

December 22, 2021

## **Kamoakakula surpasses annual copper guidance, with more than 100,000 tonnes produced**



## **2021 copper production and 2022 guidance to be published in January 2022**



## **Phase 2 remains on track for early start-up in Q2 2022**

TORONTO, CANADA – Ivanhoe Mines (TSX: IVN; OTCQX: IVPAF) Co-Chairs Robert Friedland and Yufeng “Miles” Sun are pleased to announce that Kamoakakula’s Phase 1, 3.8 million-tonne-per-annum (Mtpa) concentrator plant in the Democratic Republic of Congo (DRC) has exceeded the upper end of annual copper production guidance with more than **100,000 tonnes of copper in concentrate** produced year-to-date, as at December 22, 2021. The figures are on a 100%-project basis and metal reported in concentrate is prior to refining losses or deductions associated with smelter terms.

Ivanhoe’s 2021 production guidance for contained copper in concentrate produced from Kamoakakula was **92,500 to 100,000 tonnes**, which was originally projected to be 80,000 to 95,000 tonnes. The annual production guidance was also previously increased in November, reflecting the successful completion of ramp-up of the Kakula Phase 1 concentrator.

Kamoakakula’s 2021 copper production to the end of the year, as well as guidance for 2022 copper production, cost of sales and cash costs, including the start of Phase 2 operations, will be provided in January 2022.

“Kamoakakula Copper's performance marks an excellent end to what has truly been a banner year for Ivanhoe Mines,” commented Founder and Executive Co-Chair Robert Friedland. “We would like to extend heartfelt congratulations to the team at Kamoakakula, who consistently exceeded expectations during the construction and development of the world's newest world-scale copper mine, and have continued that outperformance as we have moved through ramp-up and into full production.

“The Phase 2 expansion remains significantly ahead of schedule, and we are well on the way to doubling annual copper production to approximately 400,000 tonnes starting early in Q2 2022. So far in December, we have seen feed grades in excess of 6% copper and recoveries have also been exceeding our design recovery of 86%, which bodes well for our ability to efficiently ramp-up future expansions at Kamoakakula. Our

management team now envisions the Phase 3 concentrator will enter production by the end of 2024.

"Finally, we would like to extend warmest wishes for a peaceful holiday season and a happy and prosperous New Year to all our employees, partners, stakeholders and shareholders. We look forward to an exciting 2022 as we continue to build Ivanhoe Mines into the next major, carbon-neutral global miner by doing things differently ... our team is re-inventing the responsible supply chain of the 'electric metals' that the world desperately requires for the energy transition."

A side-by-side aerial of the Phase 1 and Phase 2 (foreground) concentrator plants. The Phase 2 plant is expected to double annual copper production to approximately 400,000 tonnes.



## Qualified Persons

Disclosures of a scientific or technical nature regarding development scenarios at the Kamoakakula Project 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 Kamoakakula Copper's Head of 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 Kamoakakula Project, which is available on the company's website and under the company's SEDAR profile at [www.sedar.com](http://www.sedar.com):

- **Kamoa-Kakula Integrated Development Plan 2020 dated October 13, 2020, prepared by OreWin Pty Ltd., China Nerin Engineering Co., Ltd., DRA Global, Epoch Resources, Golder Associates Africa, KGHM Cuprum R&D Centre Ltd., Outotec Oyj, Paterson and Cooke, Stantec Consulting International LLC, SRK Consulting Inc., and Wood plc.**

**The technical report includes relevant information regarding the assumptions, parameters and methods of the mineral resource estimates on the Kamoa-Kakula Project 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 development of major new, mechanized, underground mines at the Kamoa-Kakula copper joint-venture in the Democratic Republic of Congo and at the Platreef palladium-rhodium-platinum-nickel-copper-gold discovery in South Africa; and the extensive redevelopment and upgrading of the historic Kipushi zinc-copper-germanium-silver mine, also in the Democratic Republic of Congo.**

**Kamoa-Kakula began producing copper concentrates in May 2021 and, through phased expansions, is positioned to become one of the world's largest copper producers. Kamoa-Kakula are being powered by clean, renewable hydro-generated electricity and are projected to be among the world's lowest greenhouse gas emitters per unit of metal produced. Ivanhoe Mines has pledged to achieve net-zero operational greenhouse gas emissions (Scope 1 and 2) at the Kamoa-Kakula Copper Mine. Ivanhoe also is exploring for new copper discoveries on its Western Foreland exploration licences in the Democratic Republic of Congo, near the Kamoa-Kakula Project.**

## **Information contacts**

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## **Forward-looking statements**

**Certain statements in this 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. These statements reflect the**

company's current expectations regarding future events, performance and results and speak only as of the date of this release.

Such statements include without limitation, the timing and results of: (i) statements regarding the expectation that the Phase 2 concentrator is expected to begin operations in Q2 2022; ii) statements regarding Kamoakakula's Phases 1 and 2 combined are forecast to produce approximately 400,000 tonnes of copper per year; and (iii) statements regarding the expectation to start up the Phase 3 concentrator in Q4 2024.

As well, all of the results of the Kakula definitive feasibility study, the Kakula-Kansoko pre-feasibility study and the Kamoakakula preliminary economic assessment, constitute forward-looking statements or information, and include future estimates of internal rates of return, net present value, future production, estimates of cash cost, proposed mining plans and methods, mine life estimates, cash flow forecasts, metal recoveries, estimates of capital and operating costs and the size and timing of phased development of the projects. Furthermore, with respect to this specific forward-looking information concerning the development of the Kamoakakula Project, 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; (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) political factors; (xviii) unforeseen delays or stoppages in shipping and transportation of goods and equipment; (xix) water inflow into the mine and its potential effect on mining operations; and (xx) 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 or not such results will be achieved. A number of 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 below and under "Risk Factors", and elsewhere in this 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 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 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 release.

The company's actual results could differ materially from those anticipated in these forward-looking statements as a result of the factors set forth below in the "Risk Factors" section in the company's 2021 Q3 MD&A and its current annual information form.