



LITHIUM PEGMATITE DISCOVERY IN GHANA

Maiden Mineral Resource Estimate JORC 2012

14.5Mt @ 1.31% Li₂O (Inferred & Indicated)

4.5Mt @ 1.39% Li₂O (Indicated - Starter Pit)

Significant Exploration Upside

Robust Scoping Study

Post Tax NPV₈ of US\$345M



Africa Day 4 Feb 2021
Vincent Mascolo CEO

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Information in this report relating to the exploration results is based on data reviewed by Mr Lennard Kolff (MEcon. Geol., BSc. Hons ARSM), Chief Geologist of the Company. Mr Kolff is a Member of the Australian Institute of Geoscientists (AIG) who has in excess of 20 years’ experience in mineral exploration and is a Qualified Person under the AIM Rules. Mr Kolff consents to the inclusion of the information in the form and context in which it appears.

The information in this announcement that relates to metallurgical results is based on information compiled by Mr Noel O’Brien, Director of Trinol Pty. Limited. Mr O’Brien is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code). Mr O’Brien consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

CORPORATE SNAPSHOT

Capital Structure

LSE AIM : IRR

Issued Capital 418.9m

Options & Warrants 70.42m

- 50.42m @ 12p – Expire Jun 2022
- 9m @ 60p – Expire Sept 2021
- 11m @ 90p – Expire Sept 2021

Performance Rights 12.1m

Fully-diluted share capital 501.5m

Market Capitalisation (26p) £109m

Cash Balance (as at 30 June 2020) US\$5.1m

Directors & Management

Neil Herbert
Non-Executive Chairman

Vincent Mascolo
Managing Director & CEO

Stuart Crow
Non-Executive Director

Nicholas Mather
Non-Executive Director

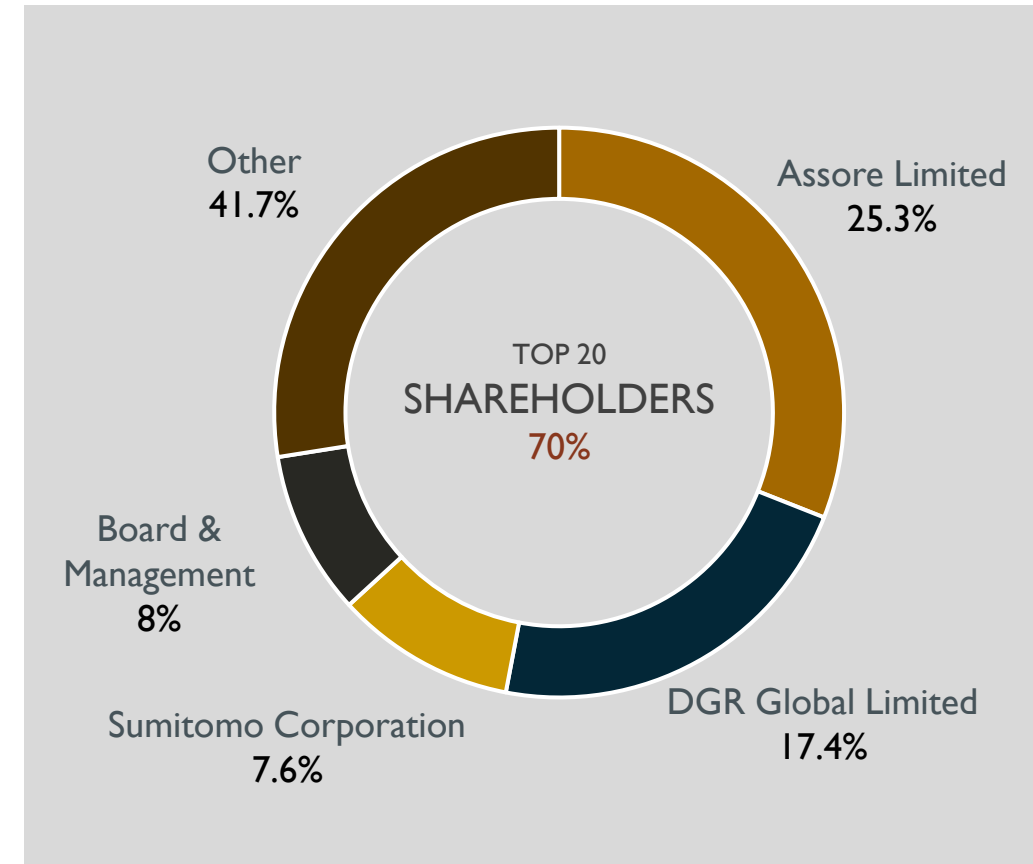
Christelle Van Der Merwe
Non-Executive Director

Kieran Daly
Non-Executive Director

Teddy Miyawaki
Non-Executive Director

Len Kolff
Chief Operating Officer

Major Shareholders



AFRICAN LITHIUM FOOTPRINT

GHANA
Lithium

COTE D'IVOIRE
Lithium

ONGOING REVIEW OF OPPORTUNITIES



GEODRILL

US\$4M DRILLING FOR
EQUITY PROGRAMME

POLE POSITION TO SERVICE EUROPEAN AND US MARKETS

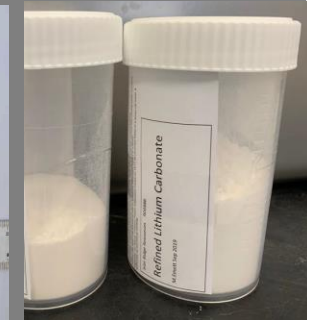


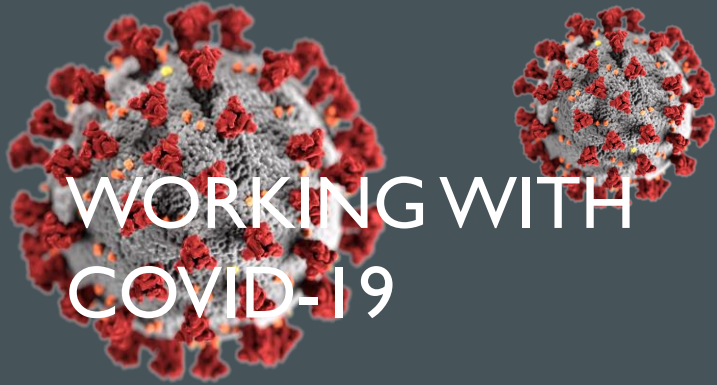
SCOPING STUDY SUPPORTS BUSINESS CASE

- 2.0 Mtpa production operation
- 8-year LOM operation, producing an average 295,000tpa of SC6% Li₂O
- Payback < 1 year with significant exploration upside
- Drilling advancing to extend mine life > 10 years

STRONG FUNAMENTALS

- High-grade resource & coarse spodumene
- Conventional mining methods
- Simple process flow-sheet via DMS
- Proven premium concentrate
- 1 km from highway, 110km to deep-sea port, adjacent hydro-electric powerlines
- 1st quartile cash costs with low carbon footprint
- Strong ESG content; pro-mining jurisdiction





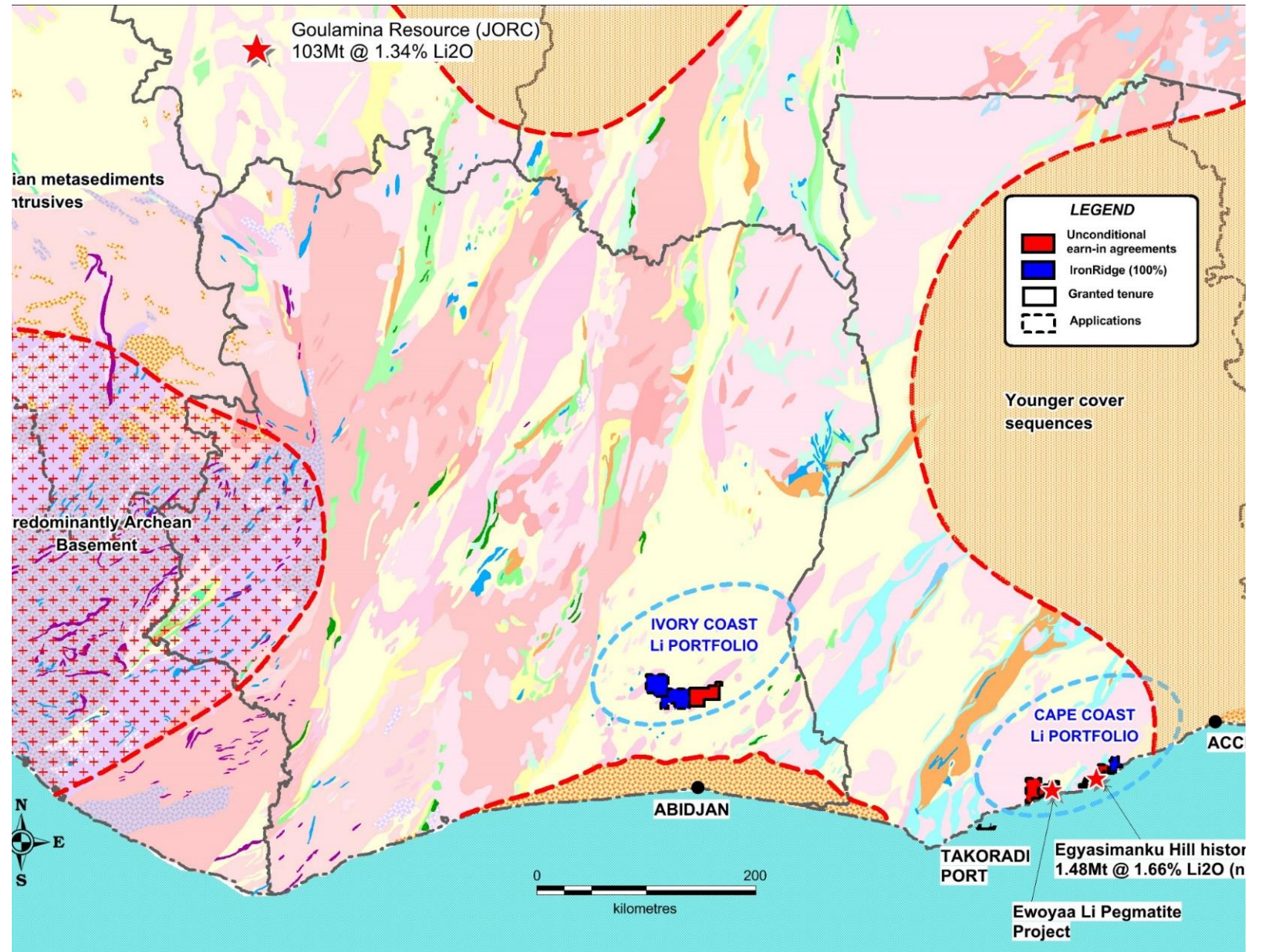
- COVID-19 Management Plan implemented at all operational sites
- Committed to ensuring the safety and wellbeing of all employees and local communities
- 100% national teams on site and operating
- Real-time remote support from senior expat staff in similar time-zones
- Liaising closely with communities

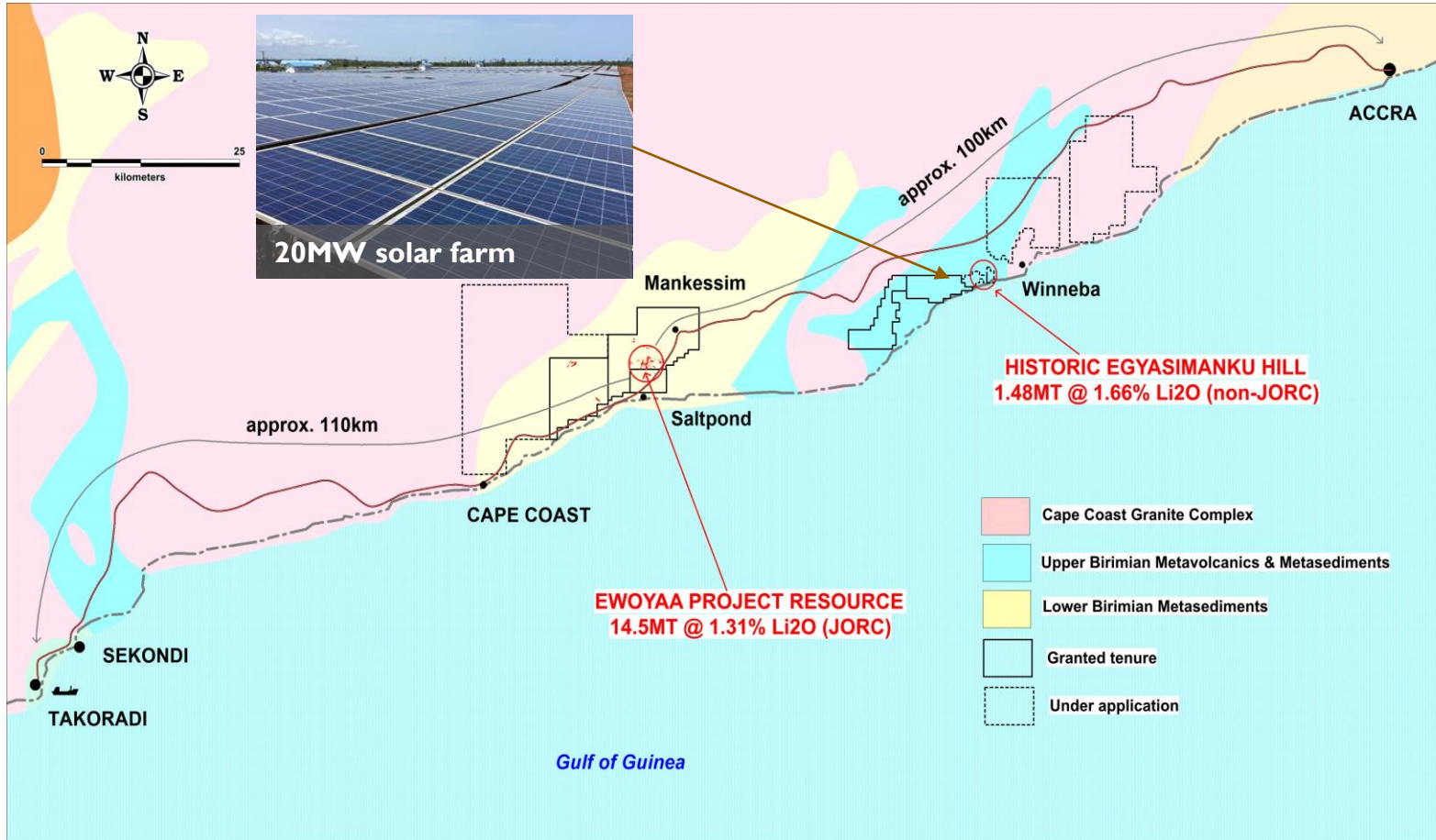


Tool-box meeting pre-drilling at Zaranou

WEST AFRICA; NEW LITHIUM FRONTIER

- Proven big, high-grade Lithium spodumene pegmatites
- Significant globally
- Historical gold focus in the Birimian, yet highly prospective for Lithium too
- 684km² secured in Ghana
- 1,172km² secured in Côte d'Ivoire



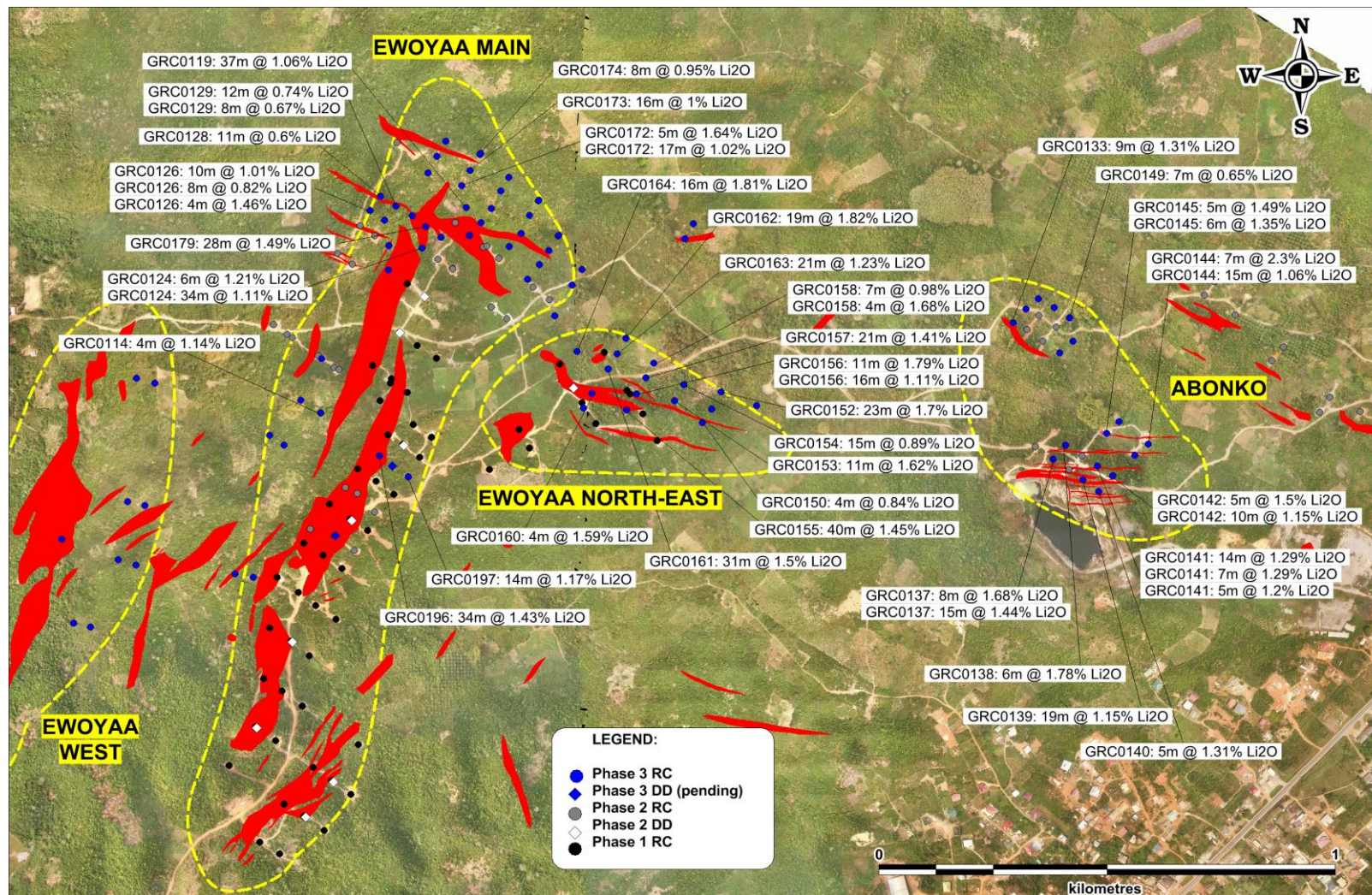


View looking north over Ewoyaa project area

CAPE COAST LITHIUM PORTFOLIO (80%-100%)

- 684km² land package secured via earn-in & application
- Within 110km of Takoradi port and 100km of Accra
- Coarse spodumene dominant pegmatites
- 27,000m of RC and DD drilling completed to date
- Additional Be, Cs, Sn potential

EWOPYAA DISCOVERY: HIGH-GRADE DRILLING RESULTS



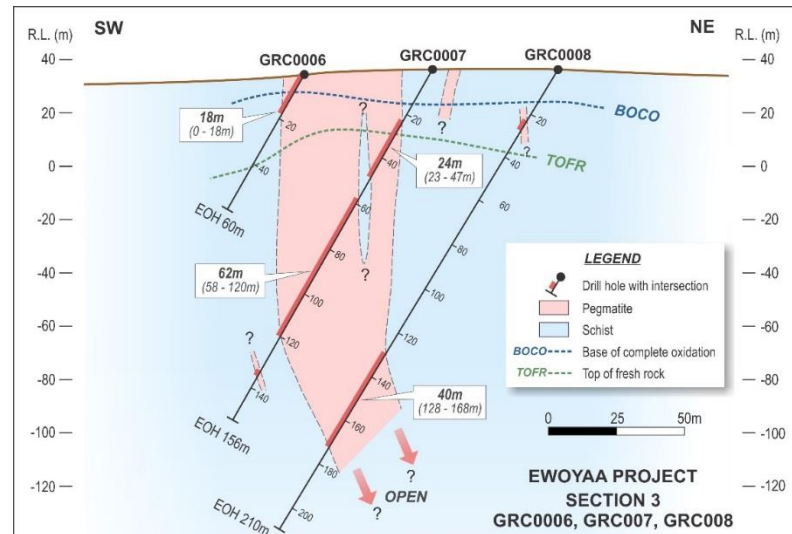
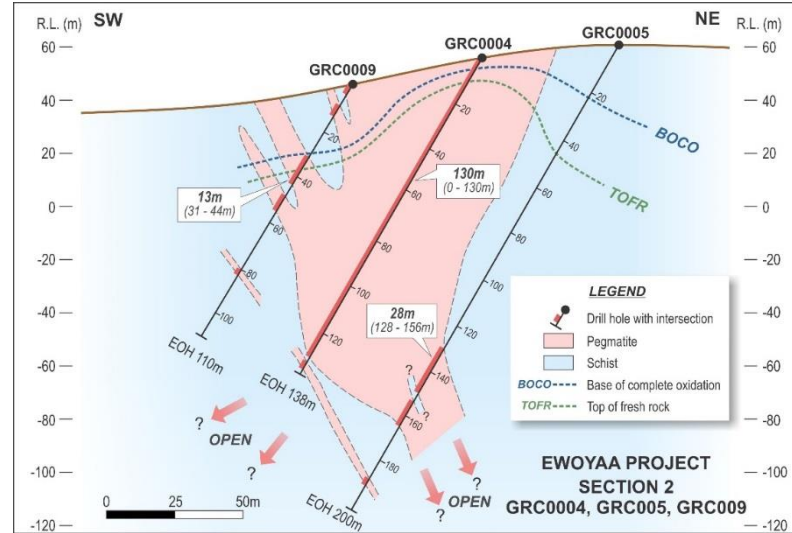
Highlight drill intersections at a 0.5% Li₂O cut-off & max 10m - Phase 1, or 4m - Phase 2 internal dilution

- **128m @ 1.21% Li₂O** from 3m incl.
 - 70m @ 1.53%
 - 16m @ 1.36%
- **111m @ 1.35% Li₂O** from 37m incl.
 - 65m @ 1.58%
 - 20m @ 1.51%
- **80m @ 1.52% Li₂O** from surface incl.
 - 22m @ 1.76%
 - 20m @ 1.51%
- **72m @ 1.27% Li₂O** from 24m incl.
 - 56m @ 1.5%
 - 38m @ 1.65%
- **68m @ 1.31% Li₂O** from 45m incl.
 - 22m @ 1.76%
 - 6m @ 1.81%
- **56m @ 1.71% Li₂O** from 48m incl.
 - 16m @ 1.83%
 - 13m @ 1.9%

COARSE SPODUMENE – BROAD WIDTHS



Coarse spodumene in outcrop



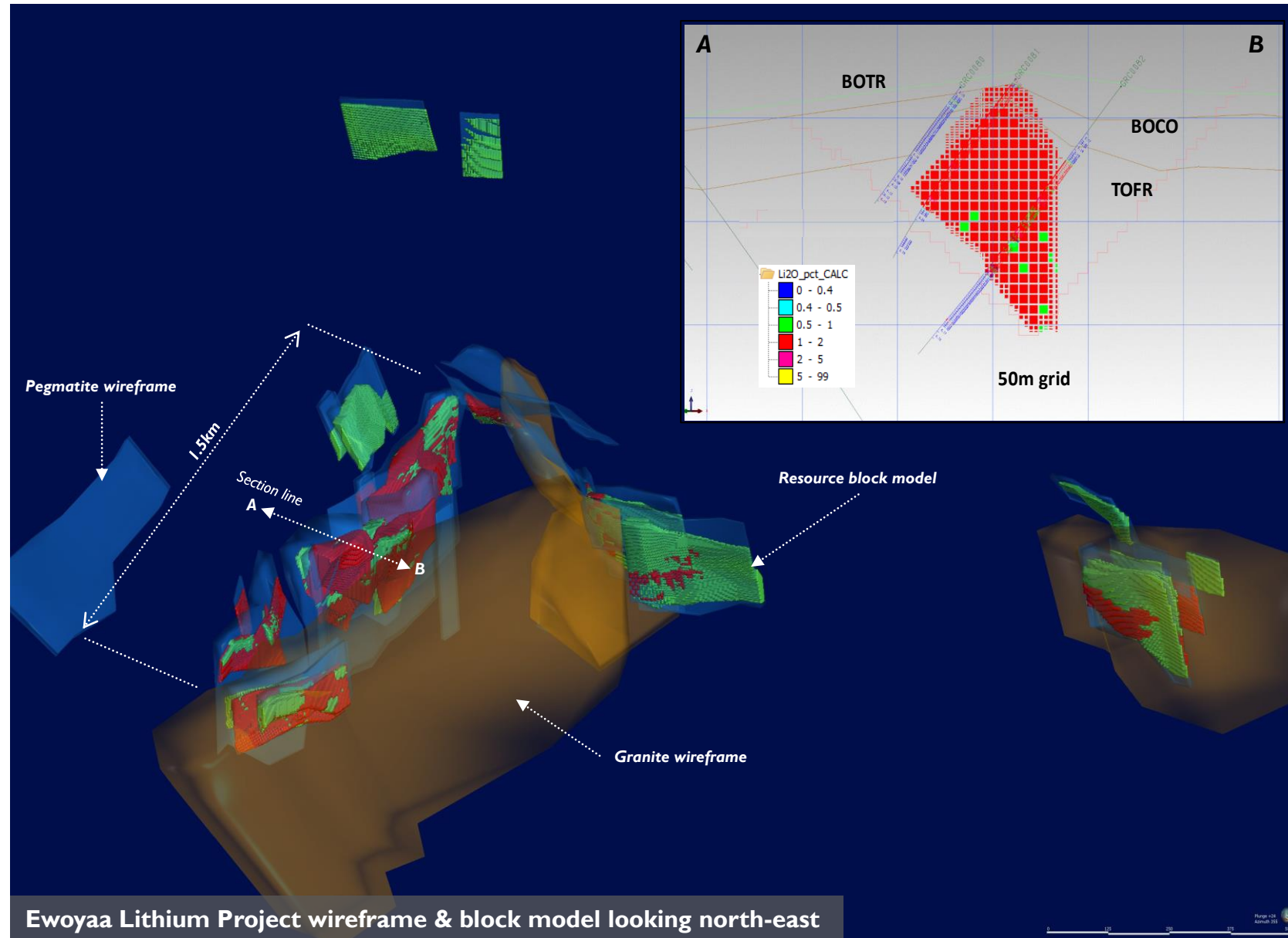
Coarse spodumene pegmatite drill core

MAIDEN MINERAL RESOURCE ESTIMATE (JORC 2012)

- 14.5Mt at 1.31% Li₂O in Inferred and Indicated category
- Includes 4.5Mt at 1.39% Li₂O in Indicated category

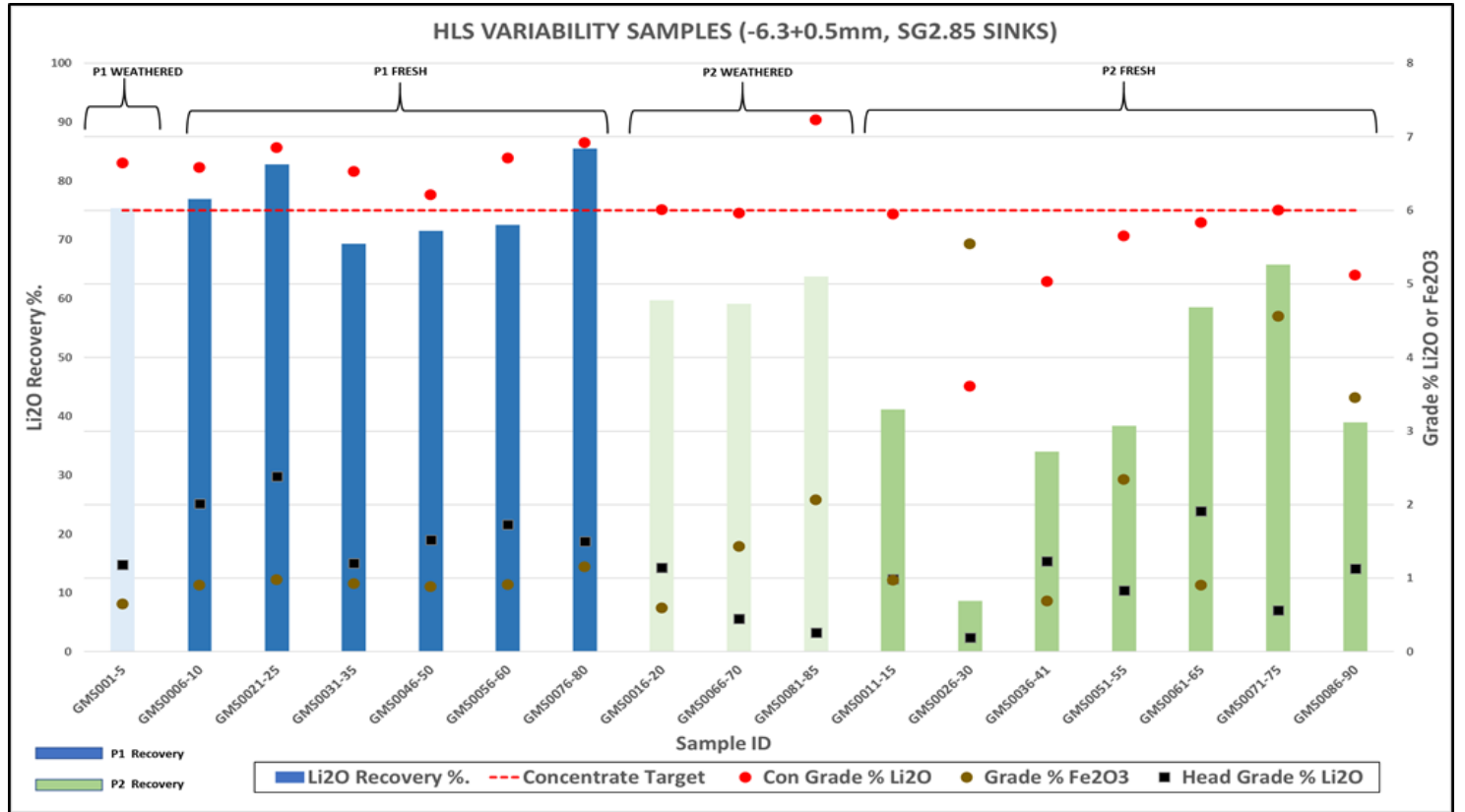


RC drilling at the project site



SIMPLE METALLURGY - PREMIUM PRODUCT SC6%

- Course spodumene dominant lithium mineral
- >6% spodumene concentrate at 6.3mm crush
- HLS recoveries up to 85%
- Low contaminants; <1% Fe₂O₃, <3% combined Na₂O & K₂O
- Simple gravity process flow sheet
- No flotation required
- Low capital intensity implied



RESULTS REPLICATED AT PILOT SCALE USING DMS

- 54kg bulk sample
- DMS100 cyclone testwork
- 6.29% spodumene concentrate at 6.3mm crush
- Very low contaminants
- Battery grade Li carbonate and Li hydroxide conversion successfully completed at ANSTO



Spodumene concentrate; 2cm field of view



99.92% Refined Lithium Carbonate

LOCATION, LOCATION, LOCATION

Sets us apart from our peers:

- Product haulage – only 110km from the deep-sea port of Takoradi.
- Power generation – proximity to existing operational hydroelectric power in the region.
- Shipping distance – close proximity to Europe and the US.





EXCEPTIONAL LOGISTICS – SEALED ROAD

- Sealed bitumen road within 1km of deposit footprint
- 110km from project footprint to Takoradi port



EXCEPTIONAL LOGISTICS – TAKORADI PORT

- Takoradi Port currently exports 3Mt of Mn and approx. 1Mt Bx per year from existing facilities
- Port being re-developed as a major West African oil, gas and bulk minerals hub



EXCEPTIONAL LOGISTICS – GRID POWER

- Grid power adjacent to deposit footprint
- Hydro power option
- 20MW solar plant (capacity to 40MW) adjacent to Egyasimanku Hill deposit

NATIONAL INTERCONNECTED TRANSMISSION SYSTEM OF GHANA

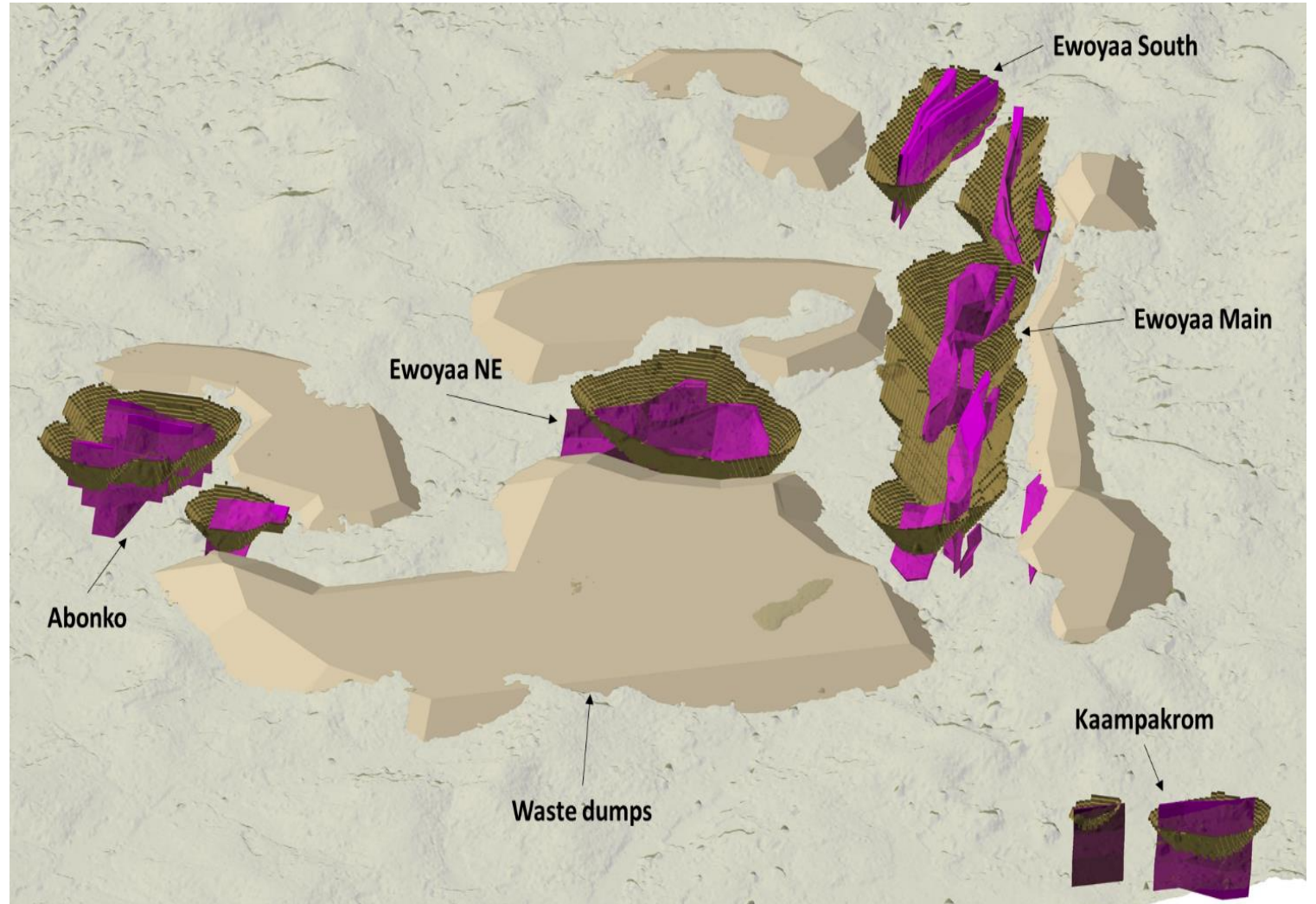


HYDRO POWER OPTION – GREEN ENERGY LITHIUM

- Akosombo Dam 1.038GW in 2005
- Ghana 1.58 GW of hydro capacity installed 2017

FUNDAMENTALS SUPPORT ROBUST SCOPING STUDY

Base Case	2Mtpa ROM
NPV8	US \$345M (post tax)
IRR	125%
Payback	< 1 year
Mine life	8 years
Average LOM Opex (FOB) Ghana	US\$247/t
Annual Production	295,000tpa of SC6%
Capex	US\$68M
EBITDA	US\$105M per annum
Revenue LOM	US\$1.55B

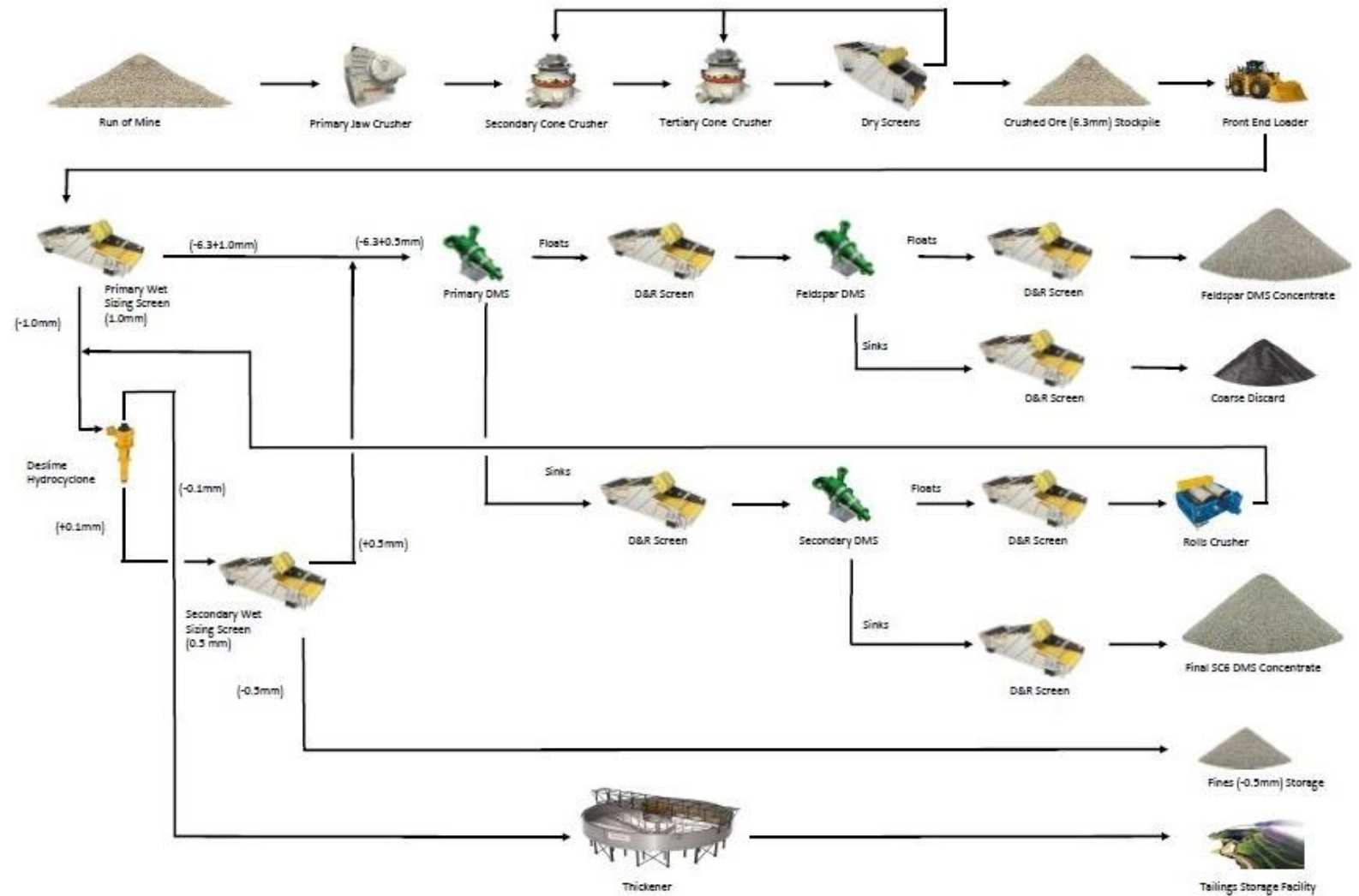


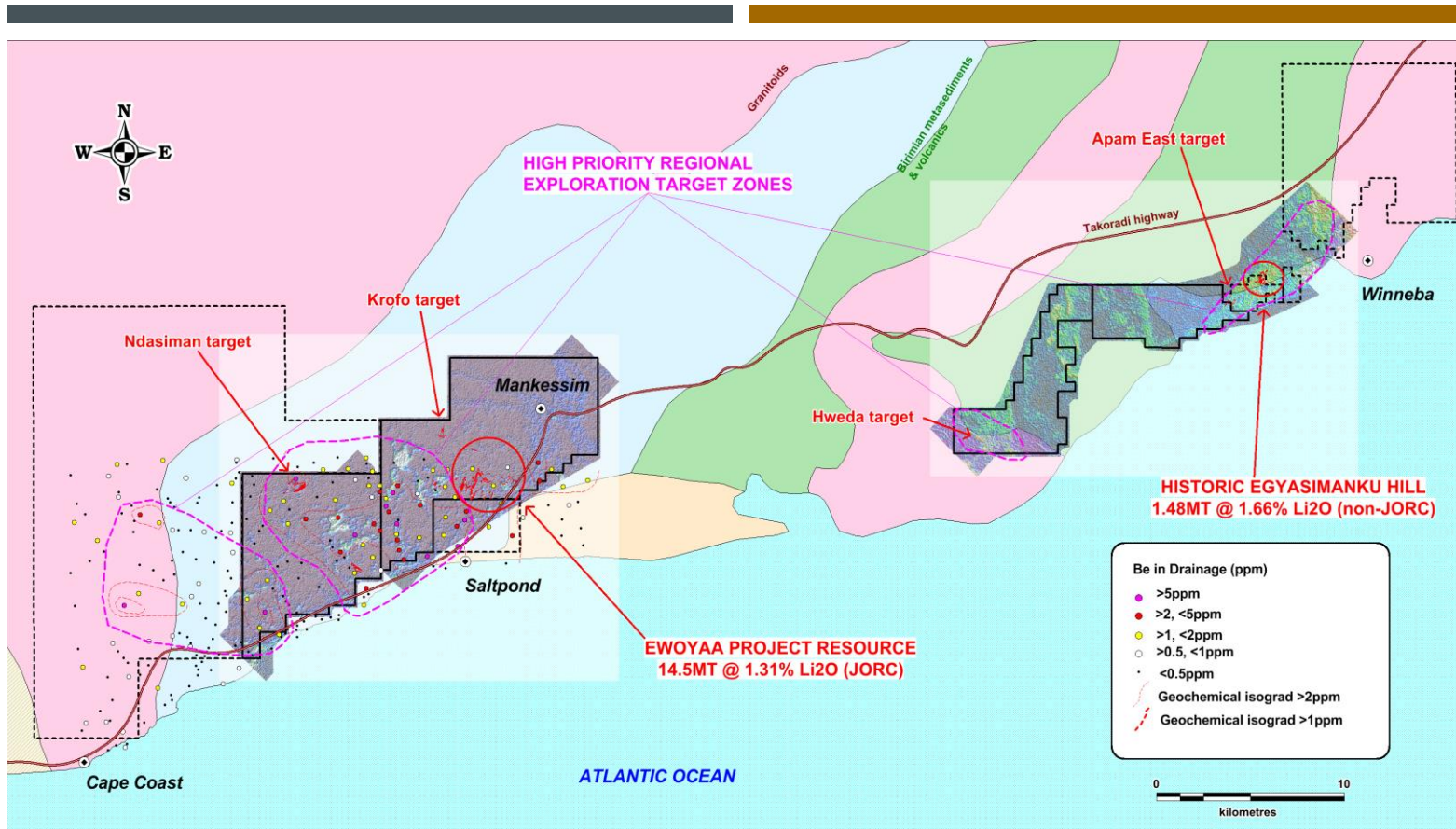
Delineation of resources, project pit shells and waste dumps; view looking south.

EXCEPTIONAL SCOPING STUDY RESULTS

- Conventional open cut mining from surface with low stripping ratios
- Simple processing via conventional DMS, producing a premium 6% spodumene concentrate saleable product
- Excellent geology and metallurgy with significant value-add potential from feldspar credits
- First quartile cash costs; low capital and operating costs with a low carbon footprint
- Significant exploration upside
- Proximity to excellent logistics and infrastructure

IRONRIDGE RESOURCES - EWOYAA SIMPLIFIED PROCESS FLOW DIAGRAM





View looking north-west from Ewoyaa pegmatite discovery

EXPLORATION UPSIDE:

MULTIPLE TARGETS DEFINED

- Historical Egyasimanku Hill deposit 1.48Mt @ 1.67% Li₂O (non JORC)
- Kaampakrom – coarse spodumene 1km Nth of Ewoyaa
- Krofo – new pegmatite discovery 3km NW of Ewoyaa
- Ndasiman – 700m strike, up to 100m apparent width, 9km west of Ewoyaa
- Multiple additional targets



Seedling nursery at project site



Weather station data download

ESG INITIATIVES; LOW CARBON FOOTPRINT

- NEMAS Consult Ltd appointed
- Wet & dry season environmental and social baseline underway
- Strong national employment and training programmes implemented
- Re-generation nurseries established
- Hydro electric and solar power options
- Low power consumption processing & transport



INVESTMENT CASE



Robust, high-grade resource



Location



Active and well serviced mining region



Conventional mining and processing



Resource Upside



Experienced and well credentialed technical and management team



Further feasibility studies ongoing



Highly positive financial outcomes from Scoping Study



Ghana Field Team



Côte d'Ivoire Field Team



IronRidge **GMR** Limited
RESOURCES Green Metals Resources
"Developing Ghana's first Lithium Resource and Developing Employment"
Proudly supporting the 62nd Independence Day Celebration in Mfantseman Municipality.



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Appendix

Scoping Study – Key Parameters and Assumptions

Parameter	
Infrastructure and Economic	
Discount rate (real, post tax)	8%
SC6 FOB (Ghana port)	US\$650 per tonne
Currency	US\$
Mining and Production	
Average Life Of Mine strip ratio	4.4
Processing rate	2Mtpa
Life Of Mine Production Target	16Mt ore
Average Li2O grade (diluted)	1.31%
Li2O Recoveries (LOM average)	65.6%
Spodumene concentrate grade	6%
Moisture content of concentrate	3%

Parameter	Costs
Cost Assumptions	
LOM total open pit mining costs	US\$280.5M
LOM total processing cost	US\$187.2M
Logistics and transport	US\$38.9M
General and admin	US\$52.1M
Royalties (State & JV)	6%
Corporate tax rate	35%

Scoping Study – LOM Financials and Capital Expenditure

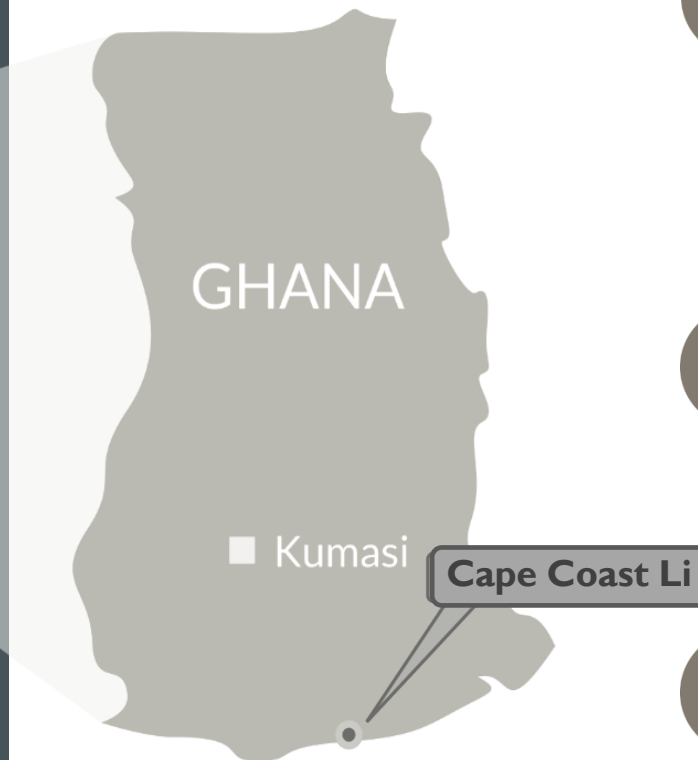
Life of Mine Financials

Base Case - 2Mtpa ROM	US\$M
Revenues	1,553
IRR post tax	125%
CI Cash Cost	\$247
Capital expenditure	\$68.1
NPV(8%) Post tax	\$345
NPV(8%) Pre tax	\$539
EBITDA (LOM)	\$853.8
EBITDA / Year Average	\$105
NPAT (LOM)	\$491.6
NPAT / Year Average	\$60.4
Life of Mine Project Free Cash flow	\$495m
Royalties	6%
Corporate tax	35%

Capital Costs Summary

Main Area	Capital (US\$M)
Construction P & Gs	\$3.18
Plant & Services	\$25.65
Infrastructure	\$11.63
Mining costs	\$1.46
Management costs	\$6.45
Owners costs	\$10.82
Sub Total	\$59.19
Contingency	\$8.88
Project total	\$68.07

GHANA – COUNTRY PROFILE AND PROJECT LOCATION



GDP

US\$2,046 GDP per capita (2017)

Projected economic growth of 5% (2020)

Member of the EITI



Currency

Cedi



Resources / Commodities

Cocoa, Gold Agriculture,
Oil & Gas



Population

25.7 million



Area

238,000 km²



Language

English

GHANA - PRO MINING INVESTMENT FRAMEWORK



Mineral Rights, Licences & Permits:

- Reconnaissance Licence – 1 year and renewal for a further 1 year
- Prospecting Licences – 3 years and 2 x 3 year extensions
- Mining Licences – Up to 30 year term and renewable for a further 30 year term

State Carried Interest – 10% free carry with up to 15% contributing

10-year tax holiday (economic free zones)

35% corporate tax rate

5% royalty

Commercial terms negotiable