

22 October 2019

ASX Announcement

BLACKEARTH QUARTERLY ACTIVITIES REPORT

Quarter ended 30 September 2019

HIGHLIGHTS FOR THE QUARTER

OPERATIONAL

- **Madagascan department of mines (BCMM) offers support to BEM to fast track Maniry following a meeting with the Minister of Mines and Strategic Resources**
- **Metallurgical tests undertaken by BGRIMM (China) independently confirm ALS (Perth) pilot results**
- **Spherical graphite from the Maniry project meets specifications consistent with those 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**

CORPORATE

- **Placement completed raising A\$1.68 million; total as at 30 September A\$2.39 million**

BlackEarth Minerals NL (ASX: BEM) (the **Company** or **BlackEarth**) is pleased to provide its September 2019 quarterly update on its Madagascan graphite projects. In summary, BlackEarth continues to fast-track the development of its 100% owned Maniry Graphite Project in southern Madagascar.

1. MADAGASCAN DEPARTMENT OF MINES (BCMM) OFFERS SUPPORT TO BEM

The Company had the opportunity to hold strategic discussions with the Madagascan Minister of Mines and Strategic Resources, Mr Fidiniavo Ravokatra. Discussions centred around a number of key elements including:

- The Company's current development schedule and expenditures incurred to date on the Project;
- Estimated personnel needs both during construction and in operations;
- BlackEarth's social and community activities to date, including its assistance in furnishing a number of classrooms in the immediate area and financial support, together with Australian Doctors for Africa (ADFA), for the development of a specialised medical clinic in the region;
- Environmental management plans; and
- BEM's plans for the development of the Project.



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

Understanding the Company's plans, the Minister offered his full support given the strategic value that the project holds in one of the poorest parts of the country.

2. METALLURGICAL TESTS UNDERTAKEN BY BGRIMM

Metallurgical results were received from Beijing General Research Institute for Mining and Metallurgy (BGRIMM) who undertook metallurgical test work on a sample of Maniry ore. The ore sample was part of ore feed to the Company's soon to be completed second pilot run being undertaken at ALS (Perth). The results from the high-level test work undertaken by BGRIMM confirmed the detailed metallurgical work undertaken by ALS (Perth) and Battery Limits Pty Ltd in the first pilot run and first reported in the announcement entitled "Definitive Metallurgical Test Work Confirms High Grade, Large Flake Concentrate" dated 10 December 2018. Key statements by BGRIMM included:

- "The graphite ore owned by BlackEarth Minerals NL contains a high distribution ratio of large flakes";
- "We obtained a very high concentrate yield of large graphite flakes and a high recovery of graphite from the tests"; and
- "The fixed carbon content has already reached a high level, and it can even be further improved through optimizing processing and technical parameters".



BEM jumbo flake produced by BGRIMM (China)

Flake Size	(microns)	Mesh	Composite	
			Mass (%)	TGC (%)
Large - Super Jumbo	180-500+	80-38	41.5	92
Medium	150-180	100-80	14.2	94
Small	75-150	200-100	28.5	94
Fine	<75	-100	15.8	93

BGRIMM preliminary graphite flake grade and distribution results

The Company has met with a number of potential off-take parties. BEM has, since listing the Company, ensured that it has pursued a rigorous and auditable qualification plan as part of its fast track strategy. Thorough technical investigations undertaken by suitably qualified personnel, who understand the needs of prospective buyers, they have prepared the Company for positive initial meetings with potential end-users. As part of the current pilot work, screened concentrate samples would be sent to interested parties by late August 2019 for testing. These include those directly operating in the battery, refractory and expandable markets.

3. SPHERICAL GRAPHITE FROM THE MANIRY PROJECT MEETS SPECIFICATIONS

During the quarter the Company announced that testing on concentrate from the Maniry Graphite Project (the “**Project**”) in southern Madagascar, had confirmed its consistency with specifications required by lithium-ion anode material manufacturers.

Dorfner ANZAPLAN (Germany) (“**Dorfner**”) commenced a detailed program to test Maniry concentrate for suitability as anode material in lithium-ion batteries. The test work aimed to target the optimised conditions for producing a spherical graphite product from a flake graphite flotation concentrate, for use in the battery industry. The testwork was carried out on concentrate generated from the Company’s first bulk sample pilot run, undertaken at ALS in Perth, and completed in December 2018.

In the interim report to BlackEarth, Dorfner ANZAPLAN stated that “the measured values for samples after optimisation are in the range of typical comparable products”, a view which was reinforced by spherical graphite producers and anode material manufacturers in China who reviewed the full report. Spherical graphite production yields of up to 52% were achieved.

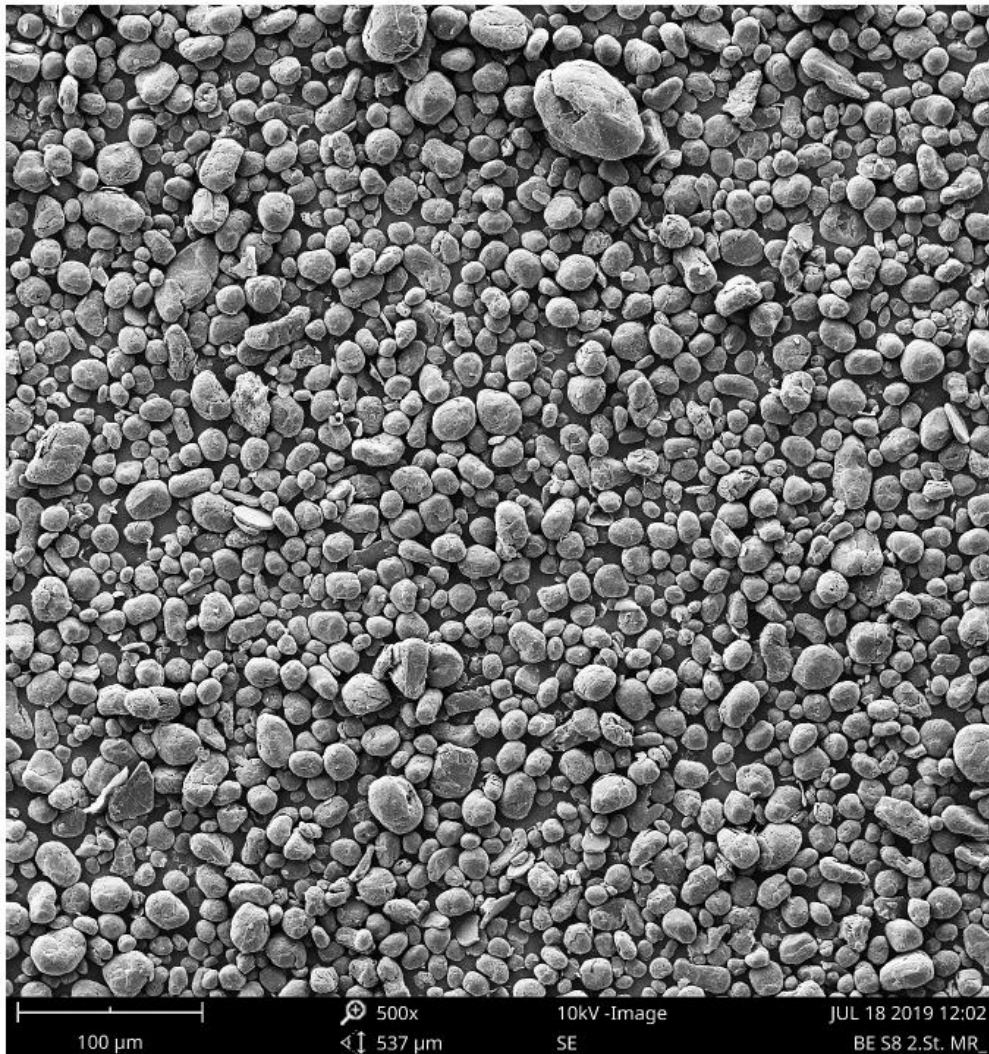
	Tap Density	D50	Ratio	BET	Yield
	[g/cm ³]	[µm]	D90/D10 [-]	[m ² /g]	Test [wt.-%]
Test Products					
BE S7	0.98	17.0	2.5	6.8	35
BE S8	0.93	15.5	2.7	6.7	46
BE S9	0.93	15.4	3.1	6.9	52

Spheroidization Results

The key characteristics listed above relate to the shape and roundness of the material, the particle size distribution and the specific surface area; all critical elements required by lithium-ion anode material manufacturers

BlackEarth Minerals Managing Director, Mr Tom Revy, had commented:

“This is a key milestone for BEM, as it highlights the Company’s potential to meet the spherical graphite specifications which are favourable for offtake agreements. Based on feedback from end-users both in China and internationally, these results will greatly assist in the Company’s current discussions. We look forward to continuing to advance the Maniry graphite project DFS over the coming months”.



SEM Micrograph of Spheroidization Test BE S8; Magnification 500x

Test work continued at Dorfner in Germany with purification of spherical graphite (chemical, thermal, microwave assisted acid digestion) underway, with production of pouch cells and electrochemical characterisation work expected to start thereafter.

4. COMMUNITY RELATIONS

BlackEarth continues its partnerships with the local communities in which it operates, to ensure positive and enduring impacts well into the future.

5. WESTERN AUSTRALIA TENEMENTS

The Company continues to review its West Australian tenements and will update the market in regard to any material developments on these tenements as appropriate. The Company plans on focusing its efforts during the remainder of FY2019 on its Maniry and Ianapera graphite projects located in Madagascar.

6. CORPORATE

Through the Company's newly appointed corporate advisor, Peloton Capital Pty Ltd ("**Peloton**"), BEM successfully completed a bookbuild and secured commitments from investors in Australia to subscribe for approximately 28m new fully paid ordinary shares at A\$0.06 per share, to raise proceeds of A\$1.68 million before costs.

The issue price of A\$0.06 represented a discount of:

- 15.5% to BlackEarth's last closing price of A\$0.07 per share on 19 August 2019;
- 14.5% to the 10 day volume weighted average price of A\$0.07 per share; and
- 14.7% to the 15 day volume weighted average price of A\$0.07 per share.

The shares were placed within the Company's:

- 15% placement capacity under ASX Listing Rule 7.1 (3,016,068 New Shares); and
- placement facility approved as Resolution 2 at the shareholders meeting held on 30 May 2019 (25,000,000 shares).

The shares under the placement were issued without disclosure under the Corporations Act and were not subject to shareholder approval. The shares ranked equally with the Company's existing fully paid ordinary shares. The placement was completed with the new shares issued on 29 August 2019.

The funds raised will be used to continue to fast track BlackEarth's graphite projects in Southern Madagascar and in particular will be used for:

- Bulk trial mining and export of ore to a pilot plant;
- Pilot trial;
- BFS (feasibility) related activities / consultants / contractors; and
- Working Capital

CONTACTS

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Jane Morgan	Investor and Media Relations	0405 555 618

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 Person's Statement

- The information contained in this report that relates to Exploration Results and Mineral Resources has been compiled and / or reviewed by Ms Annick Manfrino, a member of The Australian Institute of Geoscientists. Ms Manfrino is the Principal of Sigma Blue and Manager Geology of BlackEarth 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 report 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.

For more information – www.blackearthminerals.com.au

About BlackEarth Minerals NL

BlackEarth Minerals NL (ASX:BEM) is an ASX listed company focussed primarily on the development of its 100% owned Madagascan 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
	Razafy - 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 15% 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".

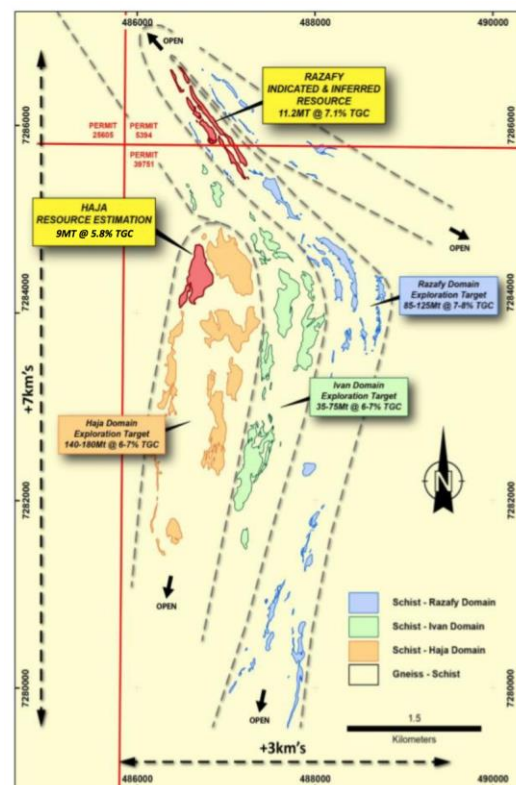
The inferred mineral resource at Haja was first reported in the announcement of 27 December 2018 entitled "Maiden Resource Estimation for Haja at Maniry Graphite Project".

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"

SCHEDULE OF MINING TENEMENTS

Details of Mining Tenements at Quarter ended 30 SEPTEMBER 2019			
(ASX Listing Rule 5.3.3)			
Australia			
Tenement ID	Location	State	Interest
E66/95	Northern Gully	WA	100%
E70/4811	Kauring, Greenhills	WA	100%
E70/4812	Kauring, Greenhills	WA	100%
E70/4824	Yanmah, Donnelly	WA	100%
E70/4825	Manjimup, Donnelly	WA	100%
E70/4903	Kauring, Greenhills	WA	100%
E70/4906	Kauring, Greenhills	WA	100%
International			
Tenement ID	Location	Country	Interest
PR25605	Maniry	Madagascar	100%
PR25606	Maniry	Madagascar	100%
PR3432	Maniry	Madagascar	100%
PR39750	Maniry	Madagascar	100%
PR39751	Maniry	Madagascar	100%
PE5394	Maniry	Madagascar	100%
PE5391	Ianapera	Madagascar	100%
PE5392	Ianapera	Madagascar	100%
PE5393	Ianapera	Madagascar	100%
PE25093	Ianapera	Madagascar	100%
PE25094	Ianapera	Madagascar	100%

CORPORATE INFORMATION

21 October 2019
 113,655,521 fully paid ordinary shares
 28,142,750 \$0.25 partly paid shares paid to
 \$0.0001 and unpaid \$0.2499
 2,750,000 Unlisted \$0.30 options
 8,000,000 Performance Rights
 \$5.7 million market capitalisation

BOARD OF DIRECTORS

Phil Hearse (Non-executive Chairman)
Tom Revy (Managing Director)
George Bauk (Non-executive Director)