



## ASX RELEASE

30 July 2019

### About Globe

- Globe Metals & Mining Limited is a Perth based company listed on Australian Stock Exchange (ASX Code: GBE)

### Investment Summary

- 100% interest held in Kanyika Niobium Project in Malawi (Africa)

### Directors and Management

**Ms Alice Wong** - Non-Executive Chairperson

**Mr Alistair Stephens** - Managing Director

**Mr William Hayden** - Non-executive Director

**Mr Bo Tan** - Non-executive Director

**Mr Alex Ko** - Non-executive Director

### Capital Structure

**Shares on Issue:** 465,922,373

**Options on Issue:** 1,000,000 (exercise price of \$0.25 per option; expiry of 30 June 2020)

### Substantial Shareholders

**Apollo Metals :** 52.79%

**Ao-Zhong International Minerals:** 25.36%

### Contact

Alistair Stephens

Managing Director

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## June Quarter 2019 Review of Operations

### Kanyika Niobium Project

- Company continues to work with government, stakeholders, specialist consultants and advisory parties to advance the Project.
- Work during the quarter was predominantly focussed on execution of the Development Agreement with Globe meeting with the government to discuss feedback from Malawi Government departments.
- Work during the quarter also included consideration of project financing and partnership options, and potential for involvement in areas of latest development in the niobium industry.

### Malawi Federal Election

- Malawi 's constitutional court to decide legality of recent election result causing disruption and delay to government processes.

### Niobium Industry News

- Recent news reports indicate that industry leader CBMM of Brazil has entered into a partnership with Toshiba to develop electric car batteries and follow announcements in 2017 by Toshiba that its next-generation SCiB™ electric car battery would feature a titanium-niobium-oxide anode.
- News of the partnership between CBMM and Toshiba follow reports earlier this calendar year that CBMM has committed to investing US\$200 million aimed at expanding its capacity from its current level of 100ktpy FeNb to 150ktpy by the end of 2020.
- Analysts report that the decision by CBMM to increase its production capacity is due to the current strength in the niobium market, with export statistics reflecting that exports of niobium from CBMM to China, the largest market, more than doubled from 2016 to 2018.

### Corporate & Finance

- Cash at bank and in term deposits at 30 June 2019 of \$7.387 million.
- 1,000,000 share options lapsed having an expiry of 30 June 2019 and an exercise price of \$0.20.

Globe Metals & Mining Limited (ASX Code: GBE) (“Globe” or “the Company”) provides its activities report for the quarter ended 30 June 2019.

## 1. Kanyika Niobium Project

### 1.1 Mining Development Process

Negotiations with various regulators, stakeholders and other parties are ongoing in regard to developing the Kanyika Niobium Project.

Advancement of the Kanyika Niobium Project is dependent on finalisation and execution of the Development Agreement (refer status at 1.5) which rests with the Government of Malawi.

### 1.2 Exploration Activities

No exploration activities were undertaken this quarter.

### 1.3 Engineering Studies

Update of the previous engineering study to incorporate the findings and outcomes of the pilot plant work undertaken during 2014 and other necessary engineering design changes are complete.

An update on the Feasibility Study was provided during the previous quarter – refer section 1.5.

### 1.4 Mineral Resource Estimate

A Mineral Resource Estimate for the Kanyika Niobium Project under the 2012 JORC guidelines was reported to ASX on 11 July 2018, as follows:

**Table 1: Mineral Resource Estimate for Kanyika using a 1,500 ppm Nb<sub>2</sub>O<sub>5</sub> lower cut**

Category	Million Tonnes	Nb <sub>2</sub> O <sub>5</sub> ppm	Ta <sub>2</sub> O <sub>5</sub> ppm
Measured	5.3	3,790	180
Indicated	47.0	2,860	135
Inferred	16.0	2,430	120
<b>Total</b>	<b>68.3</b>	<b>2,830</b>	<b>135</b>

**Table 2: Mineral Resource Estimate for Kanyika using a 3,000 ppm Nb<sub>2</sub>O<sub>5</sub> lower cut**

Category	Million Tonnes	Nb <sub>2</sub> O <sub>5</sub> ppm	Ta <sub>2</sub> O <sub>5</sub> ppm
Measured	3.4	4,790	220
Indicated	16.6	4,120	190
Inferred	2.8	4,110	190
<b>Total</b>	<b>22.8</b>	<b>4,220</b>	<b>190</b>

## 1.5 Feasibility Study

On 25 January 2019, Globe provided an update on progress of its Kanyika Feasibility Study.

Globe advised that it had:

1. finalised the revision of all studies and plans, such that the technical programs associated with the mineral resource, mining, metallurgical studies, processing, engineering design and infrastructural support are all done to a technical detail that is satisfactory to engineering classification standards; and
2. obtained updated capital and operating cost estimates through a tender process that was undertaken independent of Globe,

and has updated its financial model for revised capital costs, revenues and operating costs in order to determine key metrics including but not limited to project revenue, profitability and payback.

Globe noted that it was not yet in a position to finalise the financial model and release the key outcomes due to:

- (a) the current status of the mining law in Malawi; and
- (b) the status of negotiations between Globe and the Government on the Development Agreement.

### ***Mining Act***

On 14 December 2018, the National Parliament of Malawi passed a new bill – Mines and Minerals Bill 2018 (New Act) with the new legislation to replace the previous Mines and Minerals Act (Cap. 61:01) which had been in place since 1981, subject to presidential assent and gazettal.

On 14 February 2019, the Malawi parliament confirmed that Malawi's President, Mr Peter Mutharika, had assented to the new Act.

President Mutharika is on record telling the Malawi Parliament that government hopes to enhance the development of the mining sector and increase its benefits to the people. President Mutharika said: "In recognition of the huge potential the mining sector has on the country's economic growth and development, government is implementing a number of activities aimed at increasing investments in the sector."

The administrative process of gazettal of the New Act is the last step to be completed to bring the New Act into force and is considered a formality.

Despite this, gazettal is yet to occur, with reports suggesting that the delay in gazettal is likely a consequence of the election uncertainty currently gripping Malawi (refer 1.6).

### ***Development Agreement***

The Company appears to be making significant progress in negotiating a Development Agreement for the KNP with the Government of Malawi.

The Company has been working with the Malawi Government responding to comments received following the Kanyika Development Agreement having been circulated amongst Malawi Government departments for final comment. The Company considers the comments received to be relatively minor in nature and is actively seeking for the Development Agreement be finalised and executed.

Finalisation of the Development Agreement also requires a shareholder's agreement to be signed off prior to the Development Agreement becoming operative, amongst other conditions. The Company does not consider the other conditions to be significant impediments to finalisation and execution of the Development Agreement. These documents are an important consideration for the Government of Malawi as they will potentially be standard documents for all mining related projects in the future.

The Company is not in a position to finalise the Feasibility Study or its financial modelling of the Feasibility Study until the New Mines and Minerals Act is gazetted and the Kanyika Development Agreement is executed.

## 1.6 Malawi Government Elections

On 21 May 2019, Malawi held a federal election.

Release of the results of the election were initially suspended whilst Malawi's High Court considered an injunction placed on the Malawian Electoral Commission, claiming electoral irregularities.

On 28 May 2019, Peter Arthur Mutharika was sworn in as President of Malawi after the injunction was lifted enabling the results to be released.

Former President Peter Arthur Mutharika was returned after securing a slim margin of victory over Lazarus Chakwera, leader of the Malawi Congress Party – Mutharika (38.7%); Chakwera (35.41%).

Subsequently on 21 June 2019, Malawi's constitutional court ruled in favour of opposition parties pursuing a case over disputed election results. A full hearing set down for June 26 has subsequently been deferred.

It is widely reported that the uncertainty around the Malawi Federal election is expected to continue and is likely to cause disruption and delay to government processes.

## 2. Corporate

### 2.1 Cash at Bank

Cash at bank for the Company remains robust with A\$7.387 million at bank on call or in term deposit.

### 2.2 Options

As at 30 June 2019, share options remaining on issue are as follows:

Grant Date	Expiry Date	Number	Exercise Price
2 July 2013	30 June 2020	1,000,000	\$0.25
		<b>1,000,000</b>	

#### Changes During the Quarter

1,000,000 share options lapsed having an expiry of 30 June 2019 and an exercise price of \$0.20.

## 3. Niobium Demand

*During the quarter the Company continued to investigate opportunities for participation and involvement in industries seeking to develop applications requiring niobium.*

The use of niobium in rechargeable batteries is an important emerging market for niobium.

In October 2017, Toshiba, an industry leader in lithium-ion battery technology, announced the development of its next-generation SCiB™ ultra-rapid rechargeable batteries, which utilises a titanium niobium oxide anode to double the capacity of the battery anode. The new battery offers higher performance, longer-life, quicker charging and significantly improves safety. Toshiba will commence commercial manufacture from fiscal year 2019.

Recent research conducted at the University of Cambridge in the UK has found that the use of niobium tungsten oxides can intercalate large amounts of lithium benefitting systems that require high-power delivery and/or fast charging (e.g. mobile phones, laptop computers, e-readers and other electronic devices) and may also have implications for solid-state energy storage such as grid-scale storage for solar power.

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In addition to the use of niobium in electronic batteries a range of new applications are being developed or proposed which utilise niobium's unique characteristics in industries as diverse as medicine, aerospace, electronics and atomic energy.

### **Appended - Recent News Articles in relation to Niobium**

#### **Is super niobium battery coming?**

by Lucas Amorim, 4 July 2019 Exame

<https://exame.abril.com.br/blog/primeiro-lugar/a-superbateria-de-niobio-vem-ai/>

***Brazilian CBMM has invested US \$ 7 million in a pilot plant in partnership with Japanese conglomerate Toshiba to develop electric car batteries***



Electric car: innovation allows charging in 6 minutes and autonomy of 350 kilometers

On a trip to Japan in late June, President Jair Bolsonaro put the niobium on the news again when talking about jewelry made with the mineral.

What he may not know is that much more noble use is being made for niobium. Brazilian CBMM, which owns 78% of the global product market, has invested \$ 7 million in a pilot plant in partnership with Japanese conglomerate Toshiba to develop electric car batteries using niobium.

In tests, the batteries can be charged in just 6 minutes, with a range of 350 kilometers. The equipment can reach the market in two years. Currently, CBMM niobium is used to increase the strength and flexibility of steel alloys used, for example, in car manufacturing and construction.

## Niobium: CBMM announces major expansion in ferroniobium production capacity

Source: Roskill

<https://roskill.com/news/niobium-cbmm-announces-major-expansion-in-ferroniobium-production-capacity/>

The privately controlled global ferroniobium giant **CBMM** has announced that it will greatly expand capacity for ferroniobium production at Araxã, Brazil. The expansion will see capacity rise from its current level of about 100ktpy FeNb (gross weight) to 150ktpy by the end of 2020, with production anticipated at 110kt in 2019 and 120kt in 2020. The company is reportedly investing US\$200M in the expansion (some of which might be for niobium products other than ferroniobium).

### Roskill View

Several factors could have prompted CBMM’s decision to proceed fully with the expansion. One might be CBMM’s long-maintained policy of ensuring that there cannot be a deficit of supply for ferroniobium. Another is that ferroniobium competes with ferrovanadium in some steel applications. The ferrovanadium market has entered a period of structural deficit and prices reached thirteen-year highs in late 2018. These factors have prompted substitution of ferrovanadium for ferroniobium at some Chinese steel mills. Unlike ferrovanadium, ferroniobium does not have a history of price volatility. CBMM’s expansion may be timed to highlight the relative stability of the ferroniobium market.

The level of Brazil’s exports to China, the largest market, more than doubled from 2016 to 2018. That material can really only have come from CBMM. Trade statistics indicate that CMOC is operating at full capacity, as is Magris in Canada.

An interesting side note is that, while spot market prices for ferroniobium have jumped since October last year, unit values of bulk exports from Brazil and Canada have changed little. Only time will tell if the underlying price increases.

## 4. Schedule of Mineral Tenements as at 30 June 2019

	Project	Status	Tenement	Interest held by Globe
Malawi	Kanyika	Under application	AML00026	100%
Malawi	Kanyika	Granted	EPL0421/15R	100%

AML- Application for Mining Lease. A renewal application was lodged for this tenement and the Company awaits formal feedback on its renewal.

EPL – Exclusive Prospecting Licence (Malawi)

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Globe Metals & Mining Limited

### ABN

33 114 400 609

### Quarter ended ("current quarter")

30 June 2019

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(51)	(513)
(b) development		
(c) production		
(d) staff costs		
(e) administration and corporate costs	(395)	(1,638)
1.3 Dividends received (see note 3)		
1.4 Interest received	46	211
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(400)</b>	<b>(1,940)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment		
(b) tenements (see item 10)		
(c) investments		
(d) other non-current assets		

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>		
<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares		
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>		
<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	7,774	9,339
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(400)	(1,940)
4.3	Net cash from / (used in) investing activities (item 2.6 above)		
4.4	Net cash from / (used in) financing activities (item 3.10 above)		
4.5	Effect of movement in exchange rates on cash held	13	(12)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>7,387</b>	<b>7,387</b>

5. <b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	7,387	7,774
5.2 Call deposits		
5.3 Bank overdrafts		
5.4 Other (provide details)		
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>7,387</b>	<b>7,774</b>

6. <b>Payments to directors of the entity and their associates</b>	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	165
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

The payments made to directors of the entity and their associates reported at 6.1 were comprised as follows:

	\$A'000
Non-executive Directors' Fees	62
Managing Director Fees	96
Superannuation	6
<b>Total</b>	<b>165</b>

7. <b>Payments to related entities of the entity and their associates</b>	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

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## Mining exploration entity and oil and gas exploration entity quarterly report

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities		
8.2 Credit standby arrangements		
8.3 Other (please specify)		
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

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<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	34
9.2 Development	
9.3 Production	
9.4 Staff costs	230
9.5 Administration and corporate costs	116
9.6 Other	
- Directors Fees	62
<b>9.7 Total estimated cash outflows</b>	<b>442</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2 Interests in mining tenements and petroleum tenements acquired or increased				

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**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here: (Director/Company secretary)

Date: .30 July 2019

Print name: Michael Fry

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.