Kinsenda Copper Mine Haut-Katanga Province, DRC

Chinese Financing for Transition Minerals



February 2025



Kinsenda Mining Site Overview

Location

DRC

Tshinsenda (Kinsenda), Sakania Territory, Haut-Katanga Province Minerals

Copper

With no mineral by-products Metric Tons

0.3 million

Of copper in total ore reserves

Exploitation

Underground

Mining method used to extract ore

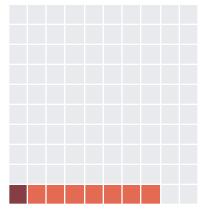
Life of Mine

12 years

Minimum anticipated years of production

Located in the Haut-Katanga Province of the Democratic Republic of the Congo (DRC), Kinsenda is an underground copper mine that produces close to 30,000 metric tons of copper each year. Jinchuan Group, a Chinese state-owned company, acquired the Kinsenda copper mine in 2011, and China Development Bank, one of the two state-owned policy banks, has provided financing over the span of a decade to support development and operations at Kinsenda.

Global Copper Ore Reserves: 1,000 Mt



~10 million metric tons (Mt) per square

DRC copper ore reserves (80 Mt)

Kinsenda copper ore reserves (0.3 Mt)

Source: USGS Commodity Summaries 2024

What are ore reserves?

When we refer to the reserves of a certain type of mineral, we are describing the amount of mineral output that can be recovered in a way which is economically viable. Feasibility studies assess whether it is practical and profitable to extract ore reserves.

Reserves estimates change over time. They may decrease as mineral extraction activities deplete existing deposits, and they may increase as technological advancement makes additional mineral extraction feasible. As of 2024, the DRC held an estimated 8% of global copper reserves.

Introduction

Kinsenda mine is considered the world's second highest-grade active underground copper mine, with an average reserves grade of 5.8%. The copper grade, expressed as a percent, is determined by the concentration of copper inside the ore rock; the average grade of copper reserves today is 0.6%. Annual production varies; Kinsenda mine produced 29,087 metric tons of copper in copper concentrates in

2022, despite initial estimated production levels around 20,000 metric tons per year. Production levels have reached closer to 30,000 metric tons in recent years.

The site has been operational in some capacity since 1977 and was acquired by South African mining company Metorex in 2007. In 2011, Jinchuan Group, a Chinese-state owned company, gained control of Metorex and their numerous mines in the region, including the Kinsenda site. Since the 2011 acquisition, Chinese official financiers have provided several loans to support mine development and mining operations in the region.

Geography

The Kinsenda mine is situated in the Haut-Katanga province near the border town of Kasumbalesa, approximately 90 kilometers southeast of the city of Lubumbashi. It is within 5 kilometers of the DRC-Zambia border. The mine is accessible via a paved road (off the main Lubumbashi to Kasumbalesa highway) and has a dirt airstrip on site suitable for small aircrafts.

PRC Financing Summary

The Kinsenda mining site has been open in some capacity since the 1970s, though ownership details became unclear as the DRC suffered civil war. The mine flooded and changed hands several times.

Jinchuan Group, a Chinese state-owned company, became the controlling shareholder of Kinsenda mine in 2011 through its acquisition of the South African mining company Metorex, which owned a 77% stake in the project at the time of acquisition. In 2013, Metorex obtained an \$80 million loan from China Development Bank (CDB) for developing the Kinsenda mine. In 2014, the limited liability operating company, Kinsenda Copper Company SARL (KICC), obtained an additional \$225 million loan from CDB for development of the mine, including activities such as dewatering, drilling, and construction on the mine site.

In recent years, Metorex received additional loans from Chinese state-owned entities to support working capital requirements. While these financing agreements do not specify that the loan proceeds should be used to support the Kinsenda mine, the proceeds may have indirectly supported the Kinsenda site, given Metorex's majority ownership stake in KICC.

In total, between 2013 and 2022, China Development Bank extended \$339 million of credit (in constant 2021 prices) for the Kinsenda copper mine development and operations specifically, as well as an additional \$187 million to Metorex to support its general operations, which includes Kinsenda mine, among others. As displayed in the infographic below, CDB extended a grand total of \$526 million of credit (in constant 2021 prices) to directly and indirectly support Kinsenda mine and its operations. Other financial commitment values in the profile are represented in current prices (i.e. their values in the years

when they were committed), but for the purposes of cross-year comparison, the values are deflated to constant 2021 prices to adjust for inflation and enable aggregation over time.

Kinsenda Copper Mine: Overview of Chinese Lending and Ownership				
Loans	Lenders	Co-financing	Equity Holders	Ownership
\$526 million	1	0%	1	77%
Provided between 2013-2022	China Development Bank	From non-Chinese lenders	Chinese state-owned enterprise owns a stake in the joint venture	Of the joint venture is Chinese-owned
Credit Facilities Sourced from China Development Bank \$249M - Kinsenda mine development loan to KICC \$187M - General working capital loans to Metorex \$90M - Kinsenda mine development & working capital loan to Metorex USD 2021 Constant Millions 200 80 20			Sodimico, Congolese State-Owned Enterprise (23%) KICC Joint Venture / Special Purpose Vehicle Metorex, Chinese State- Owned Enterprise (77%)	
20				
	016	Year 2022		

Note: The financial commitment amounts represented in the infographic are deflated to constant 2021 prices, which adjusts for inflation and enables aggregation over time. Other financial commitment values in the profile are represented in current prices (i.e., their values in the years when they were committed).

PRC Financing Details

In 2003, Société de développement industriel et minier du Congo (Sodimico), a Congolese state-owned company, and Enterprise Groupé Malta Forrest, a Belgian mining company, formed the limited liability company Miniere de Musoshi et Kinsenda SARL (MMK) for the development and operation of the Kinsenda mine. Metorex, a South Africa-based private company at the time, acquired a minority ownership stake in MMK in August 2007, and by March 2009 became the majority shareholder of the project. In July 2009, Metorex and Sodimico formed KICC, which replaced MMK as the operator of the Kinsenda mine.

Jinchuan Group, a Chinese state-owned company in which the People's Government of Gansu Province holds a major interest, acquired Metorex in 2011. In 2013, Jinchuan Group International Resources Co.

Ltd., an investment holding company of which Jinchuan Group is the ultimate controlling shareholder, procured the entire indirect equity interest in the Metorex Group. Jinchuan Group remains the ultimate controlling shareholder of KICC through these subsidiary companies.

Bank of China International Asia Limited, Bank of America Merrill Lynch, and Investec provided financial advisory for this transaction. Presently, Metorex holds a 77% ownership stake in KICC, the operator of Kinsenda mine, and Sodimico owns the remaining 23%. Due to its controlling interest in the ownership of Metorex, China's Jinchuan Group is the ultimate controlling shareholder of the Kinsenda mine. Since the 2011 acquisition by Jinchuan Group, Metorex has contracted several loans from China Development Bank to support the development of the Kinsenda mine and to meet the working capital requirements of the company.

On June 30, 2013, Metorex entered a \$80 million financing facility with CDB. The maturity of the loan was one year, with an originally scheduled maturity date of July 8, 2014. The loan facility carried an interest rate of LIBOR plus 2.25%. Additionally, Jinchuan Group Co., Ltd (金川集團股份有限公司) issued a corporate repayment guarantee in support of the loan. Jinchuan Group reports indicate that these funds were partly used to develop the Kinsenda project, including the construction of site infrastructure, ore processing facilities, and underground access points.

On May 29, 2014, CDB provided a \$225 million USD loan to KICC for the Kinsenda copper development project. The maturity of the loan is 12 years, and Jinchuan Group served as guarantor for the agreement. However, the other borrowing terms of the loan are unknown. This is the only known loan to KICC as the borrower.

CDB has also supported Metorex's working capital needs through loans whose proceeds may have indirectly supported the Kinsenda site, given Metorex's majority ownership. Although there is no documentation that these transactions supported the Kinsenda project, it is clear that Chinese lending and Chinese companies play a significant role in the region.

On November 9, 2016, CDB provided a \$100 million USD loan to Metorex to support the working capital and operational needs of Metorex and its subsidiaries. The maturity of the loan is five years. KICC's previous \$225 million USD loan is tied to the terms of this lending; should Jinchuan Group International Resources Co. Ltd come to possess less than 51% of Metorex shares, the loan contract would be breached, and the 2014 Kinsenda loan would also default.

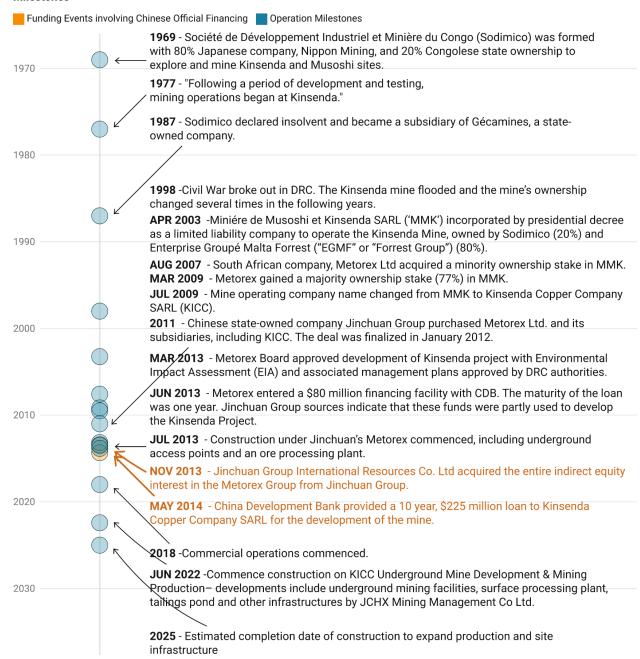
In recent years, Metorex received additional loans from CDB for \$25 million USD in 2016 and \$40 million USD in 2022 to support its working capital needs.

Kinsenda Copper Mine

Haut-Katanga Province, DRC

Estimated closure: Initial plans for 2030, with new developments extending life to 2038 and beyond.

Milestones



Implementation

Kinsenda is an underground copper mine composed of sulfide and oxide ore bodies. The Metorex Board green-lit the development of the Kinsenda site in March 2013, with a planned completion date of 2015. Construction began on underground access, the ore processing plant, and other site infrastructure in July 2013, with the contracting assistance of DRA Global. DRA Global upgraded extant mining infrastructure, replaced electrical and reticulation infrastructure, and established a new processing plant for oxide and sulfide ore. Currently, the site transports sulfide concentrate to Zambia and oxide concentrate to Metorex's Ruashi plant for processing.

As of 2022, a new laboratory was established on the Kinsenda site. The laboratory has the capacity to crush, grind, float, sample process, and analyze particles of ore. The Kinsenda site is capable of performing small-scale experiments on mined ore. That same year, construction on its second decline ramp began, targeting the East Mine deposit. Some experts predict that unlocking new deposits at the Kinsenda site may lengthen its life by another 20 years. In 2022, capital expenditure at the Kinsenda site was \$16.4 million, including the East Mine development expenses. That year, the mine produced 29,087 metric tons of copper, exceeding its nameplate capacity and a 3% increase from 2021.

Metorex is the primary operator of the Kinsenda mine through its controlling share (77%) in KICC, as displayed in the "Kinsenda Financing & Ownership Network" visual above. The DRC state-owned mining company Sodimico owns the remaining stake of KICC (23%). Metorex is an indirect, wholly-owned subsidiary of Jinchuan Group International Resources Co. Ltd since 2013, whereas Chinese state-owned company Jinchuan Group International Resources Co. Ltd is the ultimate controlling shareholder of the Kinsenda mine.

Metorex has received five loans from a single Chinese state-owned policy bank, CDB, to finance the initial acquisition and development of the site, and later fulfill the working capital needs of the company.

Kinsenda management is run by a team from China, South Africa, and the DRC, employing 1,500+ staff from the surrounding communities of Meleke, Twibombele, and Kinsenda. KICC is advised by Deloitte Touche Tohmatsu financial advisors. SLR Consulting completed Environmental Impact Assessments (EIA)s, though more recently, companies such as SRK Consulting (South Africa) (Pty) Ltd, BAW Mineral Partners Limited, and GCS Water and Environmental Consultants have assisted in environmental and mineral advising at the Kinsenda site.

Environmental, Social, and Governance Risks and Mitigation Measures

Although media and environmental experts link the copper industry in the Haut-Katanga Province broadly to ecological harm, few sources implicate the Kinsenda Project in environmental controversies or

protests. Metorex sources claim that official EIAs were submitted to DRC authorities in 2011, which were in accordance with DRC mining law at the time. Similarly, Metorex indicates all permits were approved in 2013. Kinsenda's primary mining license was renewed for 15 years in 2021, indicating that the mine complied with local mining regulations.

As compared to other mining operations in the DRC, the Kinsenda mine has not received the same level of media coverage regarding social harms. In fact, both Jinchuan and Chinese media routinely tout the mine's positive social impact. Public-facing reporting from both, including articles distributed on the company website and reporting by *China Daily*, emphasizes community-level investments, donations, job opportunities, and job satisfaction of local employees. Community outreach and site-level operations undertaken by Kinsenda management corroborate this reporting. On March 30, 2022, Kinsenda Copper Company entered into development and social responsibility agreements with three local communities. Furthermore, the Kinsenda site employs social consultants; as of 2024, Intersocial Consulting lists Metorex's Kinsenda copper mine project on its website. Intersocial plays a role in undertaking social impact assessments and social action plans, indicating that active social efforts related to Kinsenda are underway.

In general, the Kinsenda site has not received negative coverage related to poor governance practices. In 2011, the year Jinchuan Group acquired Metorex, the U.S. Department of State flagged opaque contracts and government procedures in "DRC Country Reports on Human Rights Practices for 2011." The World Bank indicated that two mining contracts Sodimico and Gécamines entered into lacked proper transparency procedures, though the report did not link those contracts to Kinsenda. In 2015, the DRC changed the provincial address of the Kinsenda mine. For the majority of its history, the Kinsenda site was located in the Katanga province but is now located in the Haut-Katanga province. Some reports indicate that such changes in governance have obscured and changed who benefits from regional resources, including mines. While it is evident that Kinsenda operators implemented several ESG risk mitigating measures, there is very little coverage of potential ESG transgressions by the Kinsenda site or its leadership.

The insights in this profile are derived from AidData's Chinese Financing for Transition Minerals Dataset. Version 1.0 (CFTM 1.0), and the sources referenced therein. The dataset captures \$56.9 billion of official sector financial commitments that China provided to 19 low- and middle-income countries between 2000 and 2021 for projects involving the extraction or processing of copper, cobalt, lithium, nickel, and rare earth elements. An accompanying report, Power Playbook: Beijing's Bid to Secure Overseas Transition Minerals, analyzes the dataset and provides evidence about the nature, scale, and scope of the PRC's overseas financing for the extraction and processing of energy transition minerals.

There are 4 records in the dataset which detail financing for the Kinsenda mining site and general working capital financing to Metorex from 2000-2021. The unique record IDs are as follows: 30100, 103340, 103341, and 103564. All financing commitments made after 2021 that are referenced in this profile are intended to provide a more holistic view at the mining site level; however, they are not included in the current version of the dataset, because comprehensive data collection activities have not yet been completed at scale for years beyond 2021.

For any questions or feedback on this profile, please email china@aiddata.org.

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