

# ASX Media Announcement

5 January 2012



**Globe**  
Metals & Mining

## Memba Project – NE Mozambique area substantially expanded

Globe Metals & Mining (“**Globe**” or “**the Company**”; ASX: GBE) is pleased to announce it has the option to acquire up to a 90% interest in five additional licences, pending due diligence, around the high-grade ilmenite and vanadium-iron (Ti-V-Fe) project at Memba in Nampula Province, Mozambique.

### Highlights

- **Three month option for Globe to acquire up to a 90% interest in five additional exploration licences through staged exploration**
- **Previously released rock-chip samples returned very high grades of titanium with additional vanadium including:**
  - **Average 47% titanium dioxide (TiO<sub>2</sub>) and up to 0.4% vanadium**
- **Additional, separate high-grade magnetite zone identified with two samples averaging 66.8% Fe**
- **Memba Project well positioned to benefit from major infrastructure upgrades in north eastern Mozambique**

The option agreement allows Globe to earn up to an 80% interest in five additional licences through staged expenditure on exploration programs, with an option to purchase an additional 10% after five years from Mozambican company Siexpo Lda (Siexpo).

Globe’s Managing Director, Mr Mark Sumich, commented, “Globe is pleased to have secured the option to acquire the tenements along strike and adjacent to the Memba Project, which in total comprises approximately 1,000sqkm. In simple terms, this means that if the Memba Project is as good as we think it is, the adjacent ground is important for capturing strike extensions.”

“This part of Mozambique is also incredibly active in terms of both new mineral projects across a range of commodities, and also almost unprecedented infrastructure development for this part of Africa. We already liked operating in Mozambique; now we like it even more.”



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## About the Memba Project

### Geology

The Memba licence area is dominated by Proterozoic gneissic rocks of various compositions that have an overall E-W strike and moderate northerly dip. In early due diligence work an outcrop of high-grade ilmenite mineralisation was confirmed over a 2km strike length. Subsequent geological mapping of the area has revealed further strike length to the east, up to 6km away from previously known localities. The addition of the new licenses to the east extends the known mineralised strike length to greater than 10km.

### New licences

Globe has already demonstrated the ilmenite potential of its existing project (licence 2679L – joint venture with Mihandzu Minerals) in addition to iron targets (see Table 1). The identification of these targets within the 2679 license corresponds well with the regional magnetic imagery that shows the target magnetic anomalies have significant E-W strike length across license 2679L and Siexpo’s (3204L and 3205L) licenses (Figure 1). Another licence, 3203L occurs in similar geology to the east of 2679L (Figure 1), whilst two further licences with iron potential are located about 150km to the west-southwest of the Memba Project (Figure 2).

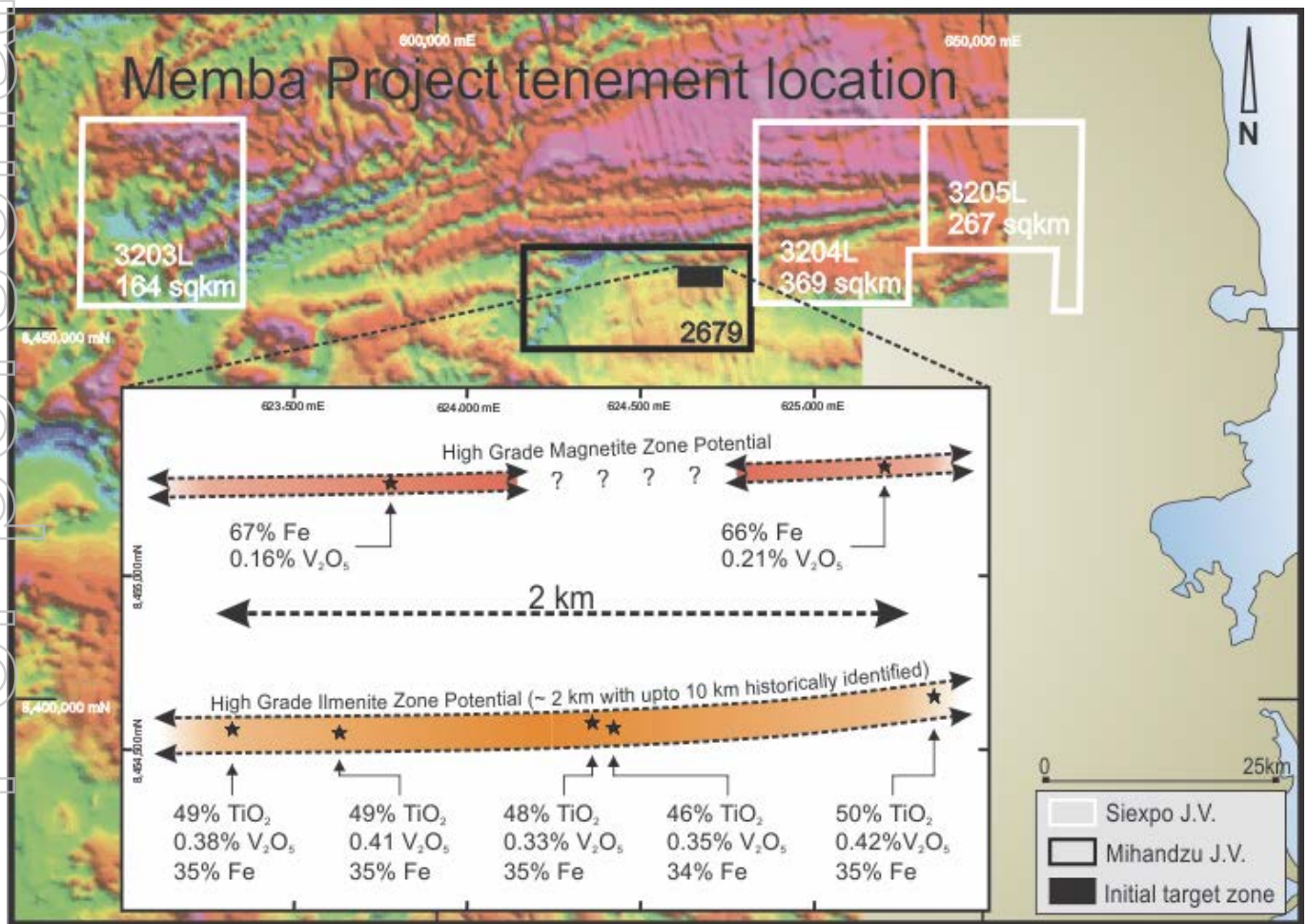


Figure 1: Memba Project tenement location and magnetic anomaly.

**Table 1: Previously reported significant Ti-V-Fe rock-chip results, Memba.**

| Sample ID | Easting | Northing | TiO <sub>2</sub> % | Fe%         | V <sub>2</sub> O <sub>5</sub> % | Al <sub>2</sub> O <sub>3</sub> % | SiO <sub>2</sub> % | P%    | S%    |
|-----------|---------|----------|--------------------|-------------|---------------------------------|----------------------------------|--------------------|-------|-------|
| N004154   | 625341  | 8454654  | <b>50.0</b>        | 35.9        | <b>0.42</b>                     | 0.4                              | 0.9                | 0.003 | X     |
| N004139   | 623319  | 8454558  | <b>48.8</b>        | 35.4        | <b>0.38</b>                     | 0.5                              | 1.6                | 0.002 | X     |
| N004145   | 624357  | 8454574  | <b>47.7</b>        | 34.6        | <b>0.33</b>                     | 0.4                              | 3.2                | 0.004 | X     |
| N004165   | 624420  | 8454562  | <b>46.0</b>        | 33.5        | <b>0.35</b>                     | 0.7                              | 5.0                | 0.004 | X     |
| N004141   | 623626  | 8454549  | <b>43.9</b>        | 35.4        | <b>0.41</b>                     | 0.6                              | 4.4                | 0.003 | X     |
| N004158   | 623773  | 8455267  | 1.4                | <b>67.2</b> | 0.16                            | 1.3                              | 1.1                | 0.007 | X     |
| N004150   | 625198  | 8455312  | 1.1                | <b>66.5</b> | 0.21                            | 1.5                              | 1.7                | 0.004 | 0.002 |

\*A total of 25 rock-chip samples were taken in the program, of which the seven reported represent mineralised zones identified in the field. Cut-off grades for reporting for both TiO<sub>2</sub> and Fe are 30%. 'X' denotes below detection limits.

### NE Mozambique infrastructure enhancements

The Governments of Mozambique, Malawi and Zambia, together with the private sector, have identified the Nacala Development Corridor (NDC) as a regional priority. The area covered by the NDC includes: Nacala Port, the area bordering the Nacala Railway Lines to Entre Lagos and Cuamba-Lichinga Railway lines and Lake Niassa. There are 10.7m inhabitants in the corridor, 3.3m on the Mozambican side representing around 61.5% of the total population of Nampula, Niassa and the northern part of Zambezia province.

A Joint Ministerial Committee made up of public and private sector representatives has been created to drive infrastructure development that facilitates the advance of resource sector activity in the area (Figure 2).

#### Construction of new rail and rehabilitation of existing rail:

- Enhancements to cover the existing 900km rail system, including 120km of new rail
- Existing rail runs from Nacala Port, west through northern Mozambique via Nampula, Malema and Cuamba, where it connects to Lichinga in the north and Nayuchi in Malawi. The Malawi section links to Zambia through the Mchinji-Chipata line, as well as proposed new links south of Mwanza in Malawi to connect directly to lines running east of the coal centre of Tete.
- Improvements are designed to accommodate anticipated coal exports from the Tete region through Nacala Port
- Predicted to be operational in 2015, coinciding with peak coal production at Moatize

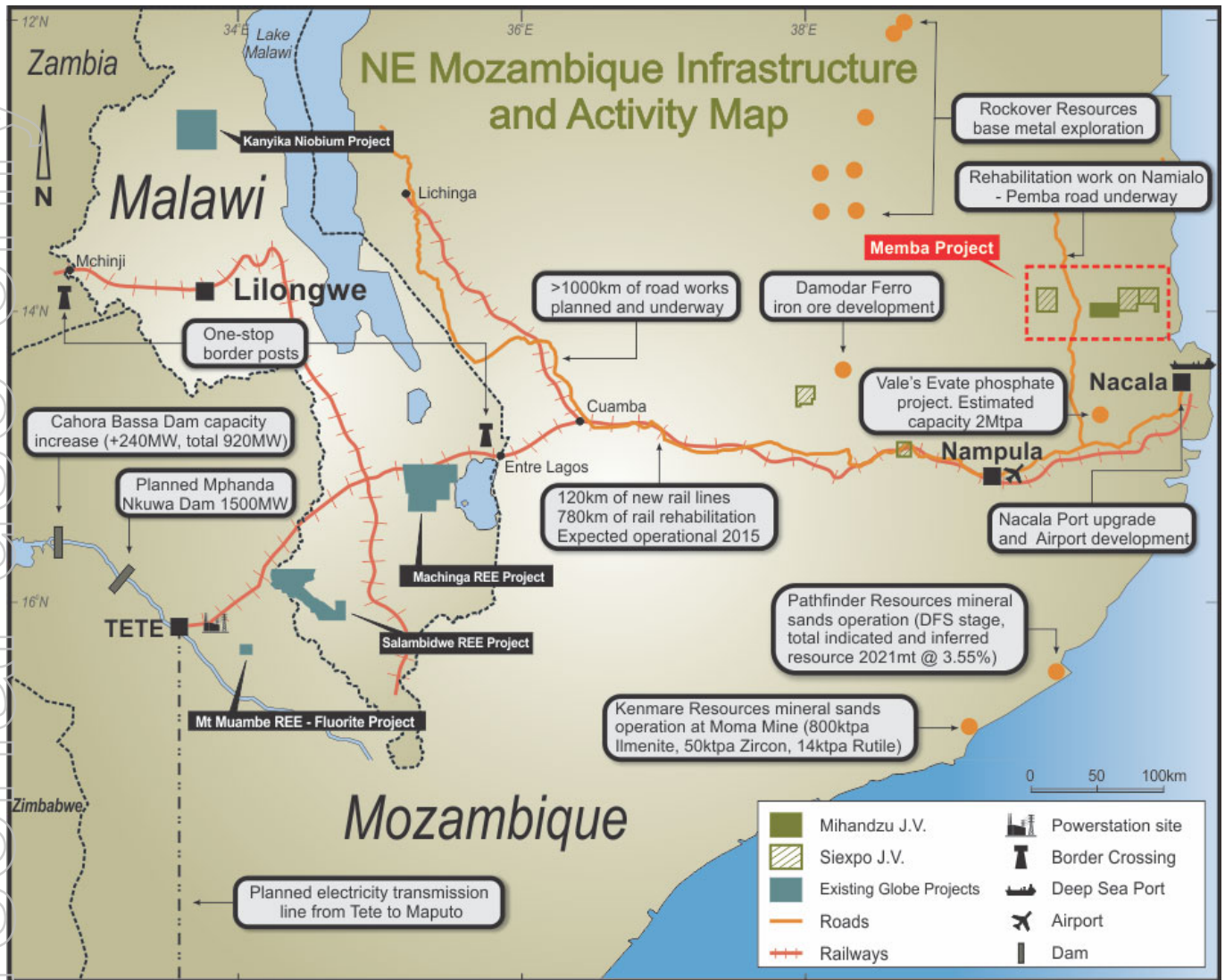


Figure 2: NE Mozambique infrastructure and activity map.

Upgrade of the deep water port at Nacala:

- Further development of the existing deep access channel (800m wide, 60m deep), to allow access for vessels of all sizes
- Upgrade to international standards through private sector financing (US\$500m)
- Industrial development zone (light and heavy)
- Two mineral berths (coal and other minerals) and two fuel berths (refinery and tanking area)
- Dry dock
- Potential capacity >20Mtpa



**Figure 3: Port of Nacala upgrade.**

**Improved road networks:**

- Enhancements to improve transport linkage to Nacala Port, reduce delays and costs, and improve accessibility to communities
- 1033km of road works and two one-stop border posts (Mozambique-Malawi and Malawi-Zambia)
- Upgrade of Nampula-Cuamba Road (348km) and Cuamba-Mandimba Road (160km) in Mozambique
- Upgrade of Lilongwe Bypass (13km), rehabilitation of Mangochi-Liwonde Road (70km) and Liwonde-Nsipe Road (82km) in Malawi
- Rehabilitation of Namialo-Pemba road, which passes within 20km from Memba

**Power upgrades and extensions:**

- Increased power generation capacity of Cahora Bassa (Zambezi River) hydroelectric dam (+240 megawatts, total 920 megawatts)

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- New Mphanda Nkuwa hydroelectric dam planned 60km downstream from the Cahora Bassa dam (1500 megawatts)
- Planned electricity transmission line upgrade from Tete to Maputo and upgrade of the Tete to Nacala line from 70 to 220 MVA to support development along the Nacala corridor. Expansion of the Mozambique national electricity grid to exploit the energy capacity of the Zambezi Valley.
- Three coal-fired power stations planned (by Australian, Indian and Brazilian coal miners) to support mining activities in the Moatize district

#### New international airport at Nacala:

- Scheduled for completion in March 2013, Nacala International Airport is under construction by Odebrecht International (Brazil) on a site currently used as a military base
- Development to include passenger and cargo terminals, control tower, maintenance building, fire station, parking lot, all necessary systems and equipment
- 3400m runway able to handle a Boeing 747 or 767

#### Mining and exploration activities in the NDC

##### Kenmare Resources – Moma Mine<sup>1</sup>

- Currently operating in the phase 1 Namalope Deposit, producing 800ktpa ilmenite, 50ktpa zircon and 14ktpa rutile, representing approximately 7% of global feedstock supply
- The phase 2 Nakata Deposit has a planned production rate of 1.2Mtpa ilmenite, 75ktpa zircon and 21ktpa rutile representing approximately 10% of global feedstock supply

##### Pathfinder Resources<sup>2</sup>

- Definitive Feasibility Study underway for ilmenite, zircon and rutile
- Total indicated and inferred resource 2,021Mt @ 3.55 % heavy mineral for 71.72Mt contained heavy mineral sands
- Total run of mine production is planned at 47Mtpa

##### Damodar Ferro<sup>3</sup>

- Iron ore mine development
- First ore shipment of 25,000 tonnes through Nacala Port in October 2011

<sup>1</sup>kenmareresources.com/media/-/media/Files/K/Kenmare-Resources/pdf/presentations/Presentation%20August%202011.pdf

<sup>2</sup>pathfinderminerals.com/investor-relations/financial-reports-and-presentations/presentations/2011.aspx

<sup>3</sup>miningreview.com/Mozambique/starts/iron/ore/exports/India

### Vale's Evate Phosphate Project<sup>4</sup>

- Pre-feasibility study currently underway
- Estimated production capacity of 2Mtpa<sup>5</sup>
- 130km from Nampula, 50km from Nacala

### Rockover Resources<sup>6</sup>

- Original Ni and PGE exploration led to four target programmes
- Magmatic hosted sulphide Ni deposits; Carbonaceous sediments metamorphosed to graphitic quartzites and other metasediments
- Cluster of Cu, Zn, Cu-Zn and Pb-Zn massive sulphides over 120km strike
- 70km long volcanogenic banded Mn formation

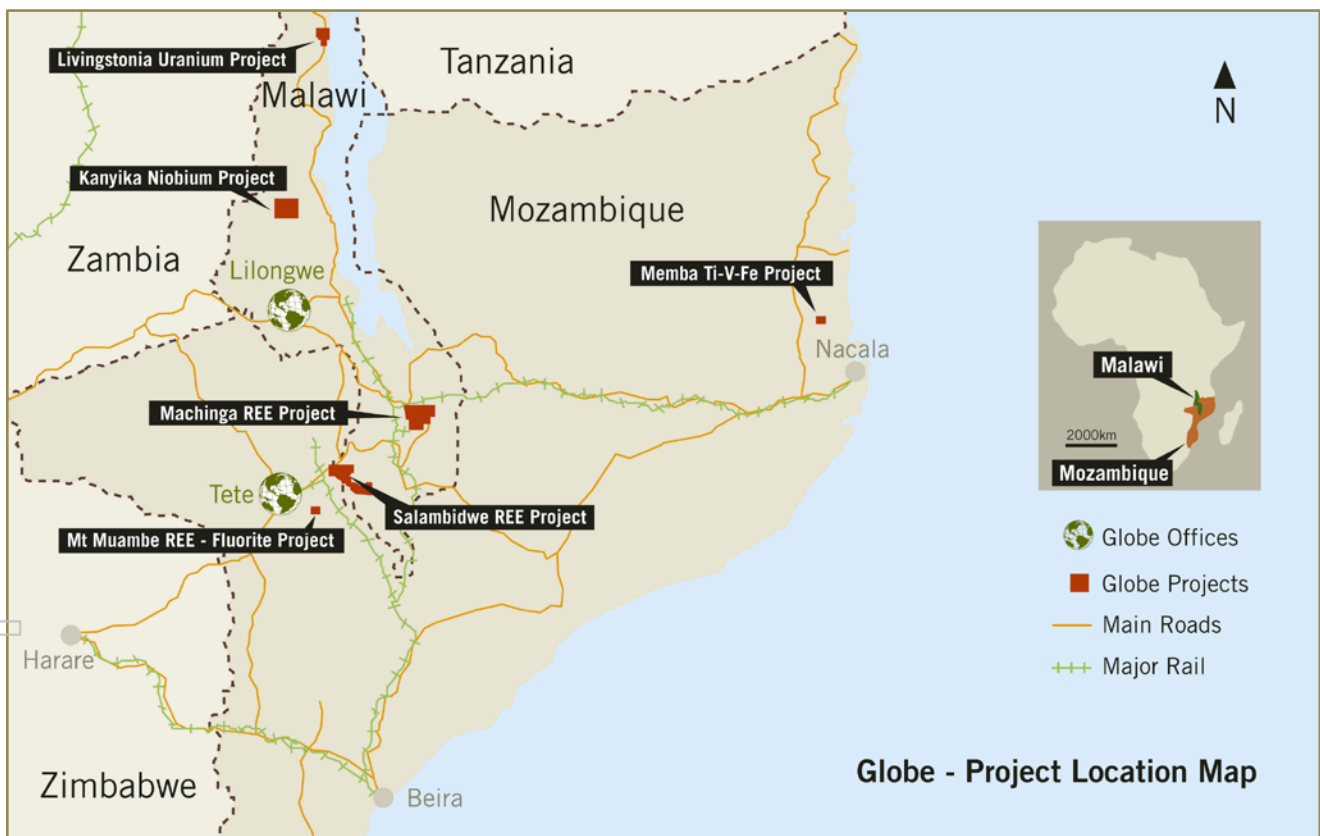


Fig 4: Project location map.

<sup>4</sup>vale.com.br/en-us/o-que-fazemos/mineracao/potassio/pages/default.aspx

<sup>5</sup>miningweekly.com/article/brazilian-major-now-active-in-southern-central-and-west-africa-2011-09-02-1

<sup>6</sup>rockover.net/mozambique.html

## About the Agreement

Under the joint venture with Siexpo Lda, Globe can earn 20% of the project in year one (US\$200,000 spend), 51% in year two (US\$500,000 spend) and 75% in year three by reporting a JORC resource. Globe has a further two years to issue a feasibility study on the project to earn an 80% interest in the Project. Thereafter, Globe may acquire a further 10% interest (total 90%) at a price to be agreed. There is an initial three month due diligence period during which Globe is carrying out legal and technical due diligence.

## About Globe Metals & Mining

Globe is an African-focused resource company, specialising in rare metals such as niobium, tantalum and rare earths, as well as other commodities including fluorite, uranium and zircon. Its main focus is the multi-commodity Kanyika Niobium Project in Malawi, Africa, which will commence production of ferro-niobium in 2014, a key additive in sophisticated steels.

Globe also has a number of other projects at an earlier stage of development: it is earning up to an 80% interest in the Machinga Rare Earth Project in southern Malawi, and the Company can earn up to a 90% interest in the Mount Muambe REE - Fluorite Project in Mozambique. Initial drill programs on both projects were undertaken in 2010.

Globe's corporate head office in Perth, Australia is supported by regional offices in Lilongwe, Malawi, as well as Maputo and Tete, Mozambique. The Company has been listed on the ASX since December 2005 (Code: GBE).

In April 2011, the Company entered into a strategic partnership with East China Minerals Exploration and Development Bureau (ECE), a Chinese State Owned Enterprise with extensive mining operations in China and overseas. ECE is now the largest shareholder in Globe, and a key partner for Globe's growth ambitions in Africa.

*Competent Person: The contents of this report relating to geology and exploration results are based on information reviewed by Dr. Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director of Globe Metals & Mining. Dr Stephens has sufficient experience related to the activity being undertaken to qualify as a "Competent Person", as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear.*

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