



ABN 27 099 098 192

CYU is a resource exploration and development company seeking to become a mid-tier copper producer

Issued Capital:

473,027,475
Ordinary shares

4,000,000
Performance shares

Directors:

Zhihua Yao
Chairman
Paul Williams
Managing Director
Zewen (Robert) Yang
Executive Director

Company Secretary:

Paul Marshall

**CHINALCO YUNNAN
COPPER RESOURCES
LTD**

Suite 4, Level 8,
320 Adelaide Street
BRISBANE Q 4000
Ph: +61 7 3211 9013
Email: admin@cycal.com.au

Contact

Paul Williams
Managing Director
paul.williams@cycal.com.au
Mobile: +61 419 762 487

CYU ADVANCES 10,000tpa COPPER SMELTER PROJECT IN DRC

26 October 2015

Summary

- On 8 September 2015 CYU announced its intention to pursue several copper processing and mining opportunities in the Democratic Republic of Congo (DRC) in central Africa.
- Yunnan Copper Industry (Group) Co Ltd (YCI), one of China's largest producers of refined copper metal, is pursuing copper processing and mining opportunities in the DRC.
- One of these opportunities is the development of a feasibility study for the design, construction and operation of an SX-EW smelter with a production capacity of 10,000tpa of copper cathode, to be located near Kolwesi in south-eastern DRC.
- A large Chinese engineering consultancy, China Nerin Engineering Co., Ltd has finished a scoping study for this project and YCI/CYU intend to engage Nerin to manage the feasibility study activities. The proposed SX-EW smelter is almost identical to other similar facilities already constructed and operating in the DRC.
- A final version of the smelter project Pre-Feasibility Study is expected by the end of November 2015 and completed Feasibility Study in April 2016.

The Board of Chinalco Yunnan Copper Resources Ltd (ASX:CYU) continues to focus on transforming the Company into a substantial mid-tier mining group, with a primary focus on acquiring and developing near-term copper production activities (both locally and overseas) as well as conducting exploration in the Mount Isa region of north-western Queensland.

Introduction

Yunnan Copper Industry (Group) Co Ltd (YCI), one of China's largest producers of refined copper metal, is pursuing several copper processing and mining opportunities in the Democratic Republic of Congo (DRC) in central Africa. As the largest shareholder of CYU, YCI has now invited CYU to lead the pursuit of these opportunities.

YCI already holds a significant joint venture interest in the successful copper smelter at Chambesi, in nearby Zambia and is very familiar with the operating conditions in this region of Africa. In addition, YCI has dedicated significant resources in recent years to study and identify various copper mining and processing opportunities in the DRC.

One of these projects is a proposed 10,000tpa SX-EW (solvent extraction – electrowinning) copper smelter to be constructed and operated near the city of Kolwesi, in south-eastern DRC. YCI is pursuing approval from China Copper Corporation Limited (a subsidiary of Chinalco, CYU's ultimate largest shareholder) and other necessary regulatory approvals in China to engage CYU to assume control of the feasibility study activities and ultimately to bring the project into full operation.

Subject to finalisation of necessary commercial arrangements (which are already well-advanced), CYU is expecting a completed Feasibility Study for the new smelter facility by April 2016.

Feasibility Study Features

Study Manager

China Nerin Engineering Co., Ltd (Nerin) has been managing the conduct of the scoping study activities on behalf of YCI. Nerin is a subsidiary of the Shenzhen Stock Exchange-listed China Non-ferrous Metal Industry's Foreign Engineering & Construction Co., Ltd (NFC). NFC has been committed to project contracting and resources developing in domestic and global non-ferrous metal market since its foundation in 1983.

Nerin has significant experience and a strong reputation in mining, metallurgy, public works, civil works and environmental engineering, proven over 3000 projects and 300 scientific research subjects completed in China and overseas in Iran, Australia, Kyrgyzstan, Algeria, Zambia, Nigeria and DRC.

The study activities for CYU's proposed smelter near Kolwesi are based on other, almost identical, SX-EW smelters recently built by other Chinese companies and now operating in the DRC.

Study Scope

Based on the scoping study that has been completed by Nerin, YCI (and CYU) intend to contract Nerin to develop a completed Feasibility Study for the proposed construction and operation of a new SW-EW copper smelter near the city of Kolwesi in south-eastern DRC. (See location map in Annexure A). The smelter is intended to process copper oxide ores acquired from local suppliers and produce copper cathodes and cobalt hydroxide.

Smelter capacity is based on a notional working roster of 330 days per year, 3 shifts per day, 8 hour shifts with a daily ore processing rate of about 1684t per day.

Nerin has completed the project scoping study and is close to finalising a Pre-Feasibility Study report, which is due for completion by the end of November 2015. Because the study is based significantly upon other, almost identical, smelters in the DRC completion of the Feasibility Study is expected by April 2016.

SX-EW Smelter Process

The smelter is being designed as a two-staged process: the first stage is preliminary ore dressing and extraction and the second stage is electrowinning. In the first stage, the ground and dried ore material is then exposed (in tanks) to sulphuric acid and sodium sulphite in a process of agitation leaching, with the concentrated precious liquids proceeding to the electrowinning process. Electrowinning uses an insoluble anode and starting electrode to produce the copper cathode sheets within about 7 days. The final cathode product (which contains a grade of at least 99.99% Cu) is then prepared for export (see photo in Annexure B of final cathode product).

Proposed Smelter Location

CYU proposes that the new smelter will be located about 25kms to the east of Kolwesi, near to existing copper mining operations which are likely to provide the future source of copper ore.

Kolwesi is the capital city of Lualaba Province and has a population of around 450,000 people. It is situated near the Lualaba River, a tributary of the Congo River. The average annual temperature in Kolwesi is 27.8°C and annual rainfall of 2,000mm. Kolwesi is fast becoming a major centre for the copper-cobalt mining and smelting operations within the greater Katanga Region of southern DRC. There are already several large mining, minerals processing and mining-services companies operating in and around Kolwesi.

The 300km of road between Kolwesi and Lubumbashi is asphalted and road transport services are generally convenient, and are currently the only means of transporting mineral product out of the DRC into export markets via the ports of Dar Es Salaam, Beira and Durban (Richards Bay). The China Railway Engineering Corporation has successfully rebuilt the 1336km Benguela rail line connecting the Angolan export port of Lobito to the DRC border. Swiss-based Trafigura Group is managing the refurbishment of the rail line connecting Kolwesi to the Benguela line. Work on this connection is likely to be completed in early 2016 and is expected to create a significant improvement (and reduction in transportation costs) by opening up a new export option for copper and cobalt production.

The proposed location of the new CYU smelter at Kolwesi is not only aimed at capitalising on the new export facilities via Lobito, but will be constructed nearby (within no more than a 10km radius) of the mining operations that will supply ore to the new smelter. Commercial discussions have already taken place with these mining operations and concluded ore supply arrangements will form part of the final Feasibility Study.

Preliminary Economic Analysis

A detailed financial model (with project financing options) will be incorporated into the completed Feasibility Study when it is released early in 2016. However, initial study estimates indicate the total capex for the new smelter will be in the order of US\$61m (after optimization work), comprising fixed asset costs of US\$36m and working capital (during the development phase and into initial plant commissioning) of US\$25m. At a copper price of US\$5,392/tonne (the LME closing copper price on 10 September 2015 but well below the LME average of US\$6,500/tonne over the past 10 years), net profit is estimated at US\$9.05m per annum.

While this preliminary analysis establishes the smelter as a significantly profitable operation (especially with increasing copper prices), CYU proposes to work closely with both YCI and Nerin to create a more detailed financial model that carries a strong level of confidence in the financial estimates. It should be noted that as the study will be based to a large extent on other similar-sized smelter facilities that have recently been built in the DRC, there is already a sound basis for the preliminary economic analysis that has been made available to CYU.

Feasibility and Project Development Timetable

As noted above, CYU is aiming to finalise a completed Feasibility Study by April 2016. If that occurs, and CYU has been able to secure the requisite project development funding and approvals, it is proposed that the design and construction phase could be completed within a period of 16 months, leading to plant commissioning by the end of 2017 – a time when most forecasters are suggesting a significant improvement in the copper price will be seen.

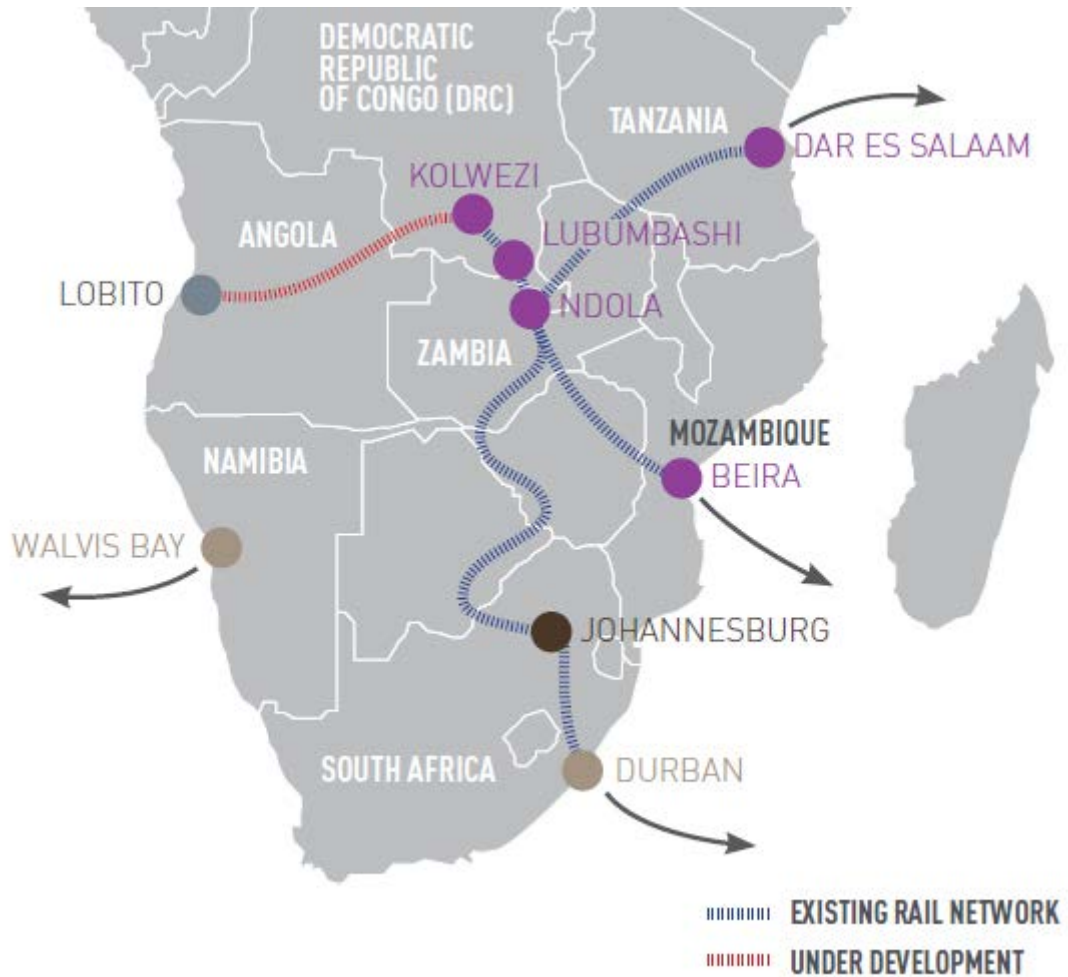
ooo000ooo

CYU Managing Director, Paul Williams, said the proposed copper smelter project was another very important step in the process of transforming CYU into a mid-tier copper producer. “CYU is very fortunate that YCI has presented this advanced-stage smelter project opportunity to us. We intend to work closely with both YCI and study manager China Nerin Engineering to complete the smelter Feasibility Study early next year and bring the plant into production as soon as is practically possible.”

On behalf of the Board

Paul Williams
Managing Director
paul.williams@cycal.com.au
+61 419 762 487

ANNEXURE A
(Location diagram – Kolwezi city and major transportation routes ex DRC)



ANNEXURE B

(Photo of copper cathode stockpile – taken from another DRC smelter facility and not a CYU asset)

