

17 January 2020

ASX Announcement

Fast Tracking the Maniry Graphite Project in Southern Madagascar

BlackEarth Minerals NL (**ASX:BEM**) ("**BlackEarth**", the "**Company**") is pleased to release a presentation on the Maniry Graphite Project in Southern Madagascar, which has been successfully fast tracked to progressing the Bankable Feasibility Study (BFS) Stage, in under 2 years, for a total cost of less than \$6m, including full overheads.

It should be noted that this is a non-deal investor presentation and roadshow.

Maniry Project Highlights include:

- The Company has successfully fast tracked its flagship Maniry graphite project in Southern Madagascar, to progressing the Bankable Feasibility Study (BFS) Stage, in under 2 years, for a total cost of less than \$6m (including full overheads).
- Graphite from the Maniry Project meets specifications consistent with those required by:
 - The expandable graphite market (400 cm³/g achieved vs industry standard of 250 cm³/g)
 - The refractory industry (very low content of deleterious material)
 - Lithium-ion anode material manufacturers (Initial test results achieved 99.97% purity)
- Following positive initial results, offtake discussions and ongoing testing on bulk samples, which are currently underway with Tier 1 refractory, expandable graphite and battery anode producers in China and globally.
- Excellent financial return with a Project Life of 10 years, NPV @ 10% pre-tax US\$ 103M and IRR pre-tax of 42%. (ASX Release 30 January 2019 – BlackEarth Announces Positive Scoping Study Results from Maniry)
- Strong newsflow catalysts for the 2020 calendar year, including completion of large scale pilot metallurgical program, Bankable Feasibility Study and finalisation of strategic offtake agreements.

This announcement is authorised for release by Mr Tom Revy, Managing Director.

CONTACTS

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BlackEarth encourages investors to update their contact details to stay up to date with Company news and announcements here: <http://www.blackearthminerals.com.au/update-details/>

Competent Persons Statement

The information in this document relates to test work results that have been derived using samples from the Company's pilot program and is based on information reviewed by Mr David Pass, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pass is an employee of BatteryLimits. Mr Pass has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Pass consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

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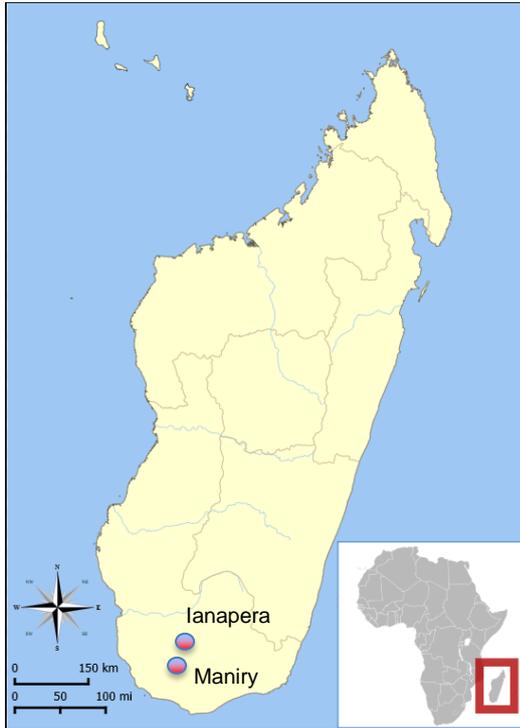
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About BlackEarth Minerals NL

BlackEarth Minerals NL (ASX:BEM) is an ASX listed company focussed primarily on the development of its 100% owned Madagascar Maniry and lanapera graphite projects. For more information, visit <https://www.blackearthminerals.com.au/>.



Project Life	10 Years
NPV @ 10% pre-tax	US\$ 103M
IRR pre-tax	42%
Project CAPEX Stage 1	US\$ 41M (500ktpa ore)
Project CAPEX Stage 2	US\$ 29M (1Mtpa ore)
Payback for Stages 1 & 2	3.7 years (Stage 1 - Only 2.7 years)
Annual graphite production	Av 30ktpa (Stage 1 – Years 1-3) Av 60ktpa (Stage 2 – Years 4+)

Project	Deposit	Tonnes (Mt)	TGC Grade (%)	Contained Tonnes (t)
Razafy	Indicated	8	7.22	677,600
	Inferred	3.2	6.8	217,600
	Razafy -Total	11.2	7.1	795,200
Maniry	Haja - Inferred	9	5.79	521,100
	Haja Total	9	5.79	521,100
Total Resources		20.2	6.51	1,316,300

Above: Maniry Graphite Project Scoping Study Results
Left: Location of BEM's Maniry & lanapera graphite projects

The Razafy Resources (both indicated and inferred) are reported at 6% TGC with cut off constraining wireframe solids defined at a nominal 3% cut off grade.

The Haja Resource is reported at 5% TGC cut off with cut off constraining wireframe solids defined at a nominal 1.5% cut off grade.

The indicated mineral resource at Razafy was first reported in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project".

The inferred mineral resource at Razafy was first reported in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project".

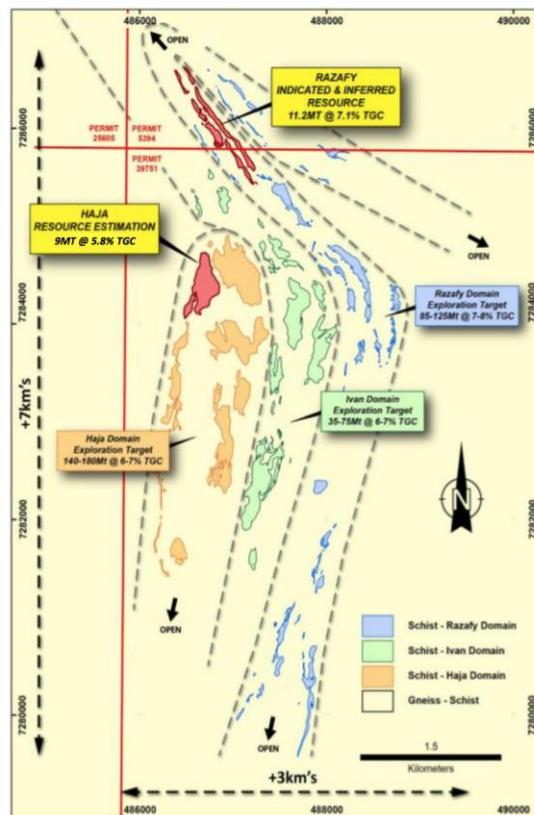
The inferred mineral resource at Haja was first reported in the announcement of 27 December 2018 entitled "Maiden Resource Estimation for Haja at Maniry Graphite Project".

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 potential quantity and grade of an exploration target is 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 mineral resources or that the production target itself will be realised.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement in respect of the scoping study results (see the announcement of 30 January 2019 entitled "BlackEarth announces positive Scoping Study results for the Maniry Graphite Project") and that all material assumptions and technical parameters underpinning the estimates of forecast financial information continue to apply and have not materially changed.

Additionally, the Company confirms that it is not aware of any new information or data that materially affects the information regarding the indicated mineral resource at Razafy in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project", which forms the basis of the production targets outlined in the table above.



Maniry Graphite Project – Overview

For further information regarding the Maniry exploration target, please refer to the announcement entitled "Exploration Target Update" dated 14 August 2018 "Update Maniry Exploration Target"

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BlackEarth Minerals NL

ASX:BEM
ACN: 610168191

Fast Tracking the Maniry Graphite Project

January 2020



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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.

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COMPETENT PERSON'S STATEMENT

- The information contained in this report that relates to Exploration Results and Mineral Resources has been compiled by Ms Annick Manfrino, a member of The Australian Institute of Geoscientists. Ms Manfrino is the Principal of Sigma Blue and Manager Geology of Black Earth Minerals. Ms Manfrino has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that she is undertaking 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 in this report of the matters based on the information in the form and context in which it appears.
- The information in this report that relates to the Exploration Target for the Maniry Graphite Project is extracted from the report entitled "Exploration Target Update" dated 14 August 2018 and is available to view on the Company's website www.blackearthminerals.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
- The information in this report that relates to the Maiden Resource Estimation for Razafy at the Maniry Graphite Project is extracted from the report entitled "Update – Maiden Resource Estimation for Razafy at the Maniry Graphite Project" dated 14 August 2018 and is available to view on the Company's website (www.blackearthminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
- The information in this report that relates to the Maiden Resource Estimation for Haja at the Maniry Graphite Project is extracted from the report entitled "Update – Maiden Resource Estimation for Haja at the Maniry Graphite Project" dated 27 December 2018 and is available to view on the Company's website (www.blackearthminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
- The information in this document that relates to metallurgical test work results is based on information compiled and reviewed by Mr David Pass, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pass is an employee of BatteryLimits. Mr Pass has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Pass consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears

CORPORATE SNAPSHOT

BlackEarth Minerals (ASX:BEM) is a minerals development company led by a team of mining experts that have identified growing trends in graphite demand.

The Company's flagship Maniry Graphite Project is located in Southern Madagascar, with the Bankable Feasibility Study (BFS) currently underway and due for completion during the 2020 financial year.

Madagascar is a highly favourable location and is currently a major supplier of graphite to global consumers including China, USA and India.

CAPITAL STRUCTURE

ASX Code	BEM
Fully Paid Shares	113.6m
Share Price (13/01/20)	\$0.048
Market Cap (@ \$0.048)	\$5.45m
Cash (31/12/19)	\$1.57m

BOARD OF DIRECTORS & MANAGEMENT

Phil Hearse	Non-Executive Chairman
Tom Revy	Managing Director
George Bauk	Non-Executive Director
Simon Storm	Company Secretary & CFO
Tracy Harris	Financial Controller
Annick Manfrino	Manager – Geology & Competent Person,
Eileen Hao	General Manager – China



FAST TRACKING THE MANIRY PROJECT

“BEM has successfully fast tracked the Maniry graphite project to progressing the Bankable Feasibility Study (BFS) Stage, in under 2 years, for a total cost of less than \$6m including full overheads”

“Over the 2020 calendar year, we will continue to advance the project and deliver shareholder value, as we rapidly progress towards first cashflow”

**Tom Revy
BEM Managing Director**

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MANIRY PROJECT HIGHLIGHTS

- The Company has successfully fast tracked its flagship Maniry graphite project in Southern Madagascar, to the Bankable Feasibility Study (BFS) Stage, in under 2 years, for a total cost of less than \$6m (including full overheads).
- Graphite from the Maniry Project meets specifications consistent with those required by:
 - The expandable graphite market (400 cm³/g achieved vs industry standard of 250 cm³/g)
 - The refractory industry (very low content of deleterious material)
 - Lithium-ion anode material manufacturers (Initial test results achieved 99.97% purity)
- Following positive initial results, offtake discussions and ongoing testing on bulk samples are currently underway with Tier 1 refractory, expandable graphite and battery anode producers in China and globally.
- Excellent financial return with a Project Life of 10 years, NPV @ 10% pre-tax US\$ 103M and IRR pre-tax of 42%.
(ASX Release 30 January 2019 – BlackEarth Announces Positive Scoping Study Results from Maniry)
- Strong newsflow catalysts for the 2020 calendar year, including completion of large scale pilot metallurgical program, Bankable Feasibility Study and finalisation of strategic offtake agreements.

MANIRY GRAPHITE PROJECT MADAGASCAR

Maniry Project Resources

Classification	Tonnage	Total Graphitic Carbon	Tonnage Percentage
Indicated	8.0	7.20%	40%
Inferred	12.2	6.05%	60%
TOTAL	20.2	6.51%	100%

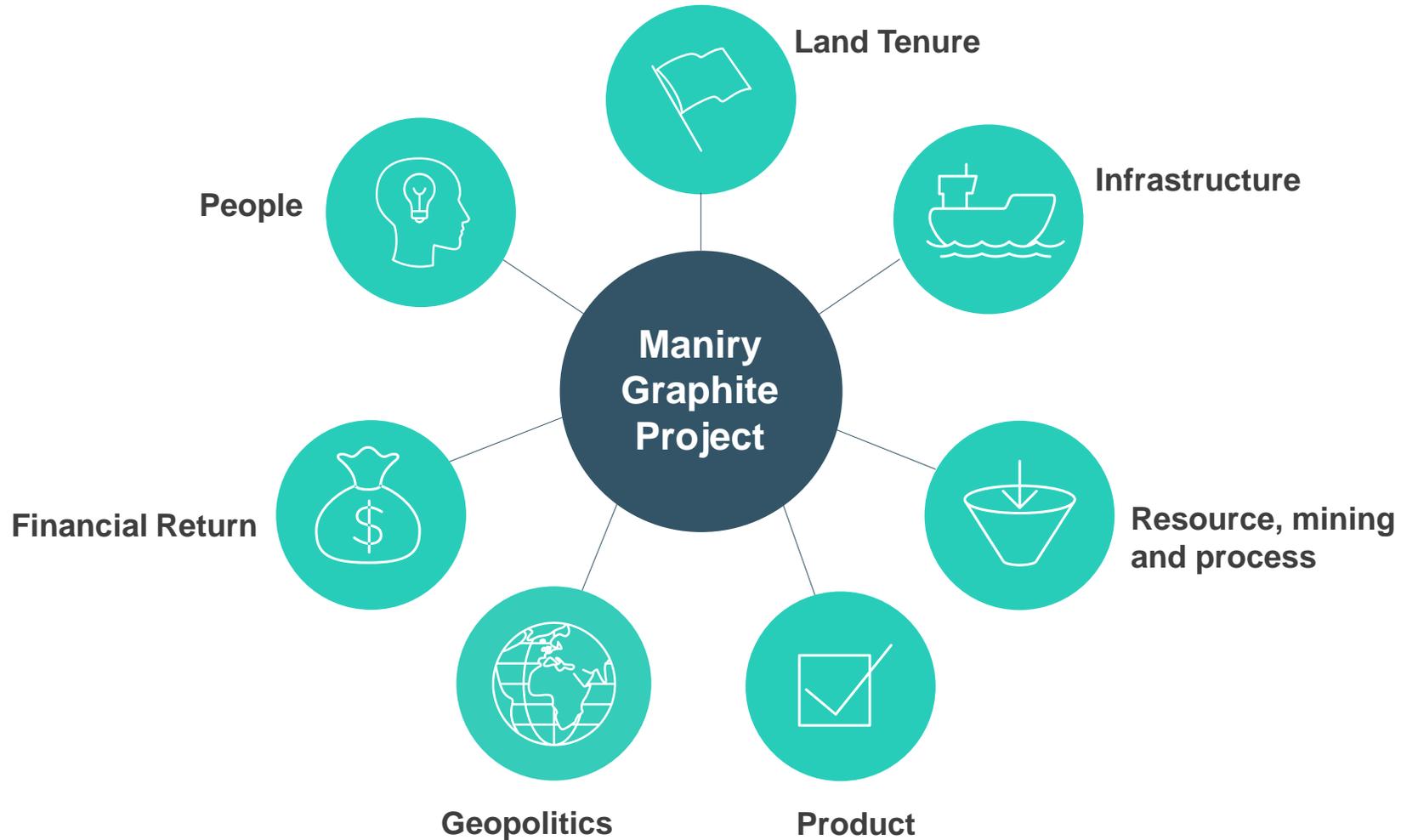
Exploration Targets

Maniry Project : 260 – 380Mt at 6-8% TGC

Ianapera Project: 20 – 34Mt at 10-20% TGC



THE 7 FACTORS FOR MINING SUCCESS



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PROJECT FINANCIAL RETURN*

Project Life	10 Years
NPV @ 10% pre-tax	US\$ 103M
IRR pre-tax	42%
Project CAPEX Stage 1	US\$ 41M (500ktpa ore)
Project CAPEX Stage 2	US\$ 29M (1Mtpa ore)
Payback for Stages 1 & 2	3.7 years (Stage 1 - Only 2.7 years)
Annual graphite production	Av 30ktpa (Stage 1 – Years 1-3) Av 60ktpa (Stage 2 – Years 4+)

Focus during Feasibility Study:

Maximising basket price and feed grade

E.g. an increase in feed grade from 6.3% to 7.3%TGC results in a project NPV of US\$152M and an IRR of 55%

*Refer ASX Releases 30 January 2019

BEM'S KEY GRAPHITE MARKETS

Flake Type	Price Per Tonne (USD)*	Mesh
Jumbo	\$1,600	38 - 50
Large Flake	\$1050	50 - 80
Medium Flake	\$830	80 - 100
Small Flake	\$685	- 100



EXPANDABLES – typically +100 Mesh

The Maniry project has achieved 400 cm³/g significantly higher than industry average results of 250 cm³/g



REFRACTORIES – typically +100 mesh

Maniry graphite is highly suitable for refractories with less impurities and the the absence or very low content of CaCO₃



BATTERIES – typically -100 mesh

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

LARGE FLAKE GRAPHITE PRODUCT

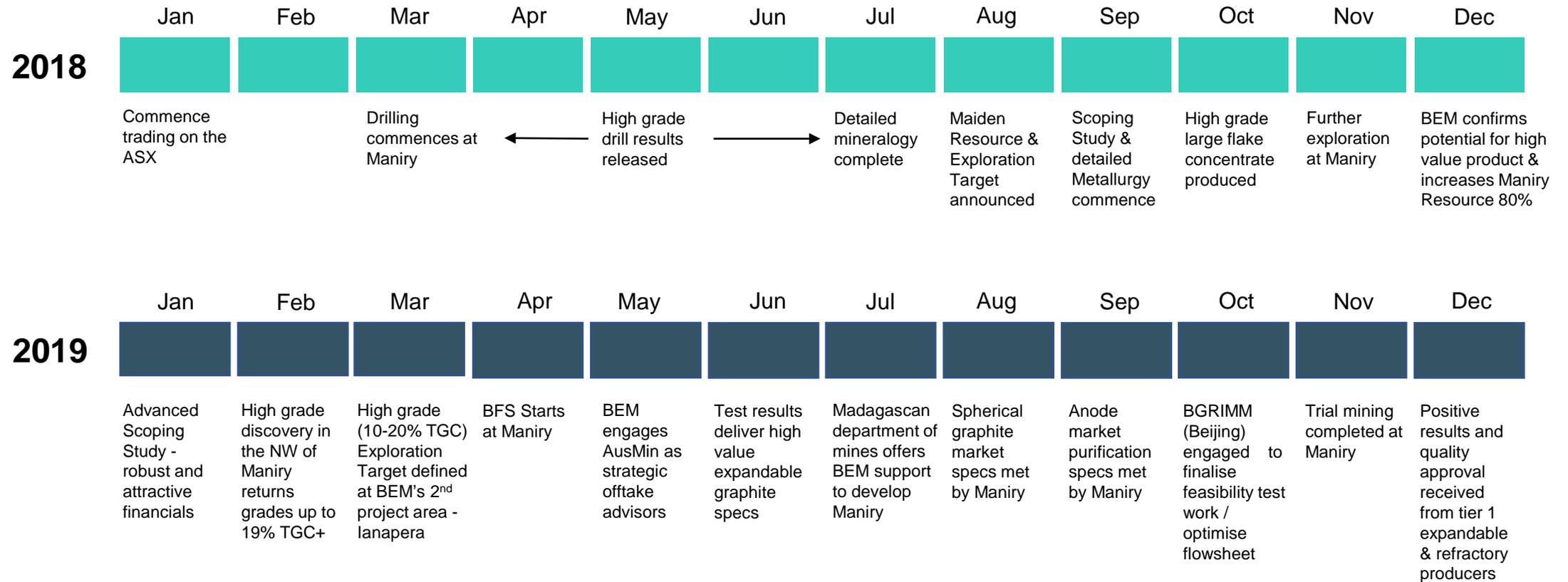
Final Concentrate Size and Grade Distribution

Flake Size	(microns)	Mesh	Master Composite	
			Mass (%)	TGC (%)
Super Jumbo	>500	38	2.8	95.8
Jumbo	300 - 500	50 - 38	17.3	96.1
Large	180 - 300	80 - 50	29.8	95.6
Medium	150 - 180	100 - 80	9.1	95.0
Small	75 - 150	200 - 100	23.6	96.8
Fine	<75	-100	17.4	96.1



High value product

FAST TRACKING THE MANIRY PROJECT



MAJOR NEWSFLOW CATALYSTS - 2020

2020	Q4 2020		Q2 2020	Q3
Completion of large scale pilot metallurgical program (BGRIMM) as part of BEM's BFS activities				
Finalisation of strategic offtake agreements				
Finalisation of all social / community and environmental pre-construction activities				
Completion of Bankable Feasibility Study (BFS)				
Project debt finance				
Ongoing exploration success				

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EXPANDABLE GRAPHITE BEM RESULTS

- NGS (Germany) achieved results of 400 cm³/g which **exceeded the industry benchmark rate of 250 cm³/g.**
Refer ASX: BEM Announcement 13/6/19
- Key attributes towards producing an **attractive expandable product** including moisture, portion of volatile matter, loss on ignition (LOI), carbon content and ash content were all deemed positive
- **Positive test results and quality approval** from Yichang Xincheng Graphite – the largest expandable graphite producer in China (see below)

BEM Sample	Expansion cm ³ /g
+50 mesh (300 micron)	500-600
+80 mesh (180 micron)	400-500
+100 mesh (150 micron)	300-400



REFRACTORY GRAPHITE BEM RESULTS

- **Successful sample tests;** major properties and quality approved by RHI - China
- “The absence or very low content of CaCO_3 is an indication that the BEM flake graphite is **suitable for the application in the refractory industry and for many other applications**”
NGS (Germany)

Refer ASX: BEM Announcement 13/6/19



BEM MEETS BATTERY OFFTAKE SPECIFICATIONS

Maniry Produces Spherical Graphite Market Specifications

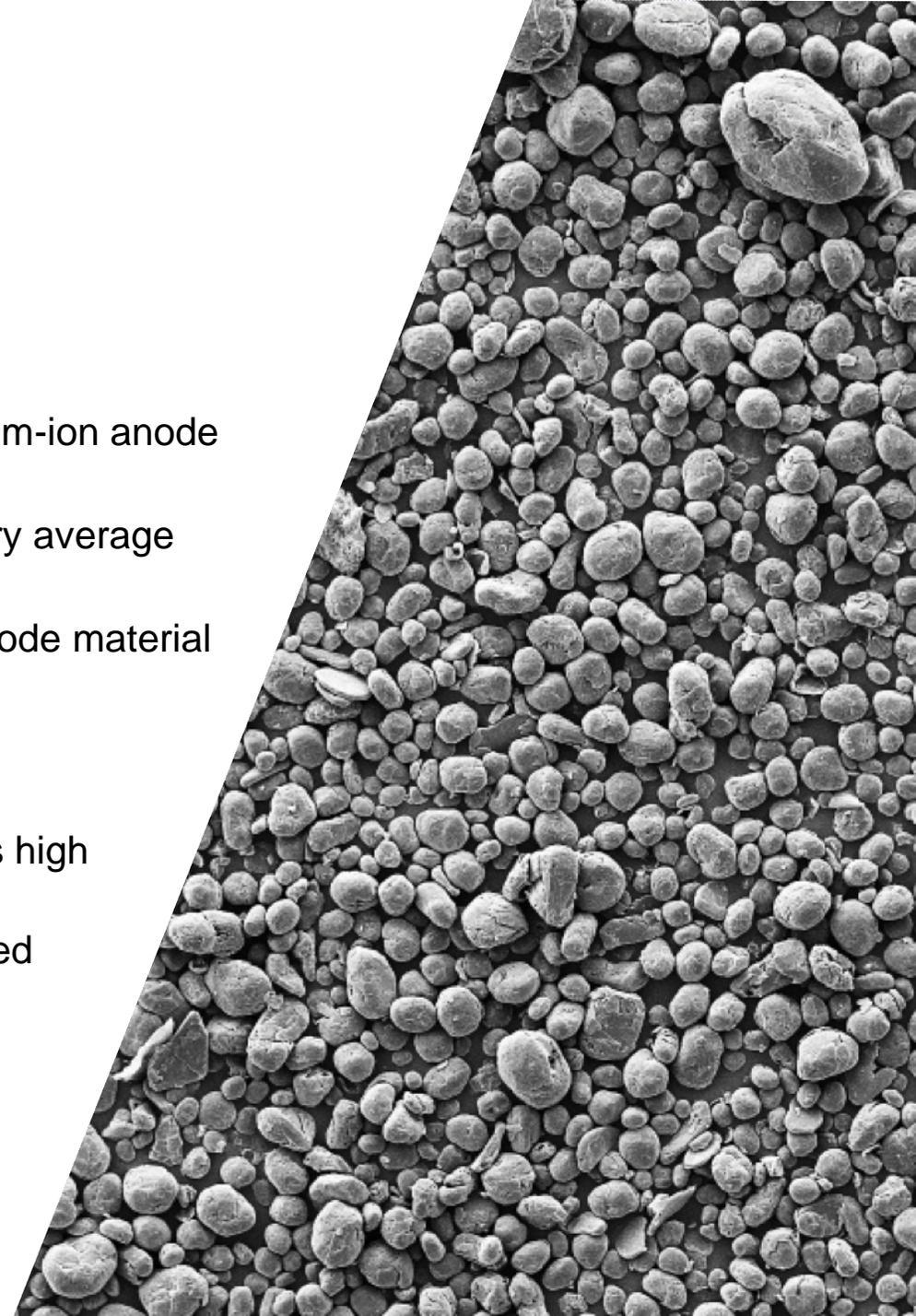
ASX Release 12 August 2018

- 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 spherical graphite producers and anode material manufacturers in China

Maniry Meets Anode Market Purification Specifications

ASX Release 4 September 2018

- Independent testwork has confirmed that Maniry concentrate delivers high purity graphite anode material
- Initial test results achieved 99.97% purity, exceeding the specs needed for marketable battery grade graphite (99.95 wt.-% final carbon content)
- Concentrate samples dispatched to potential offtake partners to conduct confirmatory inhouse test work, before potentially entering into offtake agreements



MADAGASCAR A GLOBAL HUB FOR COARSE FLAKE GRAPHITE

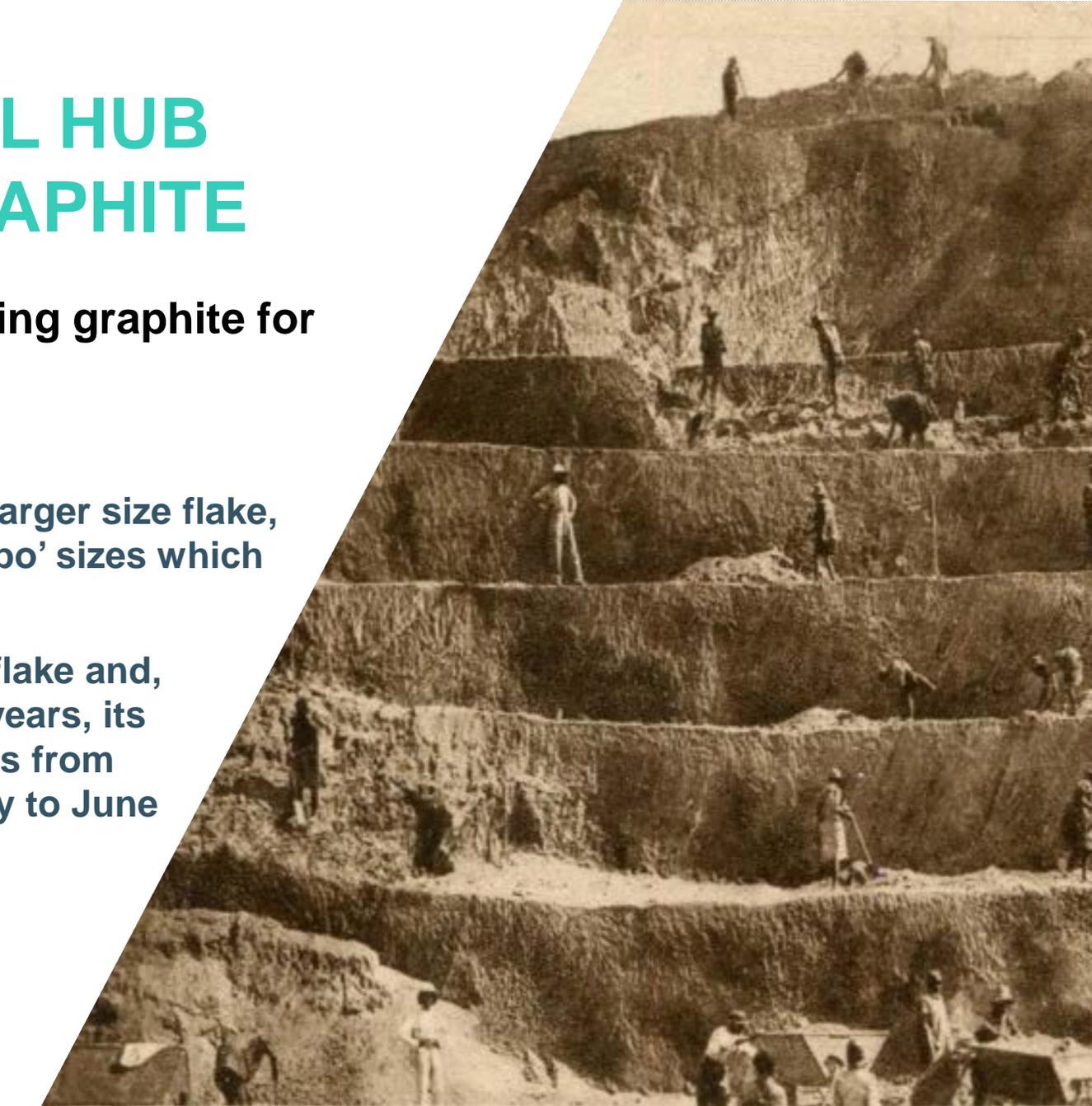
Madagascar has been mining and exporting graphite for over 100 years

Madagascan importance for large flake

“China is believed to have limited resources of larger size flake, especially of extra-large ‘jumbo’ and ‘super-jumbo’ sizes which find use in expandable/expanded graphite”

“Madagascar is a major producer of larger size flake and, although it has been exporting for a number of years, its shipments have increased rapidly in recent years from 9.4kt in 2017 to 46.9kt in 2018 and 32.5kt January to June 2019.”

**Roskill Information Services
Natural & Synthetic Graphite, Outlook to 2028, 12th Edition**



MADAGASCAR

RISK SCORE = 67

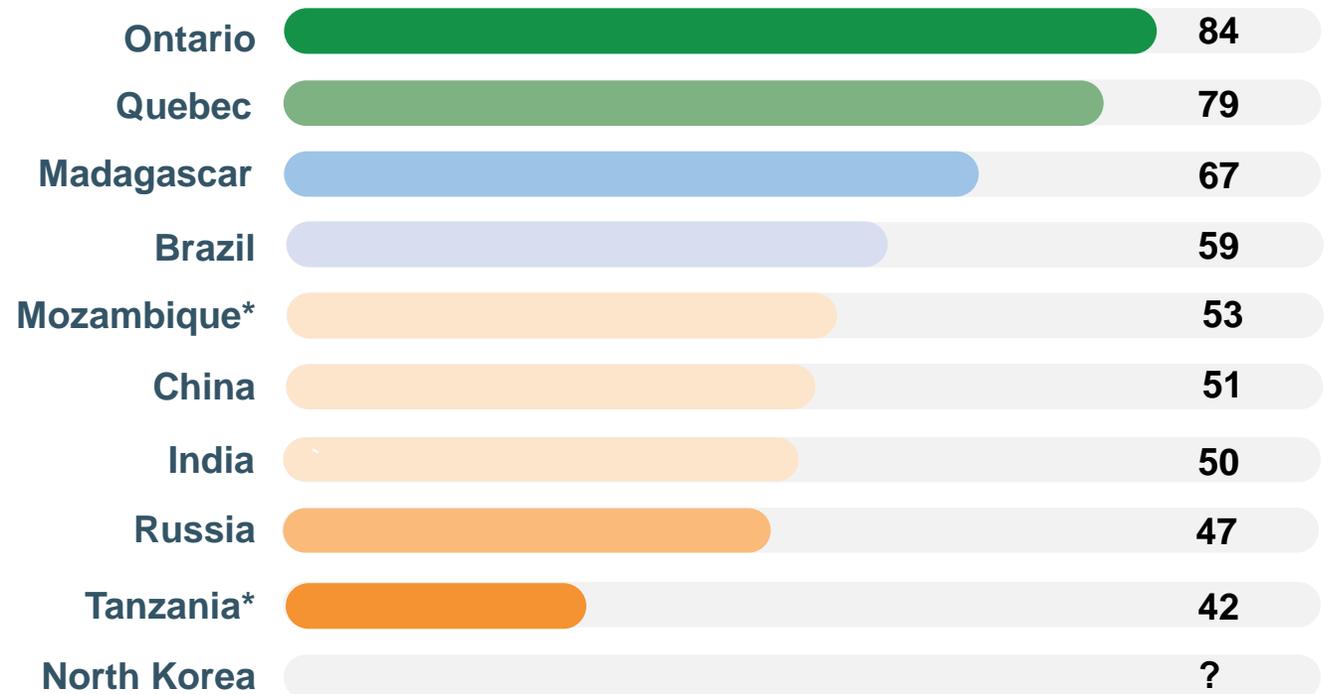
“Low to Moderate Risk”

FACT:

Over 90% of graphite is produced from countries and regions considered “riskier” than Madagascar

GEOPOLITICS MADAGASCAR

INVESTMENT RISK INDEX



*Exploration Hotspots



GEOPOLITICS IN-COUNTRY SUPPORT

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- The Company held strategic discussions with the [Madagascan] Minister of Mines and Strategic Resources, Mr Fidiniavo Ravokatra in July 2019.
- Understanding the Company's plans, the Minister has offered his full support given the strategic value that the project holds in one of the poorest parts of the country.
- The Minister also noted the expenditure incurred at the project to date, BlackEarth's supportive social and community activities in the region and the Company's environmental and development plants for Maniry.

Minister, Mr Fidiniavo Ravokatra meets with BEM Managing Director, Tom Revy

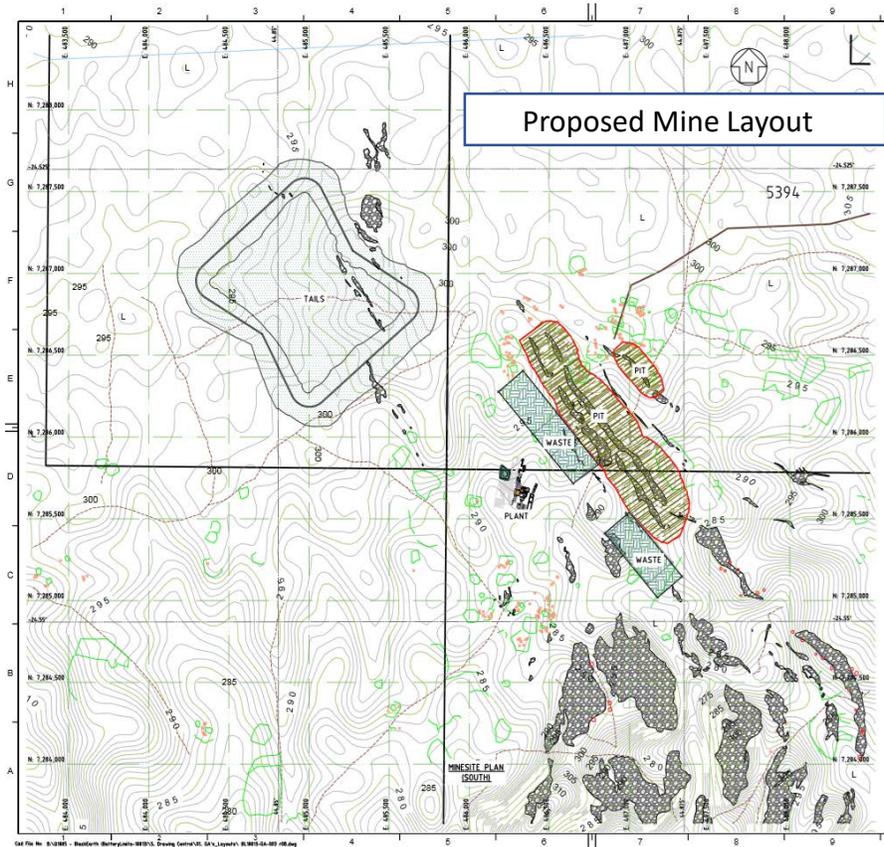
SOCIAL & COMMUNITY

- Regular communications at village and regional levels
- Local services / personnel utilised wherever possible
- Furnishing of local classrooms
- Working together with Australian Doctors for Africa (ADFA), BEM
 - Provides logistics services on an ongoing basis
 - Administrative support / office space
 - Funding and construction management for a new specialised medical clinic near Maniry



INVESTMENT CASE TECHNICAL VALUE

- Simple mining and processing to produce high value, high demand, coarse flake product, which is not competing with Chinese production



*Refer to the Disclaimer

- Thorough understanding of geology, mineralogy & metallurgy
- Majority of the current resource sits on a granted 40 year mining lease
- Significant expansion potential at Maniry given BEM's tenement position and declared Exploration Target* (260-380Mt at 6-8%TGC)
- The availability of key infrastructure and Low capital expenditure requirement
- The current Project study outcomes highlight that the Maniry Project is a robust and financially attractive graphite project by global standards
- BEM has commenced offtake discussions and product test work in both China and Germany, as part of the feasibility study
- Based on current results, Maniry has the potential to produce high demand / high value products for global end-users

THANK YOU



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