



Batteries & Beyond

APRIL 2022

ASX:BEM



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Some of the information contained in this presentation has been derived from previously released information to the ASX refer: 30/1/19 "Progressing to Full Feasibility", 17/1/20 "Fast Tracking the Maniry Graphite Project", 29/4/20 "Quarterly Activities Report – 31 March 2020", 31/7/20 "Quarterly Activities Report – 30 June 2020", 7/12/21 "Positive Updated Scoping Study".

COMPETENT PERSONS STATEMENT

The information in this document that relates to Exploration Results, Exploration Targets and Mineral Resources is based on information compiled by Ms. Annick Manfrino, Principal of Sigma Blue a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy and a consultant to the Company. Ms. Manfrino has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Manfrino consents to the inclusion of the information in the form and context in which it appears.

CAUTIONARY STATEMENT

The Exploration Targets reported herein are not JORC compliant Mineral Resources. The potential quantity and grade of the Exploration Targets are conceptual in nature, there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of a Mineral Resource.



OUR VISION

To become a
Material, Vertically
Integrated Global
Graphite business.

Company Overview



ESG Certified by Digbee ESG (UK)

• Maniry will meet the guidelines of the Equator Principles in Design, Construction & Operations



Attractive financial Returns (Pre-Tax NPV)*

- Maniry Graphite Project US\$230M
- JV Expandable Graphite Plant US\$25M (Stage 1)
- Near term cash flow



Quality & High Demand Products

- Fines sample qualified; batteries
- Mids sample qualified; refractories
- Coarse sample qualified; expandables
- Expandable graphite 100% offtake in place



Graphite Market Conditions

- Predicted supply deficit by market, late 2022
- Key to global decarbonisation ambitions
- Defined as a key commodity (US, EU, Japan, South Korea and Australia)



Corporate Snapshot

BOARD OF DIRECTORS & MANAGEMENT

George Bauk Non-Executive Chairman

- Over 30 years' experience in the resources industry including 16 years' experience as a listed resources company director
- ▶ Has held global operational and corporate roles with WMC Resources and Western Metals, and most recently was MD of Northern Minerals
- Strong background in strategic management, business planning, building teams, finance and capital/debt raising, and experience with a variety of commodities in particular industrial minerals

Tom Revy Managing Director

- Qualified metallurgist and extensive experience in project development, EPCM services
- Over 30 years' experience within the resources industry (including 5+ years in graphite)
- ▶ Senior operational and corporate positions at GRD Minproc, WorleyParsons, Ferrum Crescent and Empire Resources

David Round Finance Director

- ▶ Extensive M&A, Business Development and Corporate Advisory experience
- ▶ Was recently CFO and Head of Sales of an Australian listed Graphite production company with mine in Madagascar over 5 years commercial experience and international sales networks within the graphite industry

Heather Zampatti Non-Executive Director

- ▶ Head of Wealth Management at Bell Potter Securities and has over 35 years' experience in stockbroking, finance, investment policy, strategy and funds management.
- ▶ Holds a Doctor of Commerce honoris causa (ECU), Bachelor of Science BSc (UWA), Diploma of Education DipEd (UWA), Master of Stockbroking (MSAFAA) and Certified Financial Planner CFP.

CAPITAL STRUCTURE

271m

Fully Paid Ordinary Shares

\$0.13

Share Price (5/4/2022)

\$35.2m

Market Cap (undiluted)

\$9.3m

Cash (31 Jan 2022)

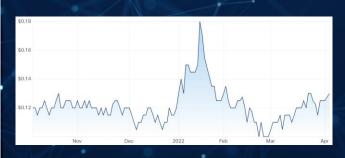
\$25.9m

Enterprise Value (undiluted)

SHARE PRICE ASX:BEM

1 Month +1<u>8%</u>

12 Month Range: \$0.094 - \$0.18



Our Commitment & Development



- ✓ Commitment to Green Energy Operation
- ESIA to be conducted in accordance with IFC Principles / World Bank Standards
- ✓ Compliant Environmental Study to be completed 2022
- Solar Power consulting team to be engaged



- ✓ Investing in our future leaders Malagasy team trained in Australia over past 24 months
- Significant expenditure in local education, health and food supplies
- ✓ Commitment to engage and train local workforce
- √ 80%-90% of Maniry workforce to be locally sourced.



- Leading ASX listed Graphite focused Company regular stakeholder updates
- Independent Assessment of ESG Compliance underway by World Leading Consultants
- Committed "Women in leadership" Policy implemented for global operations



Digbee ESG[™]

BlackEarth
Minerals NL
Achieves ESG
Certification from
Digbee ESG (UK)

Maniry Graphite Project

Process







Mining

LOM Strip Ratio -0.9:1





Processing

Stage 1: 500ktpa

Stage 2: 1Mtpa

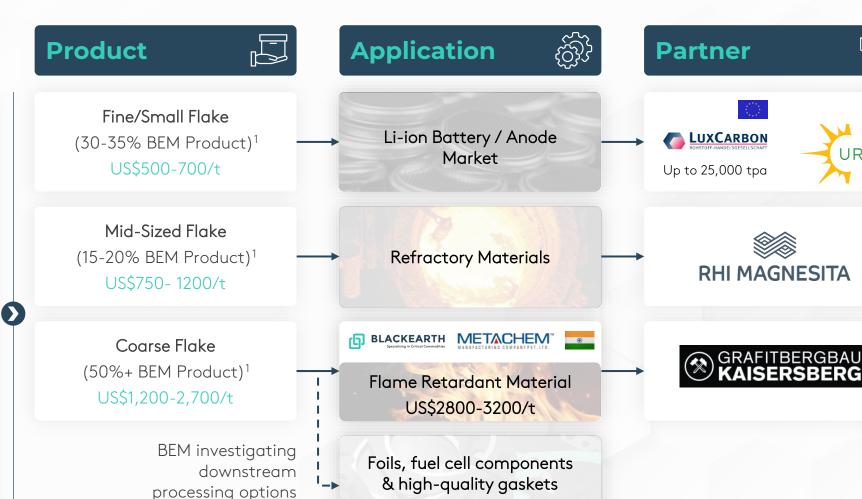




Graphite Concentrate

Stage 1: 30ktpa

Stage 2: 60ktpa





URBIX

US\$3000-15000/t

Maniry area

SIGNIFICANT EXPANSION POTENTIAL



Project Area (Razafy); >14 yrs mine life based on 100% Indicated and 20% Inferred Resources



Granted 40-year Mining Lease over the Razafy Resource



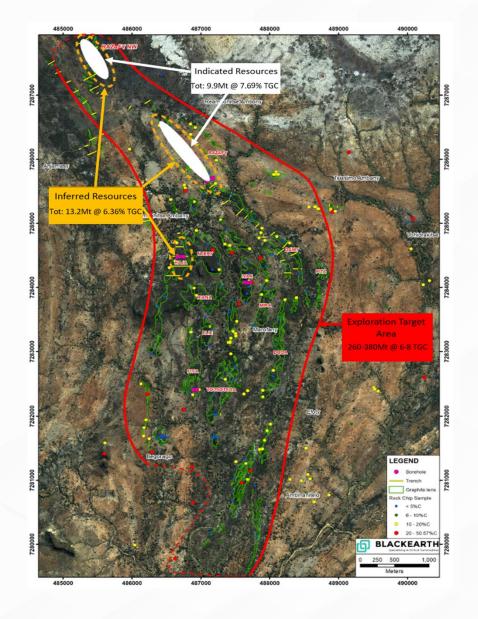
Maniry tenements stretch over **20km²**



35 large outcropping graphitic areas cover the Maniry tenements



Only 10-15% has been extensively explored

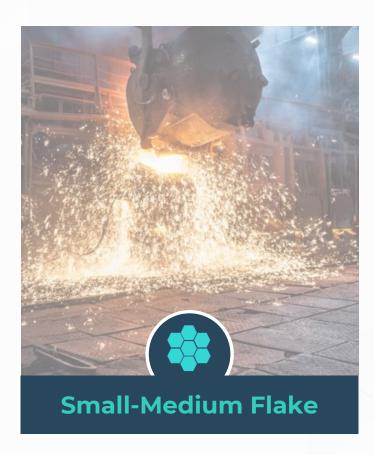




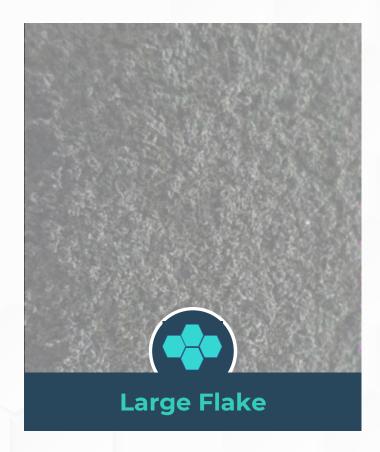
Planned Production Product Outlook



- Significant growth projected to 2040
- Demand outlook linked to Li-ion Batteries
- Est Current demand: 400+ktpa
- Est. projected growth to 2040 = 17%+pa



- Largest consumer of natural graphite
- Demand linked to Global growth
- Est Current demand: 500-600ktpa
- Est. projected growth to 2032 = 1-3%pa



- Substantial demand projected for expandable graphite related materials
- Est Current demand: 70-90ktpa
- Est. projected growth to 2040 = 5%+pa



Expandable Graphite JV Strategy



Low risk / CAPEX entry into the downstream market, providing shareholders with a higher revenue stream and Company cash flow expeditiously

"The (Maniry) flake graphite flotation concentrate ALS 19212 is well suitable for the preparation of expandable graphite. We could not find any restriction which would limit the application of this kind of flake graphite."

NGS Trading & Consulting GmbH

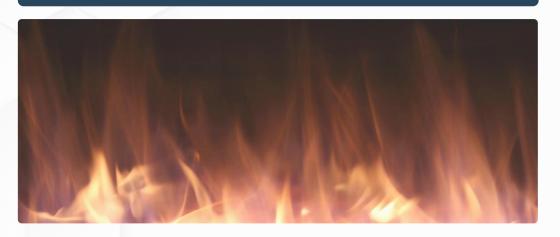


Coarse Flake Maniry Graphite



Market Applications

Fire Retardants



Critical addition to:

- Polyurethane foam
 (furniture, construction, automotive)
- Textiles
- Polymer compounds
- Rubber products
- Roof cover foils
- Fireproof coatings / paints

Other Applications



- Graphite foils
- Gaskets for high temp / pressure / corrosive environments
- Conductive additives
- Production of graphene
- "Hot-topping" compound in foundries



Metachem JV Development Plans 2022







Identification of suitable(SEZ) site (India)

Finalisation of engineering and cost study

Further offtake partners









Commencement of construction

Commissioning of the expandable plant















Decarbonising the World Requires a Review of Energy Management Practises

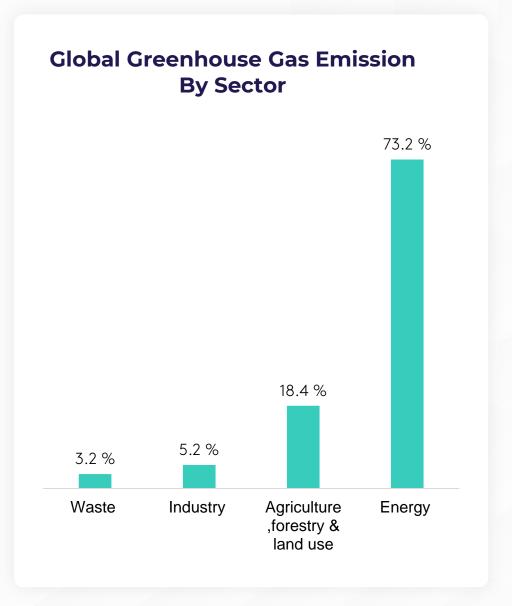
Benefits to BlackEarth:

Natural graphite is a key commodity in decarbonising our planet

Significant graphite demand exists for:

- Lithium ion batteries (energy storage & transport)
- Fuel cells (vanadium redox and hydrogen)
- Nuclear power plants

BlackEarth can produce material of suitable quality to use in all of these industries

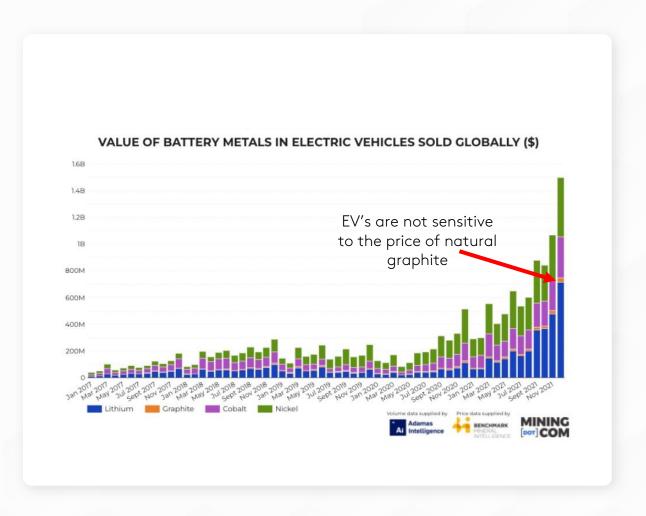




Electric Vehicle Metals Pricing

Benefits to BlackEarth:

- Natural graphite demand for use in battery market tipped to grow by around 8x (Suitable Graphite)
- Substitution due to price is very low incentive exists to use more natural flake vs synthetic
- Battery producers are looking to secure supply (directly / indirectly) that fulfil environmental and social standards
- Anode producers are increasing natural graphite content to decrease costs and provide "greener" products





BlackEarth Battery Material



Samples provided to independent laboratories and tier 1 users have been deemed suitable for use in Li-ion batteries



Spherical graphite from Maniry meets specifications required by lithium-ion anode material manufacturers



Spherical graphite production yields of up to 52% achieved vs industry average 40%



Positive feedback received from tier-1 spherical graphite producers and anode material manufacturers.





Stage 1

 Complete (final) large scale test work program with anode manufacturers to finalise offtake arrangements as part of the Maniry development



Battery Anode Material (BAM)

- Further SPG / CSPG discussions for access to technology royalty, licence, JV, etc
- Complete test work to finalise most suitable technology
- (Ongoing) Incorporate learnings from BAM v.1 developers
- Proceed with full development plan for Stage 2

Battery Material Strategy

Benefits to BlackEarth:

Potential for significant uplift in revenue for lower value fine concentrate material



Projected growth in sector (to 2040) est. 17%+pa

Take advantage of supply risk (overall supply and geopolitical risks) and importance to global decarbonisation ambitions (transportation and heavy industry) – supply chain disruption



News Flow 6 Months



Update on drilling at high grade Razafy Northwest area



Razafy Resource update



Maniry DFS update



JV Expandable graphite plant update - DFS / engineering, FID



Ongoing ESG updates



Completion of Maniry DFS



Commencement of Maniry FEED





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