Globe Metals & Mining

Positioned to be the first new niobium mine in 50 years



ASX RELEASE

31 January 2022

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 Bo Tan - Non-executive Director Mr Ricky Lau – Non-executive Director Mr Michael Barrett - Non-executive Director Mr Michael Choi - Non-executive Director Mr Michael Fry – CFO/Company Secretary

Capital Structure

Shares on Issue: 465,922,373

Substantial Shareholders

Apollo Metals: 52.79%

Ao-Zhong International Minerals: 25.36%

Director Holdings

Ms Alice Wong (Apollo Metals): 245,983,611

Contact

Michael Fry Company Secretary info@globemm.com T: +61 (0)8 6118 7240

Quarter ended 31 December 2021 Review of Operations

HIGHLIGHTS

Kanyika Niobium Project

- Mining Licence LM0216/21 issued for the Kanyika Project refer ASX announcement of 19 August 2021 titled "KNP Mining Licence Granted".
- Advance Payment made to Project Affected Peoples of MWK 220,000 (~USD 270) per household as a goodwill measure and is an advance on the compensation that will be due and payable to persons affected when the persons are required to relocate from site.
- Globe has continued to build its project delivery organisational capability with the appointment of Andrew Simms to the position of Process Engineer and the engagement of two consultant engineers: Ian Langridge and Arnold Bell.
- Engineering team currently undertaking a feasibility into a phased approach to construction and operation which is expected to present an option for a quicker pathway to initial production with reduced up-front capital costs. Doing so ought to enable Globe to commence operations on a smaller scale and to build its business (customers, products, etc) prior to initiating full-scale operations.
- Processing optimisation test-work aimed at reducing the Kanyika Project's capital and operating costs and further developing the Company's intellectual property was ongoing during the quarter.

Development Agreement

- The Company awaits notification from the Government of Malawi for the execution of a Mine Development Agreement (MDA). The MDA establishes key terms and conditions for operation and the fiscal regime for the Project.
- The Company notes that on 24 January 2022, the President of Malawi dissolved his cabinet due to concerns over corruption. A new Minister of Mines has been appointed and Globe will engage with his office as a matter of urgency. The Company anticipates that this will delay the issue of the MDA but hopefully not for an extended time.

Corporate & Finance

- Cash at bank and in term deposits as at 31 December 2021 was \$1.018 million (30 September 2021: \$1.902 million).
- Post the end of the quarter the Company has finalised and lodged its 2021 research and development return for which it expects to receive a rebate in the order of ~\$445k.
- Michael Barrett and Michael Choi were appointed as non-executive directors on 17 December 2021. Mr Alistair Stephens and Mr Bill Hayden both resigned as directors during the quarter.



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Globe Metals & Mining Limited (ASX Code: GBE) ("Globe" or "the Company") provides its activities report for the quarter ended 31 December 2021.

1. Kanyika Niobium Project

1.1 Exploration Activities During the Quarter

In accordance with ASX Listing Rule 5.3.1, the Company advises that there were no exploration activities planned or conducted during the quarter.

Application has been made to the Ministry of Mines for an Exploration License to cover the same area as EPL0421, which will expire in May 2022.

1.2 Project Studies

During the quarter the Company continued with its processing optimisation testwork aimed at reducing the Kanyika Project's capital and operating costs. As reported in the Company's ASX announcement of 20 October 2021, the work has led to the filing of a Patent Cooperation Treaty (PCT) application for a novel patent covering metallurgical technology for the recovery of pyrochlore that will significantly benefit the Kanyika Project, and which has potential for application to other niobium projects globally and to other commodity types.

The outcome from the examination process of the PCT is expected during the 2022 calendar year.

1.3 Mining Licence

Globe was granted a Large-Scale Mining Licence LM0216/21 on 13 August 2021, signed by the Honourable Rashid Abdul Gaffar, Minister of Mines, pursuant to the Mines and Minerals Act.

LML0216/21 confers on Globe the exclusive right to prospect and mine for a term of a 25 years.

The terms and conditions of the mining licence require that Globe must, amongst other things:

- pay annual charges prescribed under the Mines and Minerals (Mineral Rights) Regulations 1981 and mineral royalties in accordance with the Mines and Minerals Act.
- \circ $\$ have a right to mine and process pyrochlore
- $\circ~$ endeavour to give employment preferentially to citizens of Malawi
- endeavour to procure goods and services produced and manufactured in Malawi provided that they can be obtained at competitive terms and in comparable quality.
- o submit reports to the Registrar of Mineral Tenements as required
- o comply with all conditions imposed under Part VIII of the Mines and Minerals Act (No. 8 of 2019).

1.4 Feasibility Study

Upon Globe being granted a mining licence for Kanyika, Globe released the results of its feasibility study (refer ASX announcement of 19 August 2021) which was undertaken to establish the most appropriate configuration for the Kanyika Project and to determine its economic feasibility in a full-scale environment

The results of the Feasibility Study highlighted a robust project with strong financial returns.

More recently, the Company has been investigating a phased approach to construction and commencement of operations which is expected to present an option for a quicker pathway to production with reduced up-front capital costs with the overall objective of allowing Globe to get operating and to build its business (customers, products, etc) prior to initiating full-scale operations.



1.5 Mine Development Agreement

The Company and the Malawi Government have indicated their desire and intention to execute a Mine Development Agreement, however the execution of the Mine Development Agreement has been delayed due to internal Government departmental processes.

The finalisation and execution of a Mine Development Agreement is an important aspect of the Project as it outlines the fiscal regime under which the Project will operate and sets out the terms upon which the Company is able to develop the minerals contained in the Project, including terms not otherwise required through existing regulations. As such, Globe continues to push for its execution and awaits Government feedback on the timing of such execution.

On 24 January 2022, Malawi's President Chakwera dissolved his entire cabinet due to concerns over corruption. A new Minister of Mines has been appointed and Globe will engage with his office as a matter of urgency. The Company anticipates that this will delay the issue of the MDA but hopefully not for an extended time.

1.6 Impact of Coronavirus

As at the date of this report the COVID-19 situation in Malawi has worsened with Malawi experiencing a fourth wave of the virus resulting in a surge in the number of infected and a rise in the number of deaths. Cumulatively, Malawi has had a total of 84,224 reported cases of coronavirus with 2,544 having resulted in death. It is estimated that only 7.8% of the population have received 1 dose of the vaccination.

Globe has a small and committed team who have and continue to take all necessary measures to ensure the safety of our team, our partners, the community and the countries in which we operate. The protocols for health safety adopted and maintained by the Company have allowed its staff to continue to meet and work with both Government personnel and communities during this time.

1.7 Community

Conversations on community development programs, relocation of affected persons have been gathering momentum in recent months.

Persons required to relocate from site to facilitate the mining project will receive compensation to be determined by government in consultation with the affected communities.

In recognition of this, the Company has completed an advance payment to Project Affected Persons (refer definition below) of MWK 220,000 (~USD270) per household. Of the 244 households identified as being eligible to receive the advance payment, 242 households accepted the payment resulting in a total payment by Globe of MWK53.24 million (~USD 65,000). Administrative and other costs resulted in program costs of ~USD 75,000.

The payment is a goodwill measure and is an advance on the compensation that will be due and payable to persons affected when the persons are required to relocate from site. To this end, Globe is targeting a Decision to Mine by end of calendar year 2022 and relocation of Project Affected Persons in the first quarter of calendar year 2023; but only upon the giving of proper notice to the Project Affected Persons.

The households to whom this payment was made were those identified in a formal assessment that was undertaken by the Mzimba District Commissioner's Office in consultation with the Traditional Authorities and Malawi government during 2012 as being persons who would be required to relocate in order for the Kanyika Mining Project to proceed (so-called Project Affected Persons).

The advance payments were made during December 2021 and January 2022, with monies being direct debited to a bank account nominated by the relevant household.



Facilitation of this advance payment was precipitated by a series of community meetings, which involved Village heads and other Traditional Authorities, representatives of non-government organisations, and the Project Affected Persons themselves.

Globe is extremely grateful for the support it has received in this process including, but not limited to, the Traditional Authorities, the District Commissioners, the Development Committees (both district and village), the Lands Ministry, the Ministry of Mines, the non-government organisations, and the Project Affected Persons.

This payment is part of an ongoing process by Globe to forge better and stronger relationships with the Kanyika Community, non-Government groups and representatives of all levels of government and heralds a new era for community relations.

1.8 Project Financing

Good progress was made during the quarter ended 31 December 2021 in relation to off-take and projectfunding, with communications between Globe and several parties. Due to the commercially sensitive nature of these discussions, Globe is not in a position to provide any further information at this time. Globe shareholders will be advised as and when material developments occur.

2. Niobium Market Outlook

Globe continues to monitor factors driving niobium demand, supply and pricing and to investigate opportunities for participation and involvement in industries seeking to develop applications requiring niobium.

Background

Approximately 90% of niobium used is consumed as ferroniobium in steelmaking. The remainder is used in a wide range of smaller-volume but higher-value applications, such as high-performance alloys (which include superalloys), carbides, superconductors, electronics and functional ceramics.

Although the unit consumption is very small—fractions of a percent by weight of a tonne of finished steel—the benefits are large. Niobium addition in steel significantly increases strength, so less steel is required overall, which can reduce cost substantially. This has been the basis for the development and growth in its use in steel over the last few decades and should remain the driver in the years to come. Niobium intensity of use is relatively low in several large steel-producing nations such as China, Russia, India and Southeast Asia. The capacity therefore for an increase in the intensity of use of niobium and a potential increasing usage in long products (rebar) provides an area of potential growth in niobium demand. With Chinese regulations now requiring higher ferroalloy loadings in construction, the outlook for both ferroniobium and ferrovanadium demand looks positive.

Almost all ferroniobium supply is from three industrialised producers, two in Brazil and one in Canada. By far the largest is Companhia Brasileira de Metalurgia e Mineração (CBMM), which operates a pyrochlore mine and processing plant near Araxá in east-central Minas Gerais state in Brazil. While historically the company has operated comfortably below operational capacity, recent increases in demand translated into rising operating rates and prompted an increase its ferroniobium capacity by 50% over the period to 2021. The other major producers, Magris Resources in Canada and China Molybdenum in Brazil are thought to be operating at close to capacity.



Recent Developments & Press

Electric Vehicle Batteries

Use of niobium in electric vehicle batteries continues to gain momentum. In September 2021, CBMM acquired a 20 percent stake in the US battery start-up Battery Streak.

According to Battery Streak;

This investment will allow Battery Steak to drive development and ramp production of its revolutionary, patented materials for a variety of applications including power tools, drones, medical devices, electric scooters, warehouse robots, and EVs, in civilian and military use cases.

Battery Streak's technology allows products to charge ultra-fast, in approximately 10 minutes, while providing a longer cycle life. Additionally, Battery Streak's technology generates very little heat, even at rapid charge.

Source: https://batterystreak.com/battery-streak-nsf-grant-cbbm-investment/

This investment runs alongside CBMM's USD10M investment into Echion, another cutting-edge battery start-up promoting the use of niobium in battery anodes.

Source: https://echiontech.com/echion-completes-10m-series-a/

Medical Applications

The following article was published during the month of September 2021 reflecting the importance of niobium and tantalum to medicine:

Critical twin metals take differing paths

Niobium prefers blue-collar work; tantalum is more high-tech

Countless lives have been saved by diagnoses made with the assistance of magnetic resonance imaging (MRI) scanners, which use niobium superconducting magnets to provide detailed images of the inside of a human body.

Though it is tough to distinguish the nearly identical properties of niobium and tantalum in nature, at the workplace, one of these critical twin metals typically dons a hardhat and boots to work in the construction and energy industries while you are more apt to find the other working in the high-tech sector. Their differences, however, are subtle, and their careers sometimes overlap.

"The leading use of niobium is in the production of high-strength steel alloys used in pipelines, transportation infrastructure, and structural applications," the United States Geological Survey penned in a 2018 report on the indispensable twins. "Electronic capacitors are the leading use of tantalum for high-end applications, including cell phones, computer hard drives, and such implantable medical devices as pacemakers."

While niobium and tantalum typically take differing career paths, they have a common origin story due to the shared traits of these nearly identical twin metals.

"Niobium and tantalum are transition metals that are almost always found together in nature because they have very similar physical and chemical properties," the U.S. Geological Survey wrote in a 2018 paper on the twin metals.

These transition metals share two additional traits that place them high on the list of minerals and metals the USGS has deemed critical to America's security and economic wellbeing – the U.S. is 100% import reliant for both, and you cannot find a good substitute for either without sacrificing performance and increasing costs.

Blue-collar niobium

A tough metal that is resistant to corrosion and boasts an exceptionally high melting point, niobium tends to be the blue-collar working twin.



Roughly 81% of the 10,100 metric tons of niobium imported into the U.S. during 2020 was used as an alloy in high-strength steel.

"Niobium microalloyed high strength steel plates are used in a variety of applications, such as large diameter line pipe for the transmission of gas and oil, shipbuilding, offshore platforms, bridges, and energy generation structures such as wind turbines," according to Oakley Steel.

The Asian steel supplier says that less than 0.1% niobium is all that is needed to boost the strength, toughness, and weldability of steel.

Niobium's extreme resistance to heat and corrosion also makes this strong metal an important ingredient for iron-, nickel- and cobalt-based superalloys that need to stand up to high temperatures. Roughly 18% of the niobium consumed in the U.S. last year was used to make high-temperature superalloys for parts that go into jet engines, rockets, gas turbines, and turbochargers.

Adding to its résumé of "super" properties, niobium is among the most powerful superconducting metals.

Superconducting magnets made from niobium-germanium, niobium-tin, and niobium-titanium alloys are used in a range of important devices, from imaging equipment to particle accelerators. The magnetic resonance imaging (MRI) scanners, which use niobium superconducting magnets, along with radio waves and a computer to create detailed images of the inside of a human body – are among the applications of this critical metal's special characteristics.

Niobium superalloy magnets also play a crucial role in accelerating particles to near the speed of light in the Large Hadron Collider, a 17-mile circular tunnel deep under the border between Switzerland and France. The resulting high-energy collisions of protons help physicists investigate dark matter, antimatter, and other secrets of the universe.

Niobium-titanium magnets currently being used to produce these powerful fields are being replaced with even more powerful niobium-tin magnets used in the search for dark matter and other cutting-edge experiments at the Large Hadron Collider.

International scientists are now floating the idea for the Future Circular Collider, a 62-mile successor that would be 10 times more powerful than the Large Hadron Collider. This massive US\$27.5 billion project would need a whole lot more niobium, along with other critical minerals.

Beyond its super characteristics, niobium is hypoallergenic and inert, making it a good candidate for uses inside the human body, such as pacemakers and prosthetics.

Niobium is also one of the few metals that can be heated to produce a wide array of iridescent colors. The heat creates anodized oxide layers on the surface of niobium that make this color-changing effect by diffracting the light that bounces off it.

This ability, coupled with being hypoallergenic, makes it popular for creating colorful jewelry, especially for body piercing.

High-tech tantalum

Similar to its twin, tantalum can be implanted into the human body without any side effects. Because it is completely void of any immune response in humans, tantalum is used in critical bone replacements such as skull plates, tantalum-coated blood vessel stents, nerve connections, suture clips to close up wounds, and as a gauze to help bind abdominal muscles.

In addition to sharing many of niobium's traits, tantalum sets itself apart with an exceptional capacity to store and release energy that takes it down a high-tech career path.

While the use of tantalum is more opaque than its twin, the greatest benefit of this metal is in the powerful capacitors and resistors for modern electronics. Because tantalum is so good at storing and releasing energy, capacitors and resistors made with this transition metal can be exceptionally small. This is crucial in the shrinking of modern electronics, such as smartphones, hearing aids, personal computers, and automobiles.



Tantalum oxides are also used to make lighter-weight glass camera lenses that produce a brighter image. In addition to traits that set it apart from its twin, tantalum shares many of niobium's characteristics and is often used for similar applications. Being substantially more expensive, however, tantalum typically imbues its superlative properties as a coating on other metals.

In the chemical industry, tantalum's corrosion resistance makes it useful as a lining for pipes, tanks, and other vessels that store and transport corrosive materials.

Indispensable twins

While deposits of both niobium and tantalum are found in the U.S., it has been nearly six decades since either of these critical minerals have been produced domestically.

"Primary production of niobium or tantalum in the United States has not been reported since the late 1950s; therefore, the United States has to meet its current and expected future needs by importing primary mineral concentrates and alloys, and by recovering them from foreign and domestic alloy scrap," USGS inked in its 2018 report, "Niobium and Tantalum – Indispensable Twins."

As a result, the U.S. imported an estimated 22.2 million pounds of niobium, valued at US\$280 million, to meet the needs of U.S. manufacturers during 2020.

Accounting for roughly 68%, Brazil was by far America's largest supplier of ferroniobium and niobium metal. Canada (25%), Germany (4%), and Russia (3%) accounted for most of the balance.

While tantalum consumption in the U.S. is less than 10% that of niobium, the higher price this energy storing metal fetches makes up much of the differential.

According to the USGS, roughly 2 million lb of tantalum, valued at US\$210 million, was used in the U.S. during 2020.

When it comes to tantalum metal, China, at 38%, was America's largest supplier last year, followed by Germany (21%), Thailand (13%), and Kazakhstan (12%).

A small quantity of ores and concentrates containing both niobium and tantalum were also imported from Rwanda, Australia, Brazil, and the Democratic Republic of Congo.

Because the U.S. is wholly dependent on foreign sources for both niobium and tantalum, it is vulnerable to potential supply disruptions from swings in the metal markets, geopolitical unrest, and global economic instability.

"Niobium and tantalum are considered critical and strategic metals based on the potential risks to their supply (because current production is restricted to only a few countries) and the significant effects that a restriction in supply would have on the defense, energy, high-tech industrial, and medical sectors," according to the USGS.

While both the U.S. and Canada have potentially viable niobium resources, economically viable deposits of tantalum in North America are hard to come by.

https://www.metaltechnews.com/story/2021/09/09/critical-minerals-alliances/critical-twin-metalstake-differing-paths/698.html



3. Corporate

3.1 Cash at Bank

Cash at bank for the Company at 31 December 2021 was \$1.018 million (30 September 2021 with \$1.902 million).

Post the quarter end, the Company finalised its R&D Claim for FY21 which is expected to result in a rebate of ~\$445k.

3.2 Appointment of Directors

Mr Michael Barrett and Mr Michael Choi OAM JP were appointed as non-executive directors of Globe on 17 December 2021. Mr Choi will Chair the Company's newly established Environmental, Social and Governance (ESG) Committee while Mr Barrett will be a member of the ESG Committee and the Audit and Risk Committee.

Mr Choi has over 30 years' experience in business ownership and management and was a Member of the Queensland Parliament for 11 years between 2001 and 2012. He was at one stage the Assistant Minister for Mines and Energy and Assistant Minister for Trade.

Mr Choi is the founding managing director of a company in property development, project and development management as well as construction management. Established since the 90s, the company was recognised at one stage as one of the top 20 firms in Queensland in its sector with multiple industry awards.

Mr Choi holds a Bachelor of Engineering, is a Registered Professional Engineer Queensland, a Member of Australia Institute of Project Management, a Member of the Australian Institute of Company Directors and Vice President of Australia China Business Council (Queensland).

Mr Barrett is a Chartered Accountant with over 30 years' international experience in strategy, capital markets, investor relations, and risk management.

Mr Barrett held senior mining sector roles in Western Australia, including with Rio Tinto Iron Ore and WMC Resources Ltd before he took the position of Chief Financial Officer of Rio Tinto's US energy business in Wyoming and Denver from 2004 to 2015. He led Rio Tinto's divestment and IPO of the business as Cloud Peak Energy on the New York Stock Exchange in 2009 and continued to serve as CFO of the listed company. Since 2015, Mr Barrett spent two years as National Lead Partner for Deloitte's Risk Advisory Energy and Resources practice. He specialised in Board Advisory and Risk Management for many of the largest mining and energy and resources companies nationally. Subsequently, he established his own consulting business, helping develop smaller businesses across the energy and resources industry. Most recently, he acted for Garnet International Group, including completing feasibility studies, multiple financing rounds, and offtake agreements as it sought to develop its Balline Garnet Project.

Mr. Barrett is a Graduate of the AICD, holds a Joint Honours Bachelors degree, and is the Lead Independent, non-executive director and Chair of the Audit Committee with TSX-listed Novo Resources Corp (TSX Code: NVO); and a non-executive director of ASX-listed Pearl Global Ltd (ASX Code: PG1). Mr. Barrett resides in Perth, Western Australia.

Mr Stephens resigned as a director and formally finished his tenure as Managing Director on 9 January 2022. Mr Bill Hayden resigned as a director effective 31 December 2021.

The Company thanks each of Mr Stephens and Mr Hayden for their valued contribution over a number of years.



3.3 Further Additions to Globe Technical Team

Globe has continued to build its project delivery organisational capability with the appointment of Andrew Simms to the position of Process Engineer and the engagement of two consultant engineers: Ian Langridge and Arnold Bell.

Mr Simms is a qualified chemical engineer who has considerable experience as a metallurgist and is based in the Company's Midvale facility whilst Mr Langridge and Bell are highly experienced consultant engineers located in South Africa who will work alongside and under the direction of Rex Zietsman.

3.4 Payments to related parties of the entity

In accordance with the requirements of ASX Listing Rule 5.3.5 the Company advises that during the quarter ended 31 December 2021, the following payments were made to directors of the Company in respect of their directors' fess (inclusive of superannuation):

	A\$'000
Non-executive Directors' fees	55
Managing Director Fee	96
TOTAL	151

4. ASX Announcements from start of Current Quarter

The following announcements were made to Australian Stock Exchange (ASX) since the commencement of the current quarter and up to the date of this report.

Date	ASX Announcement Title
31-Jan-22	AGM Results
31-Jan-22	Advance Payment to Project Afffected Persons
17-Jan-22	Replacement Proxy Form
17-Jan-22	Addendum to Notice of AGM
10-Jan-22	Final Director's Interest Notice - Alistair Stephens
10-Jan-22	Formal Commencement of CEO
4-Jan-22	Final Director's Interest Notice
20-Dec-21	Change of Registry Address
20-Dec-21	Initial Directors Interest Notice x2
20-Dec-21	New Board Appointments
24-Nov-21	Postponement of Annual General Meeting
17-Nov-21	Organisational Changes
15-Nov-21	Trading Halt
3-Nov-21	Appendix 4G and Corporate Governance Statement
21-Oct-21	2021 Annual Report
26-Oct-21	Quarterly Reports
21-Oct-21	Notice of Annual General Meeting/Proxy Form
20-Oct-21	Pyrochlore Patent Technology Breakthrough
20-Oct-21	Closing Date for Director Nominations
13-Oct-21	New Appointees Build Globe's Project Delivery Capacity
28-Sep-21	Full Year Stautory Accounts
7-Sep-21	Overview of Niobium Sources, Uses, Demand and Supply
1-Sep-21	Kanyika Niobium Project - Updated Presentation

Copies of announcements are accessible on the Company's website and on ASX at: https://www2.asx.com.au/markets/trade-our-cash-market/historical-announcements



5. Shareholding Information

Top 20 Holders as at 24 January 2022:

#	HOLDER NAME	UNITS	%
1	APOLLO METALS INVESTMENT	245,983,611	52.79%
2	AO-ZHONG INTERNATIONAL MINERAL	118,143,062	25.36%
3	BNP PARIBAS NOMINEES PTY LTD	14,185,704	3.04%
4	CITICORP NOMINEES PTY LIMITED	7,939,985	1.70%
5	MR COLIN ROBERT SEARL+ MRS CINDY SEARL	3,045,546	0.65%
6	MR RICHARD ULRICK + MRS WENDY ULRICK	2,654,000	0.57%
7	HSBC CUSTODY NOMINEES	2,533,891	0.54%
8	GOENG INVESTMENTS PTY LTD	2,358,697	0.51%
9	MR ANDREW CHARLES BALLARD	2,219,919	0.48%
10	BNP PARIBAS NOMINEES PTY LTD <ib ac="" au="" client="" noms="" ret=""></ib>	2,104,959	0.45%
11	BNP PARIBAS NOMINEES PTY LTD <ib ac="" au="" client="" noms="" ret=""></ib>	2,076,174	0.45%
12	MR MARK ANDREW THOMSON	1,721,301	0.37%
13	MR KELLY PETER BODMAN	1,645,618	0.35%
14	C&CR SUPERCO <c&cr a="" c="" searl="" superfund=""></c&cr>	1,430,078	0.31%
15	MR ALISTAIR STEPHENS + MRS MECHELLE STEPHENS	1,325,000	0.28%
16	TEBIL PTY LTD < BODMAN SUPER FUND A/C>	1,310,414	0.28%
17	MR MARK LEONARD SWANSON	1,210,000	0.26%
18	MR MICHAEL SCHULTZ	1,200,000	0.26%
19	MR PAUL BURTON	1,200,000	0.25%
20	BNP PARIBAS NOMINEES PTY LTD <lgt ag="" bank="" drp=""></lgt>	1,000,000	0.21%
20	MR JEAN_CLAUDE DEILLE <desille a="" c="" superfund=""></desille>	1,000,000	0.21%
20	MR GRAEME ELLERY	1,000,000	0.21%
20	MR DRITIAN MEHMETI	1,000,000	0.21%
Totals: To	pp 20 Holders	418,287,959	89.74%
Totals: Re	emaining Holders	47,634,414	10.26%
Totals:		465,922,373	100.00%

Number and Distribution of Holders:

Units	Number	Total Units	%
1-1,000	61	3,411	0.00%
1,001 – 5,000	56	202,663	0.04%
5,001 – 10,000	82	653,529	0.14%
10,001 - 100,000	340	15,528,099	3.33%
100,001 and above	145	449,534,671	96.48%
	684	465,922,373	100%



6. Schedule of Mineral Tenements as at 31 December 2021

In accordance with the requirements of ASX Listing Rule 5.3.3 the Company provides the following information.

					Interest he	d by Globe
Country	Project	Туре	Status	Tenement	31-Dec-21	30-Sep-21
Malawi	Kanyika	Mining Licence	Granted	LML0216/21*	100%	100%
Malawi	Kanyika	Exclusive Prospecting Licence	Granted	EPL0421/15R	100%	100%

There were no tenements acquired or disposed of during the quarter ended 31 December 2021, nor was there any change in the ownership of existing tenements since the end of the previous quarter.

*: pursuant to the Mines and Minerals Act, the Malawi Government is entitled to a 10% free equity interest in LML0216/21, subject to formally notifying Globe Mining & Metals Africa Limited (GMMA) of its desire to take up its entitlement. As at the date of this report, Globe or GMMA are yet to receive any such notice.

7. Authorisation for Release

This report has been authorised for release by the Company's Chief Executive Officer Grant Hudson.

For further information contact:

Grant Hudson Chief Executive Officer <u>gh@globemm.com</u> Michael Fry Company Secretary michael.fry@globemm.com



Qualifying Statements

Mineral Resource Estimates

The information in this report that relates to Mineral Resources is extracted from the report titled "Kanyika Niobium Project – Updated JORC Resource Estimate" released to the Australian Securities Exchange (ASX) on 11 July 2018 and available to view at <u>www.globemm.com</u> and for which Competent Persons' consents were obtained. Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcement released on 11 July 2018 and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original ASX announcement.

Full details are contained in the ASX announcement released on 11 July 2018 titled "Kanyika Niobium Project – Updated JORC Resource Estimate" available to view at <u>www.globemm.com</u>

The information in this report that relates to Ore Reserves is extracted from the report titled "Kanyika Niobium Project – Project Feasibility and Economics" released to ASX on 19 August 2021 and available to view at <u>www.globemm.com</u> and for which Competent Persons' consents were obtained. Each Competent Person's consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcement released on 19 August 2021 and, in the case of estimates of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original ASX announcement.

Full details are contained in the ASX announcement released on 19 August 2021 titled "Kanyika Niobium Project – Project Feasibility and Economics" available to view at <u>www.globemm.com</u>

Disclaimer

This report has been prepared by Globe Metals & Mining Limited ("Company"). The material contained in this report is for information purposes only. This release is not an offer or invitation for subscription or purchase of, or a recommendation in relation to, securities in the Company and nether this release nor anything contained in it shall form the basis of any contract or commitment.

This report may contain forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Globe Metals & Mining Limited's business plans, intentions, opportunities, expectations, capabilities and other statements that are not historical facts. Forward-looking statements include those containing such words as could-plan-target-estimate-forecast-anticipate-indicate-expect-intend-may-potential-should or similar expressions. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and which could cause actual results to differ from those expressed in this report. Because actual results might differ materially to the information in this report, the Company does not make, and this report should not be relied upon as, any representation or warranty as to the accuracy, or reasonableness, of the underlying assumptions and uncertainties. Investors are cautioned to view all forward-looking statements with caution and to not place undue reliance on such statements.

The report has been prepared by the Company based on information available to it, including information from third parties, and has not independently verified. No representation or warranty, express or implied, is made to the fairness, accuracy or completeness of the information or opinions contained in this report.

The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral resources and Ore Reserves 2012 Edition ("JORC Code"), which governs such disclosures by companies listed on the Australian Securities Exchange.



Appendix A: About the Kanyika Niobium Project

The Kanyika Niobium Project is located in central Malawi, approximately 55 kilometres northeast of the regional centre of Kasangu and secured by Mining Licence LML0216/21.

Drilling programs totalling 33.8 kilometres of percussion and core drilling have confirmed the extent of mineralisation. Structured and progressive engineering studies have resulted in the current (JORC 2012) resource statement (refer below) and given rise to significant improvements and simplifications in the process flowsheet, from that first imagined.

In addition, Globe has undertaken substantial metallurgical optimisation work and commissioned a pilot plant to demonstrate and further optimise metallurgical processes. Metallurgical optimisations studies have improved recoveries from 62% in 2012 to 75% today, through simple novel patented metallurgical processes.

The Kanyika operations will produce a pyrochlore mineral concentrate that contains both niobium and tantalum in commercially valuable volumes to be shipped to a refinery for advanced processing into high purity materials.

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: MRE for KNP using a 1,500 ppm Nb₂O₅ lower cut Table 2: MRE for KNP using a 3,000 Nb₂O₅ lower cut

Category	Million Tonnes	Nb₂O₅ ppm	Ta₂O₅ ppm
Measured	5.3	3,790	180
Indicated	47.0	2,860	135
Inferred	16.0	2,430	120
Total	68.3	2,830	135

Category	Million Tonnes	Nb₂O₅ ppm	Ta₂O₅ ppm
Measured	3.4	4,790	220
Indicated	16.6	4,120	190
Inferred	2.8	4,110	190
Total	22.8	4,220	190

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Globe Metals & Mining Limited	
ABN	Quarter ended ("current quarter")
33 114 400 609	31 December 2021

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development		
	(c) production		
	(d) staff costs		
	(e) administration and corporate costs	(447)	(965)
1.3	Dividends received (see note 3)		
1.4	Interest received	1	2
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (provide details if material)		
1.9	Net cash from / (used in) operating activities	(446)	(963)

2.	Cash flows from investing activi	ties	
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	(9)	(43)
	(d) exploration & evaluation	(383)	(751)
	(e) investments		
	(f) other non-current assets		

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) 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)		
2.6	Net cash from / (used in) investing activities	(392)	(794)

3.	Cash flows from financing activities
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)
3.2	Proceeds from issue of convertible debt securities
3.3	Proceeds from exercise of options
3.4	Transaction costs related to issues of equity securities or convertible debt securities
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)
3.10	Net cash from / (used in) financing activities

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,816	2,816
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(446)	(963)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(392)	(794)
4.4	Net cash from / (used in) financing activities (item 3.10 above)		

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(46)	(41)
4.6	Cash and cash equivalents at end of period	1,018	1,018

5.	Reconciliation of cash and cash equivalents 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	1,018	1,902
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,018	1,902

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a ation for, such payments.	description of, and an

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

	A\$'000
Non-executive Director's fees	47
Managing Director Fee	96
Superannuation	7
TOTAL	151

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	Total financing facilities		
7.5	Unused financing facilities available at qu	arter end	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(446)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(392)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(838)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,018
8.5	Unused finance facilities available at quarter end (item 7.5)	
8.6	Total available funding (item 8.4 + item 8.5)	1,018
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.21
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3 Otherwise, a figure for the estimated quarters of funding available must be included in ite	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the follow	ing questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

	5 , , ,
Answe	er: Yes
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?
Answe	er: The Company is in discussion with various parties in relation to a capital raising. Those discussions are not at a stage yet where they are sufficiently certain to warrant disclosure.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes. It ought be noted that post the quarter end, the Company finalised and lodged its R&D Claim for FY21 which is expected to result in a cash rebate of ~\$445k. This together with current cash at bank is considered sufficient to fund operations for the short term until a capital raising is undertaken.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

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.

31 January 2022

Date:

MICHAEL FRY - COMPANY SECRETARY

Authorised by: (Name of body or officer authorising release – see note 4)

Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow 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 cash flow 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.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.