatite geology wireframes and internal lithium bearing mineralisation wireframes prepared using a nominal 0.4% Li_2O cut-off grade and a minimum down-hole length of 3m. The wireframes were used as hard boundaries for the interpolation. • Statistical analysis was carried out on data from 72 mineralised domains. Following a review of the population histograms and log probability plots and noting the low coefficient of variation statistics, it was determined that the application of high grade cuts was not warranted. • Validation of the model included detailed visual validation, comparison of composite grades and block grades by northing and elevation and a nearest neighbour check estimate. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Statement of Mineral Resources has been constrained by the mineralisation solids, reported above the -190mRL with the wireframe cut-off at 0.4% and the reporting cut-off for the Mineral Resource at 0.5% Li2O. Whittle optimisations demonstrate reasonable prospects for eventual economic extraction above the -190mRL. • Preliminary metallurgical test work indicates that there are four main geometallurgical domains; weathered and fresh coarse grained spodumene bearing pegmatite (P1); and weathered and fresh medium grained spodumene bearing pegmatite (P2). From test work completed at a 6.3mm

Criteria	JORC Code explanation	Commentary
		crush, the P1 material produces a 6% Li_2O concentrate at approximately 70 to 85% recovery (average 75% recovery), whilst P2 material produces 5.5 to 6% Li_2O concentrate at approximately 35 to 65% recovery (average 47% recovery). From test work completed at a 10mm crush, the P1 material produces a 6% Li_2O concentrate at approximately 50 to 80% recovery (average 68% recovery for weathered and 70% for fresh), whilst P2 material produces 5.5 to 6% Li_2O concentrate at approximately 7 to 30% recovery (average 20% recovery with middlings containing ~60% of the lithium which after finer crushing to 6.3mm is expected that 50% of this will be recovered giving an overall recovery of 50%). • Further geological, geotechnical, engineering and metallurgical studies are recommended to further define the lithium mineralisation and marketable products.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Ashmore has assumed that the deposit could be mined using open pit mining techniques. • A high-level Whittle optimisation of the Mineral Resource supports this view.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Preliminary metallurgical test work has been conducted on the Cape Coast material types. Test work indicates that there are four main geometallurgical material types in occurrence at the Project, with their relative abundances, concentrate grades and recoveries shown below. • The PFS recoveries for P1 and P2 materials were based on HLS and DMS 250 test results and on calculation of assumed additional Lithium recovery from middlings. • Recoveries for P1 material into primary concentrate at a 10mm crush were 50-80% from the HLS test work with an average 68% recovery for weathered and 70% for the fresh used for the PFS before discounting. • A P2 recovery of 50% was used for weathered and fresh for the purpose of the PFS study. In the Scoping study, HLS tests on P2 weathered and fresh material at a 6.3mm crush size gave recoveries of 46-61%. In the PFS testing, after the re-classification of a number of composites, it transpired that a smaller number of P2 samples were tested – only 12 out of 64. Hence the data for P2 was minimal. • Recoveries of P2 to primary concentrates at 10mm crush size ranged from 7-30% and averaged 20%. The middlings contained ~60% of the lithium and it is expected that after finer crushing (as was done in the Scoping study), at least 50% of this will be recovered giving an overall recovery of 50% before discounting. No samples high in P2 content have been processed through the larger scale DMS100 or DMS 250 plant as yet, and this will be conducted during the next study phase.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Geomet</td><td>Tonnage
Mt</td><td>Weathered
Li_2O
%</td><td>Rec
%</td><td>Conc.
Li_2O (%)</td></tr>
<tr><td>P1</td><td>1.7</td><td>1.13</td><td>68</td><td>6.0</td></tr>
<tr><td>P2</td><td>0.3</td><td>1.05</td><td>50</td><td>6.0</td></tr>
<tr><td>Sub-Total</td><td>2.0</td><td>1.12</td><td></td><td></td></tr>
<tr><td>Geomet</td><td>Tonnage
Mt</td><td>Primary/fresh
Li_2O
%</td><td>Rec
%</td><td>Conc.
Li_2O (%)</td></tr>
<tr><td>P1</td><td>23.5</td><td>1.30</td><td>70</td><td>6.0</td></tr>
<tr><td>P2</td><td>4.7</td><td>1.11</td><td>50</td><td>5.5</td></tr>
<tr><td>Sub-Total</td><td>28.1</td><td>1.27</td><td></td><td></td></tr>
<tr><td>Total</td><td>30.1</td><td>1.26</td><td>-</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>Environmental factors or assumptions</td><td>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</td><td>No assumptions have been made regarding environmental factors. ALL will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Waste dumps have been designed to minimise impacts to communities and the environment where possible and have been designed to maximum heights not exceeding surrounding topographic highs.
Tailings storage facility has been designed as an intra waste facility to minimise land competition and maximise stability.</td></tr>
<tr><td>Bulk density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>Bulk density measurements were completed on selected intervals of diamond core drilled at the deposit. The measurements were conducted at the Cape Coast core processing facility using the water immersion/Archimedes method. The weathered samples were coated in paraffin wax to account for porosity of the weathered samples.
A total of 9,725 measurements were conducted on the Cape Coast mineralisation, with samples obtained from oxide, transitional and fresh material.
Bulk densities ranging between 1.7t/m^3 and 2.78t/m^3 were assigned in the block model dependent on lithology, mineralisation and weathering.</td></tr>
<tr><td>Classification</td><td>The basis for the classification of the Mineral Resources into varying confidence categories.
Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
Whether the result appropriately reflects the Competent Person's view of the deposit.</td><td>The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Cape Coast Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced RC and DD drilling of less than 40m by 40m, and where the continuity and predictability of the lode positions was good. In addition, Indicated Mineral Resource was confined to the fresh rock. The Inferred Mineral Resource was assigned to transitional material, areas where drill hole spacing was greater than 40m by 40m, where small isolated.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The geometry and continuity have been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The data quality is good, and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. • The Mineral Resource statement relates to global estimates of tonnes and grade. • No historical mining has occurred; therefore, reconciliation could not be conducted.

'JORC Code 2012 Table 1' Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section).

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Refer to Section 3. The Ore Reserve estimate is based on the Mineral Resource determined as of 23 March 2022. • The Mineral Resources are inclusive of the Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person for the Ore Reserves, Mr Harry Warries, has not visited the site. • Due to the current global Covid-19 pandemic no site visit was undertaken. However, the Project is a greenfields project with no existing infrastructure and Shaun Searle of Ashmore who carried out the independent resource estimate undertook a site visit during February 2019 and he inspected the deposit area. As such, a site visit was not deemed to be necessary.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• A Prefeasibility study (PFS) was completed by Atlantic Lithium Limited and this Ore Reserve Statement is a result of the PFS. The PFS was undertaken by a team of industry professionals as listed below. o Resource Estimate — Ashmore Advisory Pty Ltd o Mine Engineering — Mining Focus Consultants Pty Ltd o Geotechnical investigation — SRK Consulting Ghana o Metallurgy and Processing — DRA Sth Africa, Trinol Pty Ltd, Nagrom o Hydrogeology — SRK Consulting South Africa & Ghana o General site infrastructure — Geocrest, Resource Engineering Consultants (REC) o Tailings storage facility — Geocrest & REC o Legal tenure — Atlantic Lithium Limited o Social and Environmental — NEMAS Consult Limited and Environmental and Social Sustainability (ESS) o Market Research — Atlantic Lithium Limited o Financial Modelling — Atlantic Lithium Limited
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A cut-off of 0.4% Li_2O was adopted based on the adopted wireframe cut-off of 0.4% and the reporting cut-off for the Mineral Resource of 0.5% Li_2O, material type and the economic parameters determined for the Project.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	• It is proposed to mine the resource utilising conventional open pit mining methods. • Conversion of Mineral Resources to Ore Reserves has been by the application of appropriate mining factors and assumptions based on the prefeasibility study, including geotechnical investigations. • A 5% mining dilution and a 97% mining recovery was estimated. • Pit optimisations were completed the results of which were used to identify the final pit limits. • The geotechnical parameters were developed by a specialist geotechnical consultant. • The mine plan was based on Indicated Resources and Inferred Resources with 24.5% of Inferred Resources included. This Inferred Resource is not considered material to

Criteria	JORC Code Explanation	Commentary
	• *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	the value of the Project and is not included as part of the Ore Reserve. The mine plan incorporates a three to five month mining ramp-up, with steady state production of 2.0Mtpa of mill feed. • A minimum cutback mining width of 20m was adopted. • The primary infrastructure required for the development of the Project are listed below: o General administration and services infrastructure. o General mining facilities. o Process plant o Tailings storage facility
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The proposed metallurgical process incorporates well-tested technology and utilises conventional dense media separation techniques. Processing will be conducted in a newly constructed plant adjacent to the mining operations. • The metallurgical test work to date includes 17 composites (Scoping Study) and 64 composites (PFS study) samples representing each of the identified deposits, prepared for HLS testing and selected composites were used for the measurement of physical properties. Bulk composites from each of the main pits (Ewoyaa Starter, Ewoyaa Main and Anokyi) were tested at an advanced level in a DMS 100 for Scoping Study and DMS250 for PFS study pilot plant. • The metallurgical test work indicated that, based on the processing flow chart adopted, the process plant will produce processing recoveries of around 70% for P1 fresh material and around 50% for P2 material, before processing dilution and discounting of 4% utilised in the financial model.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• The Environmental and Social Impact Assessment (ESIA), Resettlement Action Plan (RAP) and Traffic Impact Assessment (TIA) required under Ghanaian regulations, is progressing and is being undertaken by NEMAS Consult Limited, with support and oversight by the ESS Group. • Sulphur assays have been determined for more than 25,600 resource samples with results ranging from 250ppm to a maximum of 13,700 ppm with a mean of 845ppm. Results are low therefore unlikely to generate any significant acid mine drainage • Process plant tails and products are considered inert with no trace associated by-product metals or acid rock generating sulphide. • Waste rock dumps contain no trace acid rock generating sulphides and have been designed to minimise discharge into the environment in addition to downstream surface and ground water monitoring sites, which are being monitored long-term for this. • The Tailings storage facility (TSF) is designed as an integrated waste landform TSF to minimise project footprint and to design a more stable TSF structure within an area of limited available flat ground for tailings storage, within an overall low-volume tailings generating project given the DMS only process flow-sheet. • Baseline environmental and heritage studies have been conducted and environmental licensing is not currently identified to pose a restriction to the planned activities.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The Project is located approximately 100km southwest of Accra, the capital of Ghana, West Africa. • The process plant and the Project's supporting infrastructure has been developed through studies by engineering service providers as listed under the Study Status criterion. Works have included 'modelling' of plant availability, plant throughput, tailings

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		storage facility and water consumption with subsequent production of sufficient drawings to enable development of detail estimates including forecasts of consumable consumptions such as DMS plant reagents, maintenance consumables and power. First principle estimates have derived labour levels for project construction and on-going operation. • Water supply for the process will be sourced from a combination of pit dewatering and the nearby Agege Dam for makeup water. • A camp site will not be established in proximity to the mine site and all staff will be accommodated in hotels and housing local to the mine area. Workshops, offices, and warehouse is planned adjacent to the mining and processing operations as required. Power supply to the operation will be from the local electricity grid. • Potable water will be sourced from a potable water borehole with a suitable water treatment processing plant for drinking water. • Labour is expected to be sourced locally within Ghana and proximal to the project site in particular. Skilled labour is more likely to be sourced from Accra or Takoradi with minimal expatriate roles defined during construction, plant commissioning and early years of production, after which an all-Ghanaian workforce is envisioned.

Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.*
	• *The methodology used to estimate operating costs.*
	• *Allowances made for the content of deleterious elements.*
	• *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.*
	• *The source of exchange rates used in the study.*
	• *Derivation of transportation charges.*
	• *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*
	• *The allowances made for royalties payable, both Government and private.*
		• The capital and operating cost estimates are commensurate with a prefeasibility level study and were estimated by the study contributors as listed under the Study Status criteria discussed above. The capital cost estimate has been developed through the collation of a number of first principle estimates completed by the various Study contributors on completion of sufficient design works to provide bills of materials to the estimators, quotations from equipment providers and contracting companies and estimates carried out directly by the owner's team. The operational cost estimate was developed on a 'first principle basis', derived from base data provided by Atlantic Lithium and the Study contributors.
		• Contract mining was adopted as the basis of the Project.
		• The estimated capital costs for the Project are $124.8M as summarised below.
		  o Pre-production mining & owners $19.8M
		  o Processing $55.1M
		  o Utilities and Infrastructure $19.2M
		  o Indirects -EPCM and working capex $16.5M
		  -Contingency $14.2M
		• The mining costs were estimated at $3.56/t mined.
		• The estimated process operating costs, general and administration costs, for the Project are $10.64/t of mill feed.
		• Average products selling and transport cost of $30.78/t produced.
		• A 5% government royalty was applied, as well as a 1% third party royalty.
		• No deleterious elements have been identified for the Project.
		• All costs have been estimated in United States of America dollars.
		• Selling costs have been estimated for Spodumene concentrate, including royalties and transport.

Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	• The project economics have been modelled on a long-term annualised Spodumene concentrate price of $1,359/t.

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	• *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• The market for lithium is robust and a long-term metals price was developed from published forecasts from multiple sources. • Supply and demand are not considered a material factor for the spodumene market and, as such not relevant to the Ore Reserve calculations.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The financial evaluation undertaken as part of the Study indicated a positive net present value (NPV) at an 8% discount rate. • Sensitivity analysis indicated that a negative 25% change in product price, foreign exchange rate, 25% increase in overall operating cost or 25% increase in capital cost still resulted in a positive NPV. • The All-In-Sustaining Cost (AISC) margin is estimated to be greater than 60% which indicates robust economic performance of the project. • The Project is funded under a co-development agreement with Piedmont Lithium Inc ("PLL") on 1 July 2021, where Piedmont has the right to earn up to 50% at the project level and 50% SC6 offtake at market rates by solely funding US$17m towards studies and exploration and US$70m towards mine capex. Any cost overruns or cost savings for the development of the Project (i.e. where the development costs are more or less than the funding in the agreement) will be shared equally between the Company and PLL.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• The project managers are in liaison with the state government and engagement with key stakeholders is in place. • Baseline heritage surveys have been conducted for the property and sites of cultural significance documented including shrines which have previously been relocated with the community's assistance for exploration activities. Future heritage sites requiring relocation will be managed accordingly. • The community has been actively engaged throughout the exploration and resource evaluation stages with ongoing community engagement meetings, local employment from within the affected communities and a community development programme initiated. • The project based on its footprint does not envisage the requirement to relocate villages but will require to relocate individual households impacted by the proposed project design.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of*	• No significant (high) naturally occurring risks were identified during a whole of project risk assessment. The environment is stable with a long history of productive mining operations that have not been affected by naturally occurring events • ALLs tenure is in good standing with all legal obligations met. Regular meetings with state and federal Government agencies occur for the purposes of discussing required approvals and facilitating meetings with other stakeholders. • There are reasonable grounds to expect that future agreements and Government approvals will be granted and maintained within the necessary timeframes for successful implementation of the project.

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	any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Probable Ore Reserves were declared based on the Indicated Mineral Resources only contained within the pit designs that was developed for the Project. The financial analysis showed that the Project is economically viable and the risk analysis did not identify any insurmountable risks.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No external audits or reviews of the Ore Reserve estimates have been undertaken.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The relative accuracy and confidence of the Ore Reserve estimate is inherent in the Ore Reserve Classification. • The statement relates to global estimates. • No mine production data is available at this stage for reconciliation and/or comparative purposes. • Factors that may affect the global tonnages and the associated grades, as well as the quantity of concentrate produced include: o Accuracy of the Mineral Resource estimate o Mining dilution o Mining recovery o P1 / P2 categorisation o Process plant performance

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