# Bass Metals Ltd.

#### *Operating the Graphmada large flake graphite mine in Madagascar*

Africa Downunder Conference September 2016





Bass Metals Ltd: the only ASX Listed producer of graphite has:

- Recently completed the purchase of the Graphmada Graphite Mine, located in Madagascar; a premium quality, large flake operation.
- Commenced an Operations Optimisation Program to expand sales volumes and grow our revenue base.
- ✓ Planning an Expansion Project to potentially increase the Company's resource base and invest in a second Processing Plant to make a step change in production.

Location





Madagascar has produced benchmark quality graphite for over 100 years.

Stable and supportive government, having been a constitutional democracy since 1992.

#### Corporate History & Strategy

- Listed on 20<sup>th</sup> of October 2005.
- Completed the acquisition of Graphmada on the 22<sup>nd</sup> of August 2016.
- New management team engaged.
- Graphmada is currently generating revenue based on graphite concentrate sales to India, USA and Europe.
- Recently completed an oversubscribed Capital Raising for A\$7.0 million.
- No debt.

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• Currently planning an Expansion Project, with drilling to commence October 2016, followed by studies to inform an investment decision to construct a second Processing Plant, with a capacity of 12,000 to 20,000 tonnes per annum.





#### Corporate Snapshot\_

#### Rick Anthon – Non-Executive Chairman

30 years experience in both corporate and commercial law, is a director of a number of resource companies, and is currently manager of Corporate and Legal at Orocobre Ltd, Australia's premier Lithium producer.

#### Jeffrey Marvin – Non-Executive Director

20 years working with corporate management and investors to bring international mineral projects to public markets.

#### Peter Wright – Non-Executive Director

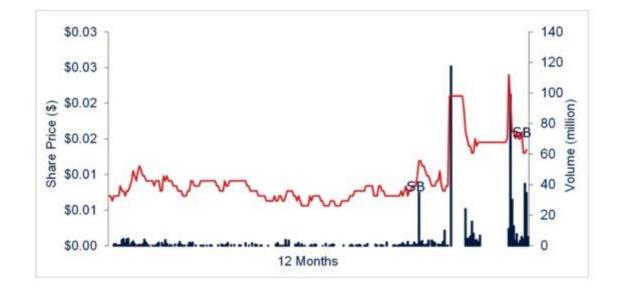
Mr. Wright has 20 years advising on capital markets, investor relations, acquisitions and divestments, particularly in minerals and metals markets. Mr. Wright is also currently Executive Director of Bizzell Capital Partners, a Brisbane based corporate advisory and funds management firm.

#### Tim McManus – Chief Executive Officer

25 years' as a mining professional with significant experience at senior management level across all facets of project assessment, development and operations. Previous roles include CEO of ASX listed Elementos Ltd, Chief Geologist for Xstrata, MD of Scorpion Energy.

#### David Round – Chief Financial Officer & Company Secretary

An accountant with extensive resource sector experience as CFO and Company Secretary to a number of resource development and mining companies.



Market Capitalisation:	~A\$16 million
Cash & Receivables:	~A\$6.5 million <sup>2</sup>
No. Shares on Issue:	~1,193 million
No. Listed Options:	~344 million <sup>1</sup>
Share Price:	1.4 cents

 $^{1}$  Excludes unlisted options – see Appendix 3B released to the ASX on the 1<sup>st</sup> of September 2016 for further detail.  $^{2}$  Cash and Receivables includes A\$1.05m from the sale of Lion Gold shares.

Bass Metals un

#### **Our Potential**



Pathway to production

## Graphmada Overview

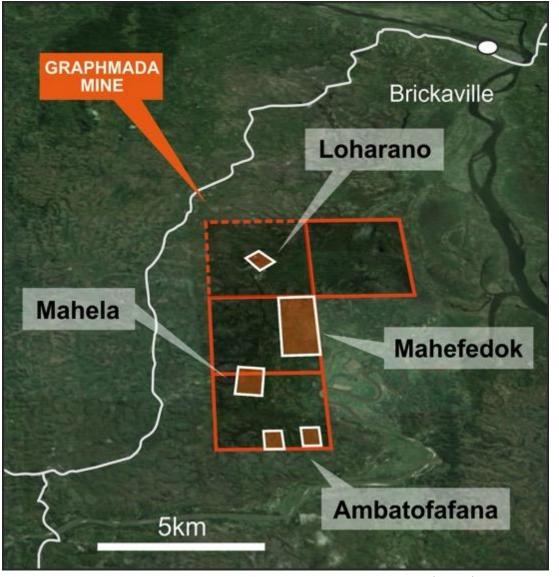
Graphmada is an operating mine with 4 known deposits within its permits:

- Loharano recent mining
- Mahefedok trial mining
- Mahela to be developed
- Ambatofafana to be developed

Loharano Deposit	Tonnage	Grade (Cutoff 2%)	Contained Graphite
Indicated	0.4 Mt	5.1%	22 Kt
Inferred	5.3 Mt	4.0 %	213 Kt
Total Resources <sup>1</sup>	5.7 Mt	4.1%	235 Kt

Table subject to rounding errors

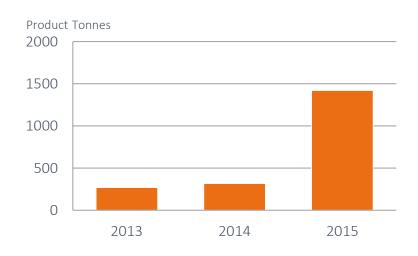
<sup>1</sup>These estimates were prepared and first disclosed by Stratmin under the JORC Code 2004. The estimates have not been updated to JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Reference is made to the Company's announcement of 2 September 2015 which provides further detail regarding this information.



Graphmada permits

# Mining & Processing Operations\_

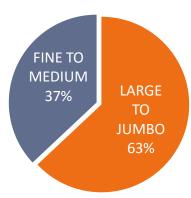
- Established operations with shallow, low cost mining and potential to lower costs further.
- Established but under utilised 6000tpa plant with analytical laboratory and supporting infrastructure.
- Premium priced concentrate with >60% of production in the large to jumbo size category.
- The 130 strong workforce utilises modern facilities and infrastructure, including an on-site doctor and pharmacy, housing and offices, water and communications.



Graphmada Production



Graphmada Product Sold in 2015



#### Logistics and Sales

Graphmada is a dependable supplier to traditional markets where its product quality is well sought after. Its product quality and desirable crystalline flake structure also provides upside into new and growing markets such as the battery, space and nuclear technology sectors.





## Operational Optimisation Program\_\_\_\_

#### Bass has commenced its Operational Optimisation Program.

Operations Optimisation Program	FY2017				FY2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Processing Plant Testwork								
New Workshop Construction								
Implementation of Grade Control Drilling								
JORC Resource Update								
Drying and Packaging Process Testwork								
Drying Plant Procurement and Installation								
Process Plant Decommissioning / Recommissioning								
Upgraded Product Sales Commence								
Comprehensive Workforce Training								
Strong Community Engagement Program								

# Operational Optimisation Program \_\_\_\_

Main benefits expected are:

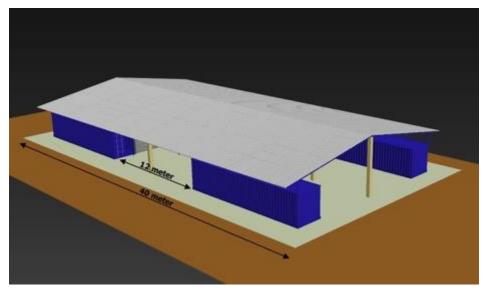
- A continuous improvement and safe working culture
- Higher margin mining
- Increase in Processing Plant availability & utilisation
- Improvements in Recovery and Concentrate Grade
- Improved product handling, minimising losses and inefficiencies
- Stable local employment with community support

## **Operational Optimisation Program**



Initiated a 2 week production stop to educate and train the workforce to improve towards reaching Australian mining standards.

Construction of a new workshop facility has also commenced. This is a critical step in having the capability for implementing the Operational Optimisation Program.



New Workshop & Stores infrastructure



New Workshop & Stores retaining wall construction

## Processing Plant Improvements\_

Proposed Processing Plant Improvements:

- Improving ore preparation, targeting the rejection of fine clay and consistent feed.
- Installation of additional regrind (secondary) milling, targeting improved graphite liberation.
- Modifications to existing flotation cells, including: improved level control, installation of froth crowders, improved air injection mechanisms and reagent optimisation targeting maximum flake recovery.
- Installation of new slurry pumps and re-tasking of existing pumps to reduce flake graphite losses.
- Optimisation of existing dewatering centrifuges in conjunction with product dryer modifications, targeting reduced product cake moisture.





Improvements in action: Vibrating magnetic separator recently installed at Graphmada

# Community Engagement\_

Investing in our people and their communities :

- Employment: First priority is to hire and train local people, who spend their salaries in the local community.
- Purchasing: Prioritise sourcing equipment and supplies from local providers, creating economic advantages to the local community and indirect employment opportunities.
- Education: Provided materials and transport for the construction of a new school and initiated a school engagement program, encouraging children to attend with subsidised supplies.



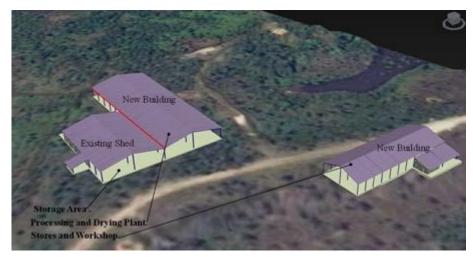
- ✓ Infrastructure: school, building, road and bridge repair across the region.
- Health: Established a Primary Health Centre with a resident doctor and supplies to handle medical emergencies and primary diseases and also provide basic nutritional, health and sanitation training to the community. We have also commissioned water wells to provide quality drinking water for near-by villages.

#### Community Engagement

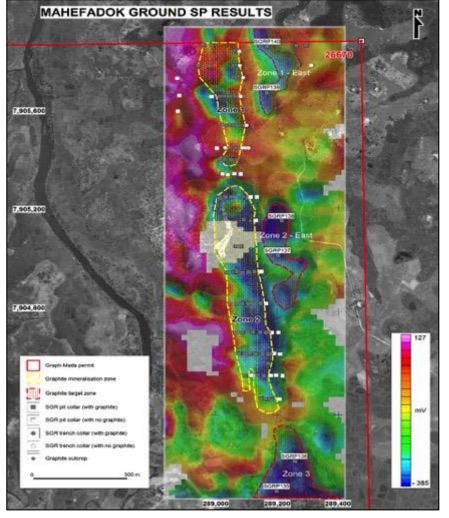


# Graphmada Expansion Project

- Currently planning an Expansion Study with the aim to increase production.
- Trial mining and processing has demonstrated a saleable product, with some product already sold.
- Plan is to ultimately establish a second processing plant designed to expand current production.
- Resource expansion drilling to commence October 2016<sup>1</sup>.



Conceptual design and layout of new processing plant



Mahefedok self-potential (SP) geophysical survey results

<sup>1</sup> There is a risk that the Company may not be able to expand or upgrade its Mineral Resource or identify sufficient graphite to meet any increase or sustained levels of production and therefore any money spent by the Company may not be economically

### Share Price Catalysts\_

- Increase in Processing Plant availability & utilisation
- Improvements in Recovery and Concentrate Grade
- Successful ramp up to nameplate capacity on existing plant
- Drilling and potential expansion of graphite resources
- Completion of the Expansion Project
- Installation of additional Processing capacity (second plant)
- Increased revenues from improvements and expanded production capacity

# **Disclaimer & Cautionary Statements**

#### Disclaimer

This document has been prepared by Bass Metals Limited (the "Company"). It should not be considered as an invitation or offer to subscribe for or purchase any securities in the Company or as an inducement to make an invitation or offer with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this document. This document is provided on the basis that neither the Company nor its officers, shareholders, related bodies corporate, partners, affiliates, employees, representatives and advisers make any representation or warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in the document and nothing contained in the document is, or may be relied upon as a promise, representation or warranty, whether as to the past or the future. The Company hereby excludes all warranties that can be excluded by law.

The document may contain forward-looking information and prospective financial material, which is predictive in nature and may be affected by inaccurate assumptions or by known or unknown risks and uncertainties, and may differ materially from results ultimately achieved. All references to future production, production targets and resource targets and infrastructure access are subject to the completion of all necessary feasibility studies, permitting, construction, financing arrangements and infrastructure-related agreements. Where such a reference is made, it should be read subject to this paragraph and in conjunction with further information about the Mineral Resources and Exploration Results, as well as the Competent Persons' statements. All persons should consider seeking appropriate professional advice in reviewing the document and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the document nor any information contained in the document or subsequently communicated to any person in connection with the document is, or should be taken as, constituting the giving of investment advice to any person.

#### Forward Looking Statements

This document may contain certain forward-looking statements. Such statements are only predictions, based on certain assumptions and involve known and unknown risks, uncertainties and other factors, many of which are beyond the Company's control. Actual events or results may differ materially from the events or results expected or implied in any forward-looking statement. The inclusion of such statements should not be regarded as a representation, warranty or prediction with respect to the accuracy of the underlying assumptions or that any forward looking statements will be or are likely to be fulfilled. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date of this document (subject to securities exchange disclosure requirements). The information in this document does not take into account the objectives, financial situation or particular needs of any person. Nothing contained in this document constitutes investment, legal, tax or other advice.

#### Competent Person Statement

The information in this report that relates to Mineral Resources is based on information compiled by Tim McManus, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy and a full-time employee of the Company.

Tim McManus has sufficient experience that is relevant to the style of mineralisation 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. Tim McManus consents to the inclusion of the information in this report in the form and context in which it appears.

#### Subsequent Public Reporting

The information for the JORC Mineral Resource Summary is extracted from the ASX Announcement "Strategic investment in producing graphite asset" released 2 September 2015, which is available to view on <u>www.asx.com.au</u>. Bass Metals Ltd. confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and 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 announcements.

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