

# IVANHOE MINES

June 11, 2024

## **Ivanhoe Mines reports first concentrate from Kamo-a-Kakula's Phase 3 concentrator on June 10, several months ahead of schedule**



## **Production from Kamo-a-Kakula's Phase 1 and 2 concentrators achieved a near-record 35,474 tonnes of copper in May, benefitting from additional imported power**

NEW YORK, NEW YORK – Ivanhoe Mines' (TSX: IVN; OTCQX: IVPAF) Executive Co-Chair Robert Friedland announced today, ahead of his appearance at the 2024 Evercore Global Clean Energy & Transition Technologies Summit at the Mandarin Oriental Hotel in New York, that on June 10, 2024, first concentrate production by Kamo-a-Kakula's Phase 3 concentrator in the Democratic Republic of the Congo (DRC) was celebrated by the mine-site management and employees. First copper concentrate was achieved approximately two weeks after the first feed of ore into the concentrator, as announced on [May 28, 2024](#). The Phase 3 concentrator expansion was completed nearly two quarters ahead of schedule and is expected to boost production to over 600,000 tonnes of copper per annum, with ramp-up to commercial production targeted for early in the third quarter.

**Watch a video showing the completion of the Phase 3 concentrator and production of first concentrate:**

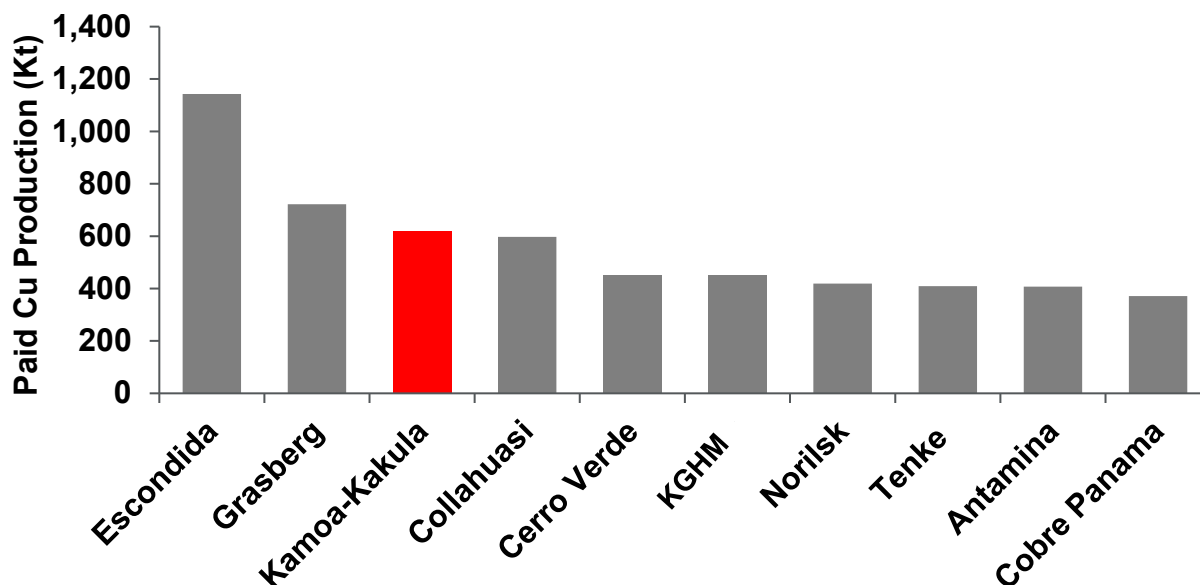
<https://vimeo.com/956315897/71af95aa07?share=copy>



The Phase 3 concentrator will process ore from the newly developed and adjacent Kamo-a-1 and 2 underground mines, as well as connect the new Kansoko underground mine. At 5 million tonnes per annum (Mtpa), the design capacity of the Phase 3 concentrator is 30% larger than the original design capacities of the Phase 1 and 2 concentrators, located approximately 10 kilometres to the south.

The Phase 3 concentrator increases the total design processing capacity of the Kamo-Kakula Copper Complex to 14.2 Mtpa. Phase 3 is expected to increase annualized copper production to greater than 600,000 tonnes per annum, positioning Kamo-Kakula as the world's third-largest copper mining complex, and the largest copper mine on the African continent. See Figure 1.

Figure 1. World's top 10 copper mines estimated for 2025, by paid copper production per annum (kt).



Source: Wood Mackenzie, 2024 (based on public disclosure and the Kamo-Kakula Phase 3 annualized production estimate of approx. 600,000 tonnes of copper. (The Kamo-Kakula data has not been reviewed by Wood Mackenzie).

Production from Kamo-Kakula's Phase 1 and 2 concentrators achieved a near record of 35,474 tonnes of copper in May. Production in May 2024, which was the best monthly performance of the past 12 months, benefitted from improved power stability since the end of the first quarter. Improved power stability has enabled increased mining rates of the higher-grade areas in the Kakula underground mine.

Improvements in power stability in recent months are due in large part to imported power from Zambia and Mozambique. An additional 20 megawatts (MW) of imported power have been secured since the beginning of June, increasing the total imported power consumed by the Kamo-Kakula Copper Complex to 55 MW. Subject to availability, it is expected that total imported power will increase up to 100 MW by the end of 2024. Kamo-Kakula is expected to continue being supported by imported power until grid stability improves. A large majority of the imported power from Mozambique and Zambia is hydroelectric.

Concurrently, Kamo a Copper continues to work closely with the DRC's state-owned power company, La Société Nationale d'Electricité (SNEL), to deliver the solutions for the identified causes of the instability experienced across the southern DRC's grid infrastructure. Project delivery of the grid improvements is expected to be completed in 2025.

In addition, Kamo a Copper's engineering team continues to expand its on-site, backup-power generator capacity, to ensure there is on-site redundancy for the Phase 1, 2 and 3 operations. On-site, backup-power generator capacity is scheduled to increase, via a phased roll-out, to a total of more than 200 MW by the end of 2024. The generator farm sites are being built adjacent to the Phase 1 and 2 concentrators and smelter at Kakula, as well as adjacent to the Phase 3 concentrator at Kamo a.

10 MW of new on-site, backup-power generator capacity was recently installed, increasing Kamo a-Kakula's immediate total installed backup capacity to 73 MW. An additional 60 MW is expected to be installed within the coming month, increasing the total backup capacity to 133 MW by the end of July. Peak on-site power demand from Phase 1 and 2 operations is approximately 105 MW. The Phase 3 concentrator adds an additional power requirement of 45 MW, once fully ramped in the third quarter. In addition, the smelter will require a further 75 MW of power once fully ramped up.

(L-R) Eddie Mong, Senior Engineer; Riaan Vermeulen, Managing Director; Dodo Mbay, Executive, Concentrators; Minty Cai, Chief Executive, Finance; Zhang "Frank" Xingxun, Executive Director; Annebel Oosthuizen, Chief Executive, Commercial; and, Ion Muzama Sumbu, Managerial Lead, Concentrators of Kamo a Copper holding the batch of first concentrate from the Phase 3 concentrator on June 9, 2024.



## **Significant growth opportunities progressing to further increase copper production with 'Project 95', Phase 3 de-bottlenecking program, and accelerating Phase 4 expansion and beyond**

Basic engineering of the previously announced "Project 95" is expected to be completed shortly. Project 95 is an initiative targeting an increased overall metallurgical copper recovery rate of Kamoakakula's Phase 1 and 2 concentrators of approximately 95%, up from the current rate of approximately 87%.

Once the Phase 3 concentrator has achieved commercial production, Kamoakakula's engineering team will gather operating data with the view to initiating a de-bottlenecking program to further increase the Phase 3 concentrator processing capacity above 5 Mtpa. The Phase 1 and 2 concentrators completed a de-bottlenecking program in February 2023, which increased processing capacity by approximately 20% above the original design throughput.

Following the completion of Phase 3, and given current market conditions, Kamoakakula's engineering team is investigating the acceleration of the project's planned Phase 4 expansion. The Phase 4 concentrator will be positioned adjacent to the Phase 3 concentrator, with a minimum processing capacity of 5 Mtpa, and will share common infrastructure with Phase 3, including the front end (crushing and screening plant), which will reduce capital costs.

An updated life-of-mine integrated development plan for the Kamoakakula Copper Complex, including the Phase 3 expansion, smelter and Project 95, as well as further optimization initiatives and the planned Phase 4 expansion is expected to be completed by the end of 2024.

Exploration work is also progressing well on the planned 70,000-metre drill program at Ivanhoe's majority-owned, 2,650-km<sup>2</sup> Western Foreland license package adjacent to Kamoakakula. Currently, there are approximately 10 drill rigs active in the Makoko and Kitoko areas. This initial phase of the program is designed to expand and delineate these high-grade copper discoveries ahead of potential engineering and planning work to study opportunities to also accelerate copper production growth from these licenses. Further exploration is planned on regional targets deemed prospective for additional sediment-hosted, high-grade copper deposits.



**Senior management addressing workers inside the Phase 3 concentrate storage and load-out facility, during the celebration of first concentrate on June 9, 2024.**



**Sunrise June 9, 2024, over the Phase 3 concentrator's ball mills. Construction of the Phase 3 concentrator was completed on budget and several months ahead of schedule.**



## Disclosure of technical information

Disclosures of a scientific or technical nature at the Kamoia-Kakula Copper Complex in this news release have been reviewed and approved by Steve Amos, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Amos is not considered independent under NI 43-101 as he is Ivanhoe Mines' Executive Vice President, Projects. Mr. Amos has verified the technical data disclosed in this news release.

Ivanhoe has prepared an independent, NI 43-101-compliant technical report for the Kamoia-Kakula Copper Complex, which is available on the company's website and under the company's SEDAR+ profile at [www.sedarplus.ca](http://www.sedarplus.ca):

- Kamoia-Kakula Integrated Development Plan 2023 Technical Report dated March 6, 2023, prepared by OreWin Pty Ltd.; China Nerin Engineering Co. Ltd.; DRA Global; Epoch Resources; Golder Associates Africa; Metso Outotec Oyj; Paterson and Cooke; SRK Consulting Ltd.; and The MSA Group.

The technical report includes relevant information regarding the assumptions, parameters and methods of the mineral resource estimates on the Kamoia-Kakula Copper Complex cited in this news release, as well as information regarding data verification, exploration procedures and other matters relevant to the scientific and technical disclosure contained in this news release.

## About Ivanhoe Mines

Ivanhoe Mines is a Canadian mining company focused on advancing its three principal projects in Southern Africa; the expansion of the Kamoia-Kakula Copper Complex in the DRC, the construction of the tier-one Platreef palladium-nickel-platinum-rhodium-copper-gold project in South Africa; and the restart of the historic ultra-high-grade Kipushi zinc-copper-germanium-silver mine, also in the DRC.

Ivanhoe Mines also is exploring and pursuing development opportunities across circa 2,650 km<sup>2</sup> of highly prospective, 60-100% owned licences in the Western Forelands, located adjacent to the Kamoia-Kakula Copper Complex in the DRC. Ivanhoe is exploring for new sedimentary copper discoveries, as well as expanding and further defining its high-grade Makoko, Kiala, and Kitoko copper discoveries.

Follow Robert Friedland ([@robert\\_ivanhoe](https://twitter.com/robert_ivanhoe)) and Ivanhoe Mines ([@IvanhoeMines](https://twitter.com/IvanhoeMines)) on X.



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## Forward-looking statements

Certain statements in this news release constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws. Such statements and information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company, its projects, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. Readers are cautioned not to place undue reliance on forward-looking information or statements. These statements reflect the company’s current expectations regarding future events, performance and results and speak only as of the date of this news release.

Such statements include, without limitation: (i) statements that Phase 3 is expected to increase annualized copper production to more than 600,000 tonnes, positioning Kamoakakula as the world’s third largest copper mining complex, and the largest copper mine on the African continent; (ii) statements that ramp-up to commercial production of the Phase 3 concentrator is targeted for early in the third quarter; (iii) statements that the Phase 3 concentrator will process ore from the adjacent Kamoakakula 1 and 2 underground mines, as well as the connecting Kansoko underground mine; (iv) statements that total imported power at the Kamoakakula Copper Complex is expected increase up to 100 MW by the end of 2024; (v) statements that Kamoakakula is expected to continue to consume imported power until grid stability improves, with projected grid improvements expected to be completed by mid-2025; (vi) statements that on-site backup-power generator capacity is scheduled to increase, via a phased roll-out, to a total of over 200 MW by the end of 2024; (vii) statements that an additional 60 MW of back up generator capacity is expected to be installed within the coming month, increasing the total backup capacity to 133 MW by the end of July; and (viii) statements that the Phase 3 concentrator adds an additional requirement of 45 MW once fully ramped in the third quarter and that the smelter will require a further 75 MW of power once fully ramped up throughout 2025; (ix) statements that basic engineering of the previously announced “Project 95” is expected to be completed shortly; (x) statements that “Project 95” would increase overall metallurgical copper recovery rate of Kamoakakula’s Phase 1 and 2 concentrators of approximately 95%; (xi) statements that the Phase 4 concentrator will be positioned adjacent to the Phase 3 concentrator, with a minimum processing capacity of 5 Mtpa, and will share common infrastructure with Phase 3, including the front end (crushing and screening plant),

which will reduce capital costs; (xii) statements that an updated life-of-mine integrated development plan for the Kamoā-Kakula Copper Complex, including the Phase 3 expansion, smelter and Project 95, as well as further optimization initiatives and the planned Phase 4 expansion is expected to be completed by the end of 2024; (xiii) statements that Ivanhoe will conduct a 70,000-metre drill program at the majority-owned, 2,650-km<sup>2</sup> Western Foreland license package adjacent to Kamoā-Kakula; (xiv) statements that the current exploration program on the Western Foreland license package will be followed by potential engineering and planning work that would be designed to study opportunities to also accelerate copper production growth from these licenses; (xv) statements that further exploration is planned on Western Foreland regional targets deemed prospective for additional sediment-hosted, high-grade copper deposits.

Furthermore, concerning this specific forward-looking information concerning the operation and development of the Kamoā-Kakula Copper Complex, the company has based its assumptions and analysis on certain factors that are inherently uncertain. Uncertainties include: (i) the adequacy of infrastructure; (ii) geological characteristics; (iii) metallurgical characteristics of the mineralization; (iv) the ability to develop adequate processing capacity; (v) the price of copper; (vi) the availability of equipment and facilities necessary to complete development and exploration; (vii) the cost of consumables and mining and processing equipment; (viii) unforeseen technological and engineering problems; (ix) accidents or acts of sabotage or terrorism; (x) currency fluctuations; (xi) changes in regulations; (xii) the compliance by joint venture partners with terms of agreements; (xiii) the availability and productivity of skilled labour; (xiv) the regulation of the mining industry by various governmental agencies; (xv) the ability to raise sufficient capital to develop such projects; (xvi) changes in project scope or design; (xvii) recoveries, mining rates and grade; (xviii) political factors; (xviii) water inflow into the mine and its potential effect on mining operations, and (xix) the consistency and availability of electric power.

Forward-looking statements and information involve significant risks and uncertainties, should not be read as guarantees of future performance or results and will not necessarily be accurate indicators of whether such results will be achieved. Many factors could cause actual results to differ materially from the results discussed in the forward-looking statements or information, including, but not limited to, the factors discussed above and under the “Risk Factors” heading in the company’s MD&A for the three months ended March 31, 2024, in the company’s current annual information form, and elsewhere in this news release, as well as unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts with the company to perform as agreed; social or labour unrest; changes in commodity prices; and the failure of exploration programs or studies to deliver anticipated results or results that would justify and support continued exploration, studies, development or operations.

Although the forward-looking statements contained in this news release are based upon what management of the company believes are reasonable assumptions, the company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.



The company's actual results could differ materially from those anticipated in these forward-looking statements as a result of the factors outlined in the "Risk Factors" section of the company's MD&A for the three months ended March 31, 2024, in the company's current annual information and elsewhere in this news release.