

Hong Kong Exchanges and Clearing Limited and The Stock Exchange of Hong Kong Limited take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document.



Zijin Mining Group Co., Ltd.*

紫金礦業集團股份有限公司

(a joint stock limited company incorporated in the People's Republic of China with limited liability)
(Stock code: 2899)

Announcement in relation to Kakula Pre-feasibility Study and Kamo-a-Kakula Preliminary Economic Assessment of the Kamo-a-Kakula Copper Mine Zone in the DRC

The Kamo-a-Kakula copper mine project in the Democratic Republic of the Congo (the "DRC"), being a joint investment between Zijin Mining Group Co., Ltd.* (the "Company"), Ivanhoe Mines Ltd. of Canada ("Ivanhoe") and the government of the DRC, has recently completed the pre-feasibility study of the Kakula copper mine (the "Kakula 2019 PFS") and the preliminary economic assessment for the overall development plan of the Kamo-a and Kakula copper discoveries (the "Kamo-a-Kakula 2019 PEA").

The Kakula 2019 PFS and the Kamo-a-Kakula 2019 PEA build on the results of the previous preliminary economic assessment announced in November 2017. In which, the Kakula 2019 PFS has advanced the detailed design and engineering in that earlier study, while the Kamo-a-Kakula 2019 PEA shows the potential to develop the project to a larger scale and with a larger production capacity.

The major results of the study are as follows:

I. The Kakula 2019 PFS

The PFS evaluates the development of a stage one, 6 Mtpa underground mine and surface processing complex at the Kakula Deposit. The Kakula mill would be constructed in two smaller phases of 3 Mtpa each as the mining operations ramp-up to full production of 6 Mtpa. The mine life is 25 years. The life-of-mine production scenario provides for approximately 120 million tonnes to be mined at an average grade of 5.48% copper, producing approximately 9.8 million tonnes of high-grade copper concentrate, containing approximately 5.6 million tonnes of copper. Very-high-grade, stage-one production is projected to have a grade of 7.1% copper in the second year of production and an average grade of 6.4% copper over the initial 10 years of operations. The PFS envisages an average annual production rate of 291,000 tonnes of copper at a mine-site cash cost of US\$0.46 per pound (lb) copper and total cash cost of US\$1.11/lb copper (inclusive of royalties) for the first 10 years of operations, and copper annual production of up to 360,000 tonnes by year four.

The economic analysis uses a consensus, long-term copper price of US\$3.10/lb, with estimated initial capital cost, including contingency, of US\$1.1 billion, and returns an after-tax NPV at an 8% discount rate of US\$5.4 billion. It has an after-tax IRR of 46.9% and a payback period of 2.6 years. The sensitivity analysis in relation to copper price is as follow:

After-Tax NPV (US\$M)	Copper Price - US\$/lb					
	2.00	2.50	3.00	3.10	3.50	4.00
Discount Rate						
Undiscounted	4,541	8,656	12,757	13,575	16,840	20,920
4.0%	2,694	5,298	7,892	8,411	10,478	13,061
6.0%	2,070	4,194	6,310	6,733	8,418	10,525
8.0%	1,581	3,339	5,090	5,440	6,835	8,577
10.0%	1,195	2,670	4,138	4,432	5,600	7,060
12.0%	887	2,140	3,386	3,635	4,626	5,863
IRR	22.7%	34.7%	45.0%	46.9%	54.1%	62.5%

The capital expenditure for off-site power, which is included in the initial capital cost, includes advances to the DRC state-owned electricity company, Société Nationale d'Electricité (SNEL), to upgrade two hydropower plants to provide the Kamoia-Kakula Project with access to clean electricity for its planned operations.

Basic engineering is underway at the Kakula Deposit, expected to be completed around mid-year, running in parallel with a definitive feasibility study expected to be completed around year-end.

Development of twin underground declines has been completed at Kakula, with ongoing underground development activities, including access drives and ventilation raises. In addition, a box cut for a ventilation decline on the southern side of the Kakula orebody is nearing completion.

The Kakula 2019 PFS estimates probable mineral reserve of approximately 120 million tonnes of copper ores at an average grade of 5.48% copper, containing approximately 6.56 million tonnes of copper metal.

II. The Kamoia-Kakula 2019 PEA

The Kamoia-Kakula 2019 PEA assesses a modular, integrated, expanded development option of 18 Mtpa, three-phase, sequential operation on Kamoia-Kakula's high-grade copper deposits.

Initial production would occur at a rate of 6 Mtpa from the Kakula Mine, before increasing to 12 Mtpa with ore from the Kansoko Mine. A third 6 Mtpa mine then will be developed at Kakula West, bringing total production rate to 18 Mtpa. As resources at Kakula and Kansoko are mined, production would begin at several mines in the Kamoia North area to maintain 18 Mtpa throughput over the mine life.

The mine life is 37 years, producing approximately 17.46 million tonnes of copper. The scenario delivers average annual production of 382,000 tonnes of copper at a total cash cost of US\$0.93/lb copper (after sulphuric acid credits and inclusive of royalties) during the first 10 years of operations and production of 740,000 tonnes by year 12.

For the three-phase sequential operation, initial capital cost, including contingency, is estimated at US\$1.1 billion, with subsequent expansions at Kansoko, Kakula West, and other mining areas, as well as the smelter, to be funded by cash flows from the Kakula Mine.

The economic analysis uses a consensus, long-term copper price of US\$3.10/lb and returns an after-tax NPV at an 8% discount rate of US\$10.0 billion, after-tax IRR of 40.9% and a payback period of 2.9 years.

The sensitivity analysis in relation to copper price is as follow:

After-Tax NPV(US\$M)	Copper Price (US\$/lb)					
	2.00	2.50	3.00	3.10	3.50	4.00
Discount Rate						
Undiscounted	13,117	25,902	38,668	41,222	51,435	64,154
4.0%	5,684	11,850	18,008	19,240	24,165	30,307
6.0%	3,788	8,311	12,828	13,731	17,341	21,845
8.0%	2,510	5,931	9,347	10,030	12,758	16,164
10.0%	1,627	4,286	6,939	7,469	9,587	12,231
12.0%	1,005	3,120	5,229	5,651	7,332	9,433
IRR	18.0%	28.9%	39.0%	40.9%	48.3%	57.0%

Under this approach, the Kamo-Kakula 2019 PEA also includes the construction of a direct-to-blister flash copper smelter with a capacity of one million tonnes of copper concentrate per annum. This would be completed in year five of operations, achieving significant savings in treatment charges and transportation costs.

The Kamo-Kakula 2019 PEA includes an economic analysis that is based, in part, on Inferred Mineral Resources. Inferred Mineral Resources are considered too speculative geologically for the application of economic considerations that would allow them to be categorized as Mineral Reserves - and there is no certainty that the results will be realized. Mineral Resources do not have demonstrated economic viability and are not Mineral Reserves. The Kamo-Kakula 2019 PEA is preliminary in nature.

In addition, the project company restates the findings of the Kamo 2017 PFS with economics based on updated assumptions. The PFS evaluates the development of the Kansoko Mine as a stand-alone 6 Mtpa underground mine and surface processing complex that would be supplied with ore from the planned development of the Kansoko Sud and Kansoko Centrale areas of the Kamo Deposit.

The Kakula 2019 PFS and Kamo-a-Kakula 2019 PEA were independently prepared by: OreWin Pty Ltd., Amec Foster Wheeler E&C Services Inc., DRA Global, KGHM Cuprum R&D Centre Ltd., SRK Consulting Inc. and Stantec Consulting International LLC.

The Company holds 9.9% equity interest in Ivanhoe. The Company, Ivanhoe and Crystal River Global Limited hold 49.5%, 49.5% and 1% equity interest in Kamo-a Holding Limited (“KHL”, a joint venture of the Company) respectively. KHL holds 80% equity interest in Kamo-a Copper SA (“Kamo-a Copper”). Kamo-a Copper holds 100% interest in the Kamo-a copper mine project.

Please refer to the announcement dated 6 February 2019 as published on Ivanhoe’s website (<https://www.ivanhoemines.com>) for further details.

The aforesaid development plan and financial projection are only based on the preliminary economic assessment and pre-feasibility study. The development plan may or may not be implemented. Any forward looking statements involved in the development plan, such as future plans and forecasts, do not constitute any actual commitment of the Company. Investors are advised to be cautious of their investment risks.

This announcement is made by the Company on a voluntary basis.

Investors and shareholders are advised by the board of directors to exercise caution when dealing in the securities of the Company.

As at the date of this announcement, the Board of Directors of the Company comprises Messrs. Chen Jinghe (Chairman), Lan Fusheng, Zou Laichang, Lin Hongfu, Fang Qixue, and Ms. Lin Hongying as executive directors, Mister. Li Jian as non-executive director, and Messrs. Lu Shihua, Zhu Guang, Sit Hoi Wah, Kenneth, and Cai Meifeng as independent non-executive directors.

By Order of the Board of Directors
Zijin Mining Group Co., Ltd.*
Chen Jinghe
Chairman

Fujian, the PRC, 7 February 2019

**The Company’s English name is for identification purpose only*