



ASX RELEASE

22 August 2013

Investment Summary

- ASX listed African-focused resources company (ASX:GBE)
- 100% interest held on projects in Malawi including niobium, graphite and rare earths
- Malawi Kanyika Niobium project in feasibility optimisation
- 70% interest in JV Mount Muambe REE project in Mozambique
- Strategic partnership with major shareholder (54%) East China Non-Ferrous Metals Investment Holding Co. Ltd (ECE)

Directors and Management

Chairman

Yi Shao

Executive Director & Deputy CEO

Shasha Lu

Non-Executive Director

William Hayden

Non-Executive Director

Tian Jingbin

Non-Executive Director

Peter Stephens

Managing Director

Alistair Stephens

CFO & Company Secretary

Kerry Angel

Exploration Manager

Fergus Jockel

Executive Manager - Africa

Neville Huxham

FPOS 220,339,131

OPTIONS 11,750,000 (various)

GBEAQ 3M Rights expire June 2014

Contact

Alistair Stephens

Managing Director

info@globemetalsandmining.com.au

T: +61 08 9327 0700

Process Optimisation Test Work Results

Globe Metals & Mining ("Globe" or "the Company"; ASX: GBE) is pleased to announce encouraging results for the optimisation work on the Kanyika Engineering Study.

Highlights

- Improved flotation results
- Smelting concentrate has demonstrated a marketable ferroalloy
- Significant cost savings expected due to reagents optimisation
- Results enhance the Kanyika project commercialisation process
- Demonstration plant for flotation and smelting in progress

As announced in the Kanyika Niobium Project Update (ASX: GBE 13/5/2013), Globe has embarked on a project review and optimisation programme for the Kanyika Niobium Project with Chinese special metals experts introduced by its major shareholder Eastern China Non-Ferrous Metals Investment Holding Co., Ltd ("ECE"). The engagement is to review the work undertaken by Globe to date and to identify where further optimisation of the project can be achieved through access to Chinese niobium/tantalum expertise, technology, procurement and potential funding.

The Chinese optimisation program consists of flotation optimisation and refining optimisation. The flotation optimisation program aims to upgrade the concentrate while simplifying and reducing costs of the reagent scheme. The refining optimisation program aims to further evaluate cost-effective methods of the flotation concentrate. These programs are now in full-swing and preliminary results are encouraging.

Flotation optimisation at GZRINM

Progress results from the optimisation work of the Kanyika flotation scheme, which is being conducted at GZRINM in Guangzhou, has provided results showing significant improvements. This includes:

- Reagent optimising has defined the production of a 37% concentrate at 74% recovery (cf. 26% grade and 77% recovery previously reported). This will reduce downstream processing costs.
- The reagents used in flotation are 50% lower in volume and considerably cheaper than those required in previous testwork, representing significant cost savings.
- Further works are aimed at recovering marketable zircon from the concentrate. The removal of zircon from the concentrate will further increase concentrate grade, enhancing cost savings and provide a small additional revenue stream.

Refining Optimisation

Globe's consultant, Mr. David Ma, has facilitated a scoping test-work program focusing on smelting concentrate to produce a saleable niobium-tantalum ferroalloy. Tests have demonstrated an internationally marketable product. Further larger-scale tests are currently underway to further optimise the recovery of niobium and tantalum in the smelting process.

Program Ahead

Based on successful optimisation results of flotation and smelting, the Company plans to undertake the following engineering programs:

- Further optimisation of flotation in all mineralised domains.
- Undertake studies to recover a saleable zircon concentrate.
- Proceed to a demonstration plant of the flotation circuit to confirm current flotation results and produce enough concentrate samples for large-scale smelting testwork.
- A demonstration scale plant of smelting process.

Program Conceptual Targets

1. Under these optimisation studies, the Company hopes to understand the capability and impacts of producing a 40% to 50% concentrate grade and the implications to the project using a smelting process.
2. A bulk sample from Kanyika is currently being recovered, with an allowance of one month to transport products to the demonstration plant in Guangzhou China.
3. The demonstration plant is already established at the Guangzhou institute and ready for operation in October.
4. The concentrate from the GZRINM will then be tested in a smelting demonstration plant at Greswin, operating in Nanjing China.
5. Results from the program will be provided to shareholders when valid and contestable outcomes are achieved, with a full report due in late 2013 or early 2014.

Globe's Managing Director and CEO commented, "Globe is continuing to focus on keeping the project costs to a minimum level and making the project more profitable. The preliminary optimisation results are encouraging and we are confident of positive results in the coming months."

"The Kanyika project was progressed from a scoping study to a full engineering study. It is my opinion that a demonstration plant study is vitally important to minimise technical risks, enhance recovery and operational performance, and to produce marketable products. This then enables the Company to proceed to the next stage having undertaken appropriate risk assessment processes."

"Globe has existing cash reserves of approximately A\$14 million. With these funds in hand, a lower cost project and wider market, with strong support from ECE, Globe is confident that it can advance the development of the Kanyika Niobium Project towards financing and commercialisation."

ENDS

Contact:

Alistair Stephens

Managing Director
Globe Metals & Mining Ltd
Tel: +61 (0) 8 9327 0700

Shasha Lu

Deputy CEO and Executive Director
Globe Metals & Mining Ltd
Tel: +61 (0) 8 9327 0700

About Globe Metals & Mining

Globe is an African-focused resources company, with a strategy to become a niobium and tantalum producer in Africa.

Globe's current focus is the Kanyika Niobium Project in Malawi, which will produce niobium and tantalum products; key additives in steels and electronics. The Mineral Resource statement substantiates that Kanyika could support a 20 year mine life.

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

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