IVANHOE
MINES

Dated August 2, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2023

INTRODUCTION

This management's discussion and analysis (MD&A) should be read in conjunction with the unaudited condensed consolidated interim financial statements of Ivanhoe Mines Ltd. ("Ivanhoe", "Ivanhoe Mines" or the "Company"), for the three and six months ended June 30, 2023, which have been prepared in accordance with International Accounting Standard 34 - Interim Financial Reporting (IAS 34) and the audited consolidated financial statements of Ivanhoe for the years ended December 31, 2022 and 2021, which have been prepared in accordance with International Financial Reporting Standards (IFRS). All dollar figures stated herein are in U.S. dollars, unless otherwise specified. References to "C$" mean Canadian dollars and references to "R" mean South African Rands.

The effective date of this MD&A is August 2, 2023. Additional information relating to the Company is available on SEDAR+ at www.sedarplus.ca. Certain statements contained in the MD&A are forward-looking statements that involve risks and uncertainties. See "Forward-Looking Statements" and "Risk Factors".

This MD&A includes references to earnings before interest, tax, depreciation and amortization (EBITDA), Adjusted EBITDA, EBITDA margin, normalized profit, and "Cash costs (C1) per pound" which are non-GAAP financial performance measures. For a detailed description of each of the non-GAAP financial performance measures used in this MD&A, and a detailed reconciliation to the most directly comparable measure under IFRS, please refer to the non-GAAP Financial Performance Measures section of this MD&A starting on page 45. The non-GAAP financial performance measures set out in this MD&A are intended to provide additional information to investors and do not have any standardized meaning under IFRS, and therefore may not be comparable to other issuers, and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

SECOND QUARTER HIGHLIGHTS

- Record quarterly production of 103,786 tonnes of copper in concentrate was achieved at the Kamoa-Kakula Copper Complex ("Kamoa-Kakula") for Q2 2023, compared to 93,603 tonnes in Q1 2023 and 87,314 tonnes in Q2 2022.

- Kamoa-Kakula sold 101,526 tonnes of payable copper during Q2 2023, recognizing a record revenue of $702 million, an operating profit of $394 million and quarterly EBITDA of $457 million.

- Kamoa-Kakula's cost of sales per pound (lb.) of payable copper sold was $1.24/lb. for Q2 2023 compared with $1.25/lb. and $1.15/lb. in Q1 2023 and Q2 2022 respectively. Cash costs (C1) per pound of payable copper produced in Q2 2023 totalled $1.41/lb., compared to $1.42/lb. and $1.42/lb. in Q1 2023 and Q2 2022 respectively.

- Ivanhoe Mines recorded a profit of $87 million for Q2 2023, net of a $27 million non-cash loss on the $575 million convertible bond fair valuation, compared with a profit of $82 million for Q1 2023. The profit in the quarter includes Ivanhoe Mines' share of profit and finance income from the Kamoa-Kakula joint venture of $123 million for Q2 2023.

- Ivanhoe Mines Adjusted EBITDA was $172 million for Q2 2023, compared with $101 million for the same period in 2022, and $172 million for Q1 2023, which includes an attributable share of EBITDA from Kamoa-Kakula.

- Ivanhoe Mines has a strong balance sheet with cash and cash equivalents of $393 million on hand as at June 30, 2023, and expects Kamoa-Kakula's Phase 1 and Phase 2 cash flow to be sufficient to fund the Phase 3 expansion capital cost requirements at current copper prices.

- Kamoa-Kakula's full year cash cost (C1) guidance is unchanged at $1.40 – $1.50 per pound and full year production guidance also unchanged at 390,000 to 430,000 tonnes of copper in concentrate.

KAMOA-KAKULA COPPER COMPLEX

The Kamoa-Kakula Copper Complex is approximately 25 kilometres southwest of the town of Kolwezi and about 270 kilometres west of Lubumbashi in the DRC Copperbelt. Kamoa-Kakula's Phase 1 concentrator began producing copper in May 2021 and achieved commercial production on July 1, 2021. The Phase 2 concentrator, which doubled nameplate production capacity, was commissioned in April 2022. Kamoa-Kakula is independently ranked by international mining consultant Wood Mackenzie to become the world's third-largest copper mining operation in 2027, following the completion of the ongoing Phase 3 expansion. Kamoa-Kakula's employee workforce is currently 97% Congolese.

The Kamoa-Kakula Copper Complex is operated as the Kamoa Holding joint venture between Ivanhoe Mines and Zijin Mining. Ivanhoe sold a 49.5% share interest in Kamoa Holding Limited (Kamoa Holding) to Zijin Mining and a 1% share interest in Kamoa Holding to privately owned Crystal River in December 2015. Kamoa Holding holds an 80% interest in the project. Ivanhoe and Zijin Mining each hold an indirect 39.6% interest in Kamoa-Kakula, Crystal River holds an indirect 0.8% interest, and the DRC government holds a direct 20% interest.

Photo: Construction of the off-gas handling structure and the adjoining furnace building at Kamoa-Kakula's direct-to-blister copper smelter.

Kamoa-Kakula summary of operating and financial data

	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Ore tonnes milled (000's tonnes)	**2,244**	1,930	2,006	2,082	1,950
Copper ore grade processed (%)	**5.21%**	5.42%	5.40%	5.60%	5.44%
Copper recovery (%)	**87.2%**	87.1%	86.1%	85.9%	84.0%
Copper in concentrate produced (tonnes)	**103,786**	93,603	92,761	97,820	87,314
Payable copper sold (tonnes)	**101,526**	86,777	92,208	93,812	85,794
Cost of sales per pound ($ per lb.)	**1.24**	1.25	1.08	1.05	1.15
Cash cost (C1) ($ per lb.)	**1.41**	1.42	1.42	1.43	1.42
Realized copper price ($ per lb.)	**3.79**	4.04	3.54	3.50	4.34
Sales revenue before remeasurement ($'000)	**729,924**	659,529	619,997	570,504	699,381
Remeasurement of contract receivables ($'000)	**(27,542)**	29,594	53,473	(110,031)	(205,248)
Sales revenue after remeasurement ($'000)	**702,382**	689,123	673,470	460,473	494,133
EBITDA ($'000)(1)	**456,628**	457,311	452,089	251,086	285,477
EBITDA margin (% of sales revenue)	**65%**	66%	67%	55%	58%

All figures in the above tables are on a 100%-project basis. Metal reported in concentrate is before refining losses or deductions associated with smelter terms. This MD&A includes "EBITDA", "Adjusted EBITDA", "EBITDA margin", normalized profit and "Cash costs (C1)" which are non-GAAP financial performance measures. For a detailed description of each of the non-GAAP financial performance measures used herein and a detailed reconciliation to the most directly comparable measure under IFRS, please refer to the non-GAAP Financial Performance Measures section of this MD&A starting on page 45.

(1) Unrealized foreign exchange losses have been excluded from EBITDA in the current and prior periods presented, as the Company believes that including the unrealized foreign exchange gains and losses does not give a valuable indication of the mine's ability to generate liquidity by producing operating cash flow to fund its working capital needs, service debt obligations, fund capital expenditures and distribute cash to its shareholders.

C1 cash cost per pound of payable copper produced can be further broken down as follows:

		Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Mining	($ per lb.)	0.39	0.41	0.40	0.41	0.39
Processing	($ per lb.)	0.19	0.19	0.16	0.12	0.14
Logistics charges (delivered to China)	($ per lb.)	0.45	0.46	0.50	0.56	0.51
Treatment, refining and smelter charges	($ per lb.)	0.25	0.23	0.23	0.21	0.21
General and administrative expenditure	($ per lb.)	0.13	0.13	0.13	0.13	0.17
C1 cash cost per pound of payable copper produced	**($ per lb.)**	**1.41**	**1.42**	**1.42**	**1.43**	**1.42**

C1 cash costs are prepared on a basis consistent with the industry standard definitions by Wood Mackenzie cost guidelines but are not measures recognized under IFRS. In calculating the C1 cash cost, the costs are measured on the same basis as the Company's share of profit from the Kamoa Holding joint venture that is contained in the financial statements. C1 cash costs are used by management to evaluate operating performance and include all direct mining, processing, and general and administrative costs. Smelter charges and freight deductions on sales to the final port of destination, which are recognized as a component of sales revenues, are added to C1 cash cost to arrive at an approximate cost of delivered, finished metal. C1 cash costs exclude royalties and production taxes and non-routine charges as they are not direct production costs.

All figures are on a 100% project basis and metal reported in concentrate is before refining losses or deductions associated with smelter terms.

Photo: (L-R) Guelord Ilunga, control room overseer; Derick Yav Tshang, control room overseer; Carine Ndala, control room overseer; Jean-Saint Kabange, plant metallurgist; Dan Mutamba, senior control room officer; and Chris Tshibanda, control room overseer, stand in the Kamoa-Kakula concentrator plant control room.

Kamoa-Kakula produced a record 103,786 tonnes of copper in Q2 2023, including a monthly record of 35,856 tonnes for May 2023

Kamoa-Kakula's Phase 1 and 2 concentrators are now regularly operating at the increased processing rate of 9.2 million tonnes per annum (Mtpa), following the completion of the debottlenecking program. The $50-million Phase 1 and 2 concentrator debottlenecking program was completed on budget and ahead of schedule in late February 2023, increasing production capacity up to 450,000 tonnes of copper in concentrate per annum.

The Kamoa-Kakula Phase 1 and Phase 2 concentrators continued to perform strongly in the second quarter, breaking several records including the quarterly production of 103,786 tonnes of copper in concentrate, a quarter-on-quarter increase of 11%. In addition, a monthly record was achieved in May 2023 with 35,856 tonnes of copper in concentrate produced. Also, during the quarter, a weekly production record of 9,710 tonnes of copper in concentrate was achieved in late April. Shortly after quarter-end, on July 2, 2023, a record daily milling rate of 29,968 dry metric tonnes was achieved, which is equivalent to an annual milling rate of 10 million tonnes per annum (after accounting for availability).

Kamoa-Kakula's Phase 1 and 2 concentrators milled a record 2.2 million tonnes of ore during the second quarter at an average feed grade of 5.2% copper. This included high-grade, run-of-mine ore from the Kakula Mine, supplemented with ore from the surface stockpiles to achieve throughput over original design capacity. Strong copper recoveries continued for the quarter averaging 87.2%.

For July, Kamoa-Kakula's Phase 1 and 2 concentrators milled 0.6 million tonnes of ore at an average feed grade of 5.8% copper and recoveries of 88.0%, producing 35,636 tonnes, just short of a monthly record.

The record second-quarter production at Kamoa-Kakula was achieved despite maintenance shutdowns in June and intermittent grid instability.

Since late Q4 2022, Kamoa Copper has been working alongside DRC's state-owned power company, La Société Nationale d'Electricité (SNEL), to identify the causes of instability across the southern DRC's grid infrastructure to assist with delivering long-lasting solutions. Kamoa Copper has identified a series of upgrades and has outlined a project plan to deliver the improvements. Mobilization of resources is underway, with vendor selection and equipment procurement having commenced.

Concurrently, Kamoa Copper's engineering team are working towards insulating Kamoa-Kakula from future instability by expanding on-site backup generation capacity, as well as sourcing additional power imported from the Zambian grid.

Over the next 12-18 months, on-site backup-power generation capacity will increase via a phased roll-out. During the second quarter, 11 megawatts (MW) of new generator capacity was installed, bringing the total on-site backup-power generation capacity to approximately 48 MW. Delivery of a further 30 MW in backup generation capacity, sufficient to power Kamoa-Kakula's entire Phase 1 and 2 operations in the event of grid disruptions, will commence later this year and is expected to be operational by Q2 2024. Over 130 MW of further backup generation capacity has been ordered and is expected to be installed in 2024, in time for the completion of the Phase 3 concentrator and smelter that are currently under construction.

Discussions are advancing to secure up to 100 MW of additional power via the Zambian grid interconnector, with the initial phase expected to be ready in the third quarter.

Draw-down of surface ore stockpiles at Kakula continues as required. While the ongoing expansion of underground infrastructure at the Kakula mine takes place, ore will be drawn as required from the stockpile to maximize copper production.

Kamoa-Kakula's high- and medium-grade ore surface stockpiles totaled approximately 4.1 million tonnes at an estimated grade of 3.7% copper as of the end of June 2023 and contained more than 152,000 tonnes of copper. The operation mined 2.2 million tonnes of ore grading 5.2% copper in Q2 2023, which was comprised of 2.0 million tonnes grading 5.4% copper from the Kakula mine, including 0.68 million tonnes grading 7.0% copper from the mine's high-grade centre.

Photo: Jurie Human, civil supervisor, Kamoa Copper and Julias Mblambo, site foreman with DRC-based contractor Kongo River Construction, study schematics underground at the Kakula Mine.

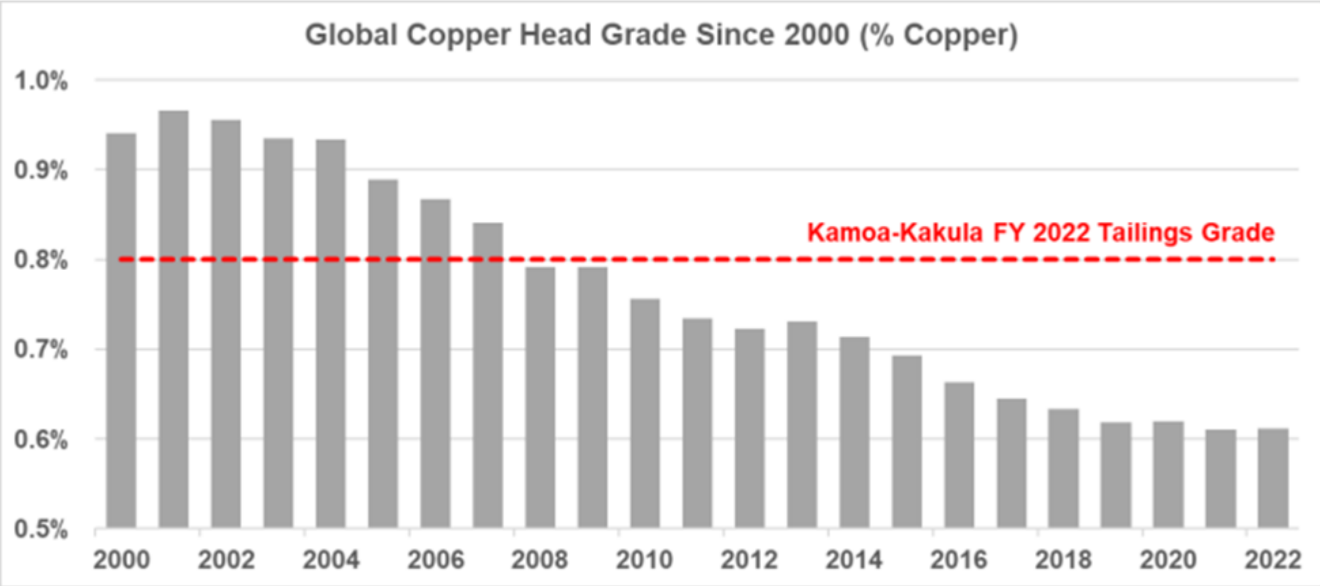
Significant preliminary testwork for improving copper recoveries at Kamoa-Kakula

On July 27, 2023, Ivanhoe announced highly promising preliminary testwork to further improve copper recoveries at Kamoa-Kakula by liberating copper from the tailings stream by a conventional process of fine-grinding the material followed by flotation, thickening and filtration. Initial preliminary results indicate that with a feed grade of less than 1% copper, approximately 65% of the contained copper can be recovered from the tailings stream, which could increase overall metallurgical recoveries to well over 90%. Based on these results, Kamoa-Kakula can further increase production, revenues and cash flow.

In 2022, Kamoa Copper's process engineering team, together with a number of internationally recognized external metallurgy specialists, initiated work to investigate ways to economically recover additional copper units from the tailings stream of the Phase 1 and 2 concentrators. There are 13 workstreams underway, including the process described above, which is subject to further metallurgical testwork and engineering work, to advance the project to an investment decision.

For context, in 2022 the Kamoa-Kakula Copper Complex milled approximately 7.1 million tonnes of ore at an average feed grade of 5.5% copper, producing 333,497 tonnes of copper in concentrate. Based on the metallurgical recovery of 86% copper, which was in line with design parameters, more than 50,000 tonnes of copper was not recovered into concentrate and diverted to the tailings storage facility, or used underground as backfill. The grade of Kamoa-Kakula's tailings in 2022 averaged approximately 0.8% copper. For comparison, the average head grade of the copper mines globally was approximately 0.6% in 2022, according to Bank of Montreal (BMO) research. See Figure 1.

Figure 1. Global average copper head grade since 2000, compared with the average copper grade of Kamoa-Kakula's tailings during 2022.



Source: BMO Research, Wood Mackenzie

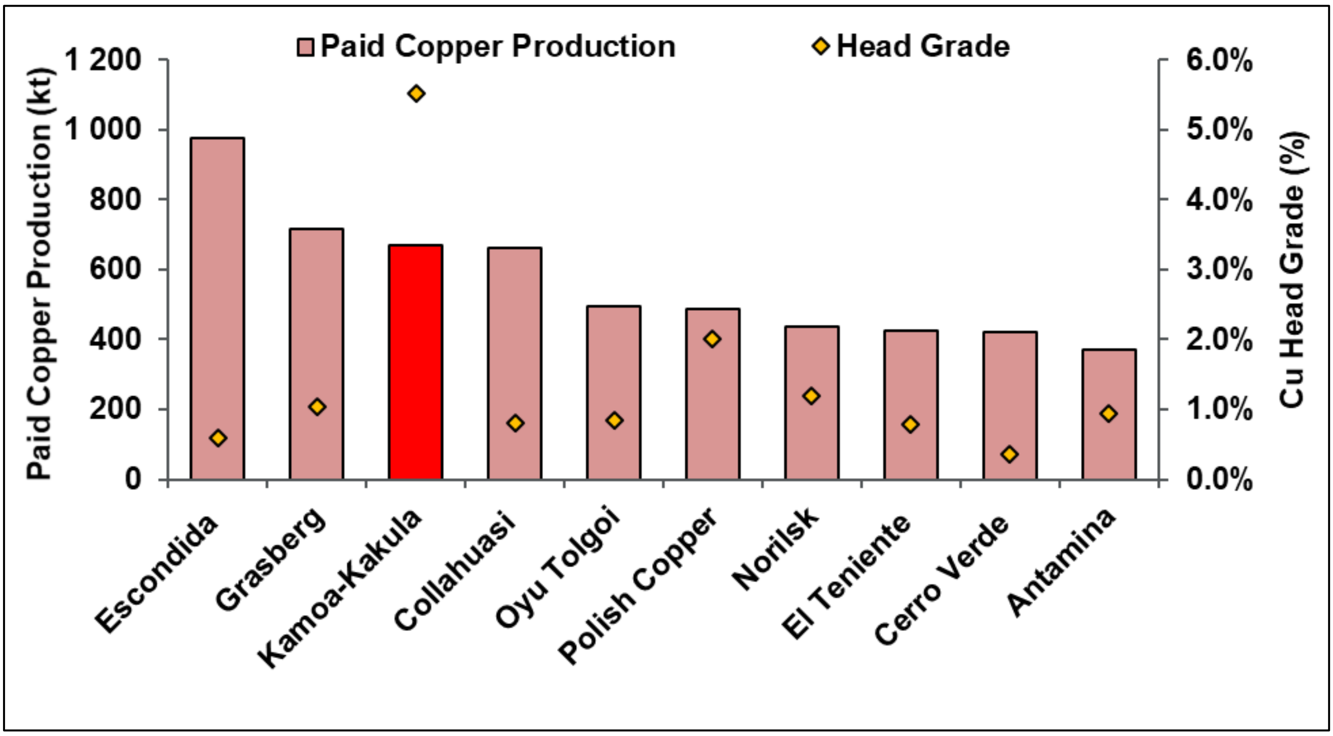
Construction of the Phase 3 concentrator plant and associated infrastructure is advancing well

Kamoa-Kakula's ongoing Phase 3 expansion is expected to be commissioned in Q4 2024 and includes a new 5-Mtpa concentrator at Kamoa, which is approximately 10 kilometres north of the Phase 1 and 2 concentrators.

The process design of the Phase 3 concentrator is very similar to that of the Phase 1 and 2 concentrators, but 30% larger. The front end of the concentrator (stockpile, crushing and screening) is being built to a capacity of 10 Mtpa, double the required capacity for Phase 3, in anticipation of the future Phase 4 expansion. This follows the same construction approach as that of Phase 1 and Phase 2. The bulk of the equipment is the same or similar to that installed in the Phase 1 and 2 concentrators, resulting in a commonality of spare parts, while also leveraging prior operational and maintenance experience.

Following the commissioning of Phase 3, Kamoa-Kakula will have a total design processing capacity of 14.2 Mtpa. The completion of Phase 3 is expected to increase annualized copper production to an average of approximately 620,000 tonnes per year over the next ten years, which will position Kamoa Copper as the world's third-largest copper mining complex in 2027, and the largest copper mine on the African continent. See Figure 2.

Figure 2: World's projected top 10 copper mines in 2027, by key metrics.



Note: Kamoa-Kakula production and grade are based on the Kamoa-Kakula 2023 PFS. The 'Cu Head Grade' for the projects benchmarked by Wood Mackenzie reflects the average reserve grade.

Source: Wood Mackenzie, 2023 (based on public disclosure, the Kamoa-Kakula 2023 PFS has not been reviewed by Wood Mackenzie).

Kamoa-Kakula's Phase 3 expansion, consisting of two new underground mines known as Kamoa 1 and Kamoa 2 and a new, 5-Mtpa concentrator plant, is well on track for first production in the fourth quarter of 2024. Construction of the twin declines to the Kamoa 1 and Kamoa 2 underground mines and excavation to access the Phase 3 mining areas is advancing well. The Kamoa 1 and Kamoa 2 mines share a single box cut with a twin service-and-conveyor decline. Over 2,000 metres of linear advance across both declines have been completed to date and access to the Kamoa 2 Mine has been achieved, holing of the services decline is expected in October 2023. Underground mining activities are expected to commence at Kamoa 1 in late 2023 and Kamoa 2 in 2025, which will both involve the same mechanized drift-and-fill mining methods used at the Kakula Mine.

Photo: Civil works for Kamoa-Kakula's Phase 3 concentrator plant are nearing completion, with over 25,000 cubic metres of concrete poured to date.

Photo: Construction of the concentrate thickener base is progressing well at Kamoa-Kakula's Phase 3 concentrator site.

Photo: Representatives from DRC-based contractor Prospere stand with members of the Kamoa Copper team in front of the foundation for Kamoa-Kakula's Phase 3 ball mill circuit.

Phase 3 concentrator project is 38% complete and on schedule for production in the fourth quarter of 2024

Detailed Phase 3 engineering design and procurement activities are nearly complete, with fabrication activities now 61% advanced. The rate of equipment deliveries to site is steadily increasing. A total of 505 of the forecasted 3,429 truck deliveries have already taken place and a further 224 trucks ladened with equipment are currently en route to site.

Civil works are nearing completion, with over 25,000 cubic metres of the total 30,000 cubic metres of concrete poured to date. The steel, mechanical, piping and plate work (SMPP) contract was also awarded during the quarter. Delivery of structural steel commenced during the quarter. Over 5,000 tonnes of the required 7,400 tonnes of structural steel and plate work have shipped to site. Orders for approximately 50,000 metres of the total 73,000 metres of piping have also been placed.

The last lot of the 1,830-tonne primary and secondary ball mill equipment package has been shipped by CITIC Heavy Industries of Henan province, China, with the first containers delivered to the Port of Durban, South Africa. Installation of the first of the two ball mills has commenced at the Phase 3 concentrator site, with scaffolding work well advanced. The first lots of the cone crushers, flotation cells, vibrating screens, concentrate filters, cyclone cluster, compressor and pump mechanical equipment packages are expected to be delivered to site imminently. Furthermore, the apron feeder was recently lifted into position inside the Phase 3 run-of-mine stockpile tunnel.

Smelter project is 56% complete and on target for commissioning in the fourth quarter of 2024

The Phase 3 expansion also includes the integration of Africa's largest direct-to-blister flash smelter, which will have a capacity of 500,000 tonnes of 99+%-pure blister copper anodes per annum. The on-site smelter is being built adjacent to the existing Phase 1 and Phase 2 concentrator plants. The smelter will incorporate leading-edge technology supplied by Metso Outotec of Espoo, Finland and will meet the world-leading International Finance Corporation's (IFC) emissions standards.

All major foundations for the equipment and buildings are complete. Most of the structural steel and equipment have been ordered and are now being manufactured. The first lots of structural steel and mechanical equipment have been delivered to site. Approximately 726 truckloads of steel and equipment out of an estimated total of 5,400 have been delivered. The main mechanical and electrical construction contractors have been appointed and mobilization is underway. Mechanical erection has started for the direct-to-blister flash furnace and electric slag-cleaning furnace and gas cleaning system. Approximately 2,000 construction workers are now working at the smelter site, and this is expected to peak at 3,000 in December 2023.

Kamoa-Kakula's Phase 3 expansion includes the refurbishment of Turbine #5 at the Inga II hydroelectric power station. The turbine will supply an additional 178 megawatts of clean hydroelectric power to the national grid, which is sufficient to meet the power requirements of the Phase 3 concentrator, the flash smelter, as well as provide spare capacity for future expansions. The 99.7% pure blister anode copper produced from Kamoa-Kakula's smelter is expected to be among the lowest carbon-dioxide emitters in the world per tonne of copper produced.

Photo: Civil construction of Kamoa-Kakula's Phase 3 direct-to-blister smelter furnace is progressing on schedule for completion in Q4 2024. It will be Africa's largest direct-to-blister flash smelter.

Photo: Foundations and civil construction for the Phase 3 smelter high-strength acid storage and dispatch also are advancing on schedule. All major foundations for the equipment and buildings are complete.

The smelter will have a processing capacity of approximately 1.2 Mtpa of dry concentrate feed and is designed to run on a blend of concentrate produced from the Kakula (Phase 1 and 2) and Kamoa (Phase 3 and future Phase 4) concentrators. Under the Kamoa-Kakula 2023 Integrated Development Plan, the smelter is projected to accommodate approximately 80% of Kamoa-Kakula's total concentrate production. Kamoa-Kakula will also continue to toll-treat concentrates under a 10-year agreement with the Lualaba Copper Smelter (LCS), located approximately 50 kilometres from Kamoa-Kakula, near the town of Kolwezi. Deliveries to LCS are expected to account for approximately 150,000 tonnes of copper concentrate annually.

As a by-product, the smelter will also produce in the region of 650,000 to 800,000 tonnes per year of high-strength sulphuric acid. There is strong demand for sulphuric acid in the DRC, as it is used to recover copper from oxide ores via the SX-EW (solvent extraction and electrowinning) process. The DRC market consumed approximately 6 million tonnes of acid in 2022. The vast majority of the consumed high-strength sulphuric acid is imported by regional consumers in the form of sulphur and burned in domestic acid plants.

The on-site smelter will offer transformative financial benefits for the Kamoa-Kakula Copper Complex, most notable being a material reduction in logistics costs, and to a lesser extent reduced concentrate treatment charges and local taxes, as well as revenue from acid sales. Logistics costs accounted for 32% of Kamoa-Kakula's total cash costs (C1) during Q2 2023, and the volume of shipments is expected to halve following the Phase 3 expansion as trucks will transport 99+%-pure blister copper anodes instead of concentrate with approximately 50% contained copper. According to the Kamoa-Kakula 2023 Prefeasibility Study, smelter commissioning is expected to drive a decrease in average cash costs (C1) over the first five years (from 2025) to approximately $1.15/lb. of copper, a 21% reduction from the midpoint of the 2023 guidance of $1.45/lb. of payable copper produced.

Kamoa-Kakula's Phase 3 expansion also includes the rehabilitation of Turbine #5 at the Inga II hydroelectric power station, which is progressing well. The replaced turbine will supply an additional 178 megawatts (MW) of clean hydroelectric power to the national grid and provide power for Phase 3. Study work is also progressing well to upgrade the transmission capacity of the existing grid infrastructure between the Inga II hydropower facility and the Kamoa site.

Outstanding economic results of updated, independent Integrated Development Plan (2023 IDP) for world-leading Kamoa-Kakula Copper Complex

Ivanhoe Mines announced the results of an updated independent Integrated Development Plan (2023 IDP) for the Kamoa-Kakula Copper Complex on January 30, 2023. The 2023 IDP consists of a Pre-Feasibility Study (Kamoa-Kakula 2023 PFS) for the Phase 3 and Phase 4 expansions of the Kamoa-Kakula Copper Complex over a 33-year mine life, as well as an updated Preliminary Economic Assessment (Kamoa-Kakula 2023 PEA) that includes a life-of-mine extension case to 42 years overall.

The Kamoa-Kakula 2023 PFS (Phase 3 and 4 expansion) plans for a staged increase in nameplate processing capacity from the current combined capacity of 9.2 Mtpa, up to a total of 19.2 Mtpa. The Phase 1 and 2 concentrators will continue to process ore from the Kakula Mine, as well as the new adjacent Kakula West Mine from 2029. The Phase 3, 5.0 Mtpa concentrator, which is under construction and on target for the first concentrate in Q4 2024, will be fed with ore from the existing Kansoko Sud Mine (formerly Kansoko Mine), as well as new mines currently under development in the Kamoa area, known as Kamoa 1 and 2. The Phase 4 expansion consists of an additional 5.0 Mtpa concentrator that will take the total processing capacity of the Kamoa-Kakula Copper Complex up to 19.2 Mtpa. The Phase 4 concentrator will be fed by new mines in the Kamoa area.

The completion of the Phase 3 expansion in Q4 2024 is planned to coincide with the commissioning of an on-site, direct-to-blister flash copper smelter capable of producing 500,000 tonnes per annum of copper anode.

Highlights of the Kamoa-Kakula 2023 PFS (Phase 3 and 4 expansion) include:

- Phase 1 and 2 at steady-state throughput (9.2 Mtpa) for the first two years, following the completion of the debottlenecking program by Q2 2023, generating cash flow to fund the ongoing capital expenditures.

- Phase 3 expansion to 14.2 Mtpa processing capacity from late 2024 drives a significant increase in copper production, which is forecast to average 620,000 tonnes during the first ten years.

- Commissioning of the 500,000 tonne-per-annum smelter in conjunction with Phase 3 results in a significant improvement in operating cost.

- A significant period of cash flow generation in the first five years following Phase 3 (2025 to 2029) with copper production averaging approximately 650,000 tonnes at a cash cost (C1) of $1.15/lb.

- Phase 4 expansion, ramping up 19.2 Mtpa processing capacity after 2030, will allow sustained copper production of over 500,000 tonnes per year through 2047.

- The remaining Phase 3 capital cost, including contingency, is $3.04 billion, excluding $255 million already spent through December 2022. Of the $3.04 billion, $2.53 billion is spent during 2023 and 2024 up to the commissioning of the Phase 3 concentrator, with the remaining capital cost for the continuing ramp-up of the mining operations thereafter.

- After-tax NPV, at an 8% discount rate, of $19.1 billion and a mine life of 33 years at a long-term copper price of $3.70/lb.

The Kamoa-Kakula 2023 PEA (Life-of-mine extension case) projects a nine-year mine life extension of the Kamoa-Kakula Copper Complex, in addition to the Kamoa-Kakula 2023 PFS. This case includes the addition of four new underground mines in the Kamoa area (called Kamoa 3, 4, 5 and 6) to maintain the overall throughput rate of up to 19.2 Mtpa.

Highlights of the Kamoa-Kakula 2023 PEA (Life-of-mine extension case) include:

- Life-of-mine extension case shows the potential to maintain the processing rate at up to 19.2 Mtpa for an additional 9 years beyond the 33 years in the Kamoa-Kakula 2023 PFS.
- The sequential ramp-up of four new underground mines in the Kamoa area (called Kamoa 3, 4, 5 and 6) providing an additional 181.2 Mt of feed to the Kamoa and Kakula concentrators at an average grade of 3.1% copper, producing an additional 4.8 Mt of contained copper in concentrate.

- After-tax NPV, at an 8% discount rate, of $20.2 billion and mine life of 42 years.

The Kamoa-Kakula 2023 PEA is preliminary and 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 Kamoa-Kakula 2023 PFS and Kamoa-Kakula 2023 PEA were independently prepared by OreWin Pty Ltd. of Adelaide, Australia; China Nerin Engineering Co., Ltd., of Jiangxi, China; DRA Global of Johannesburg, South Africa; Epoch Resources of Johannesburg, South Africa; Golder Associates Africa of Midrand, South Africa; Metso-Outotec Oyj of Helsinki, Finland; Paterson and Cooke of Cape Town, South Africa; SRK Consulting Inc. of Johannesburg, South Africa; and MSA Group of Johannesburg, South Africa. The National Instrument 43-101 technical report dated March 6, 2023, was filed on SEDAR+ at www.sedarplus.ca and on the Ivanhoe Mines website at www.ivanhoemines.com.

COPPER PRODUCTION AND CASH COST GUIDANCE FOR 2023

Kamoa-Kakula 2023 Guidance	
Contained copper in concentrate (tonnes)	**390,000 to 430,000**
Cash cost (C1) ($ per pound)	**1.40 to 1.50**

2023 full-year cash cost (C1) and production guidance remain unchanged. The figures are on a 100%-project basis and metal reported in concentrate is before refining losses or deductions associated with smelter terms. Kamoa-Kakula's 2023 guidance is based on several assumptions and estimates and involves estimates of known and unknown risks, uncertainties and other factors that may cause the actual results to differ materially.

Production guidance is based on assumptions about the disruption of power supply, among other things. The Kamoa-Kakula joint venture produced a total of 333,497 tonnes of copper in concentrate for the year ending December 31, 2022, and 197,389 tonnes in the first half of 2023 including 103,786 tonnes of copper in concentrate in Q2 2023.

Cash costs (C1) per pound of payable copper amounted to $1.41 for Q2 2023 and to $1.42 for Q1 2023.

Cash cost (C1) guidance is based on assumptions including, among other things, prevailing logistics costs based on estimated regional trucking capacity, particularly as regional idled operations are expected to come online, as well as increased benchmark treatment and refining charges, and inflation in consumables and other inputs.

C1 cash cost is a non-GAAP measure used by management to evaluate operating performance and includes all direct mining, processing, stockpile rehandling charges, and general and administrative costs. Smelter charges and freight deductions on sales to the final port of destination (typically China), which are recognized as a component of sales revenues, are added to C1 cash cost to arrive at an approximate cost of delivered finished metal.

For historical comparatives, see the non-GAAP Financial Performance Measures section of this MD&A.

Photo: Chikuk Kawiz Lea, a member of Kamoa's CADET program, stands at the Phase 1 and Phase 2 concentrator site. The program trains members of local communities for high-skill jobs at Kamoa-Kakula.

Photo: Construction teams at Kamoa-Kakula's Phase 3 concentrator site prepare for a structural steel lift with a new 450-tonne crane.

PLATREEF PROJECT

The Platreef Project is owned by Ivanplats (Pty) Ltd (Ivanplats), which is 64%-owned by Ivanhoe Mines. A 26% interest is held by Ivanplats' historically disadvantaged, broad-based, black economic empowerment (B-BBEE) partners, which include 20 local host communities with approximately 150,000 people, project employees and local entrepreneurs. A Japanese consortium of ITOCHU Corporation, Japan Oil, Gas and Metals National Corporation, and Japan Gas Corporation, owns a 10% interest in Ivanplats, which it acquired in two tranches for a total investment of $290 million.

The Platreef Project hosts an underground deposit of thick, platinum-group metals, nickel, copper, and gold mineralization on the Northern Limb of the Bushveld Igneous Complex in Limpopo Province – approximately 280 kilometres northeast of Johannesburg and eight kilometres from the town of Mokopane in South Africa.

On the Northern Limb, platinum-group metals mineralization is primarily hosted within the Platreef, a mineralized sequence traced for more than 30 kilometres along the strike. Ivanhoe's Platreef Project, within the Platreef's southern sector, is comprised of two contiguous properties: Turfspruit and Macalacaskop. Turfspruit, the northernmost property, is contiguous with, and along strike from, Anglo Platinum's Mogalakwena group of mining operations and properties.

Since 2007, Ivanhoe has focused its exploration and development activities on defining and advancing the down-dip extension of its original discovery at Platreef, now known as the Flatreef Deposit, which is amenable to highly mechanized, underground mining methods. With Shaft 1, the initial access to the deposit, now in operation and hoisting development rock from underground, Ivanhoe is focusing on construction activities to bring Phase 1 of Platreef into production by Q3 2024.

Platreef development is currently funded by $300-million stream financing, with efforts to finalize an additional senior debt facility targeted for completion in Q3 2023.

Surface construction activities and lateral underground mine development are progressing well

Underground development work has been focused on lateral development towards the high-grade Flatreef orebody on the 750-metre, 850-metre and 950-metre levels. More than 2,000 metres of lateral development has been completed to date across all three levels (750-metre, 850-metre and 950-metre levels), advancing at a rate of approximately 200 metres per month. Once the crusher and loading feeder installation on the 950-metre level is completed at the end of August, the rate of lateral underground development is expected to continue to increase to approximately 300 metres per month through the remainder of the year. From January 2024, the advancement rate is expected to increase to approximately 500 metres per month.

Platreef's Phase 1 concentrator is on schedule for first production in Q3 2024. All foundation concrete has been poured, with formwork and steel fixing of the walls and plinths commenced. The fabrication of the long-lead order mechanical equipment items is progressing as planned. Over 70% of all Phase 1 orders have been placed. Structural, mechanical, plate work & piping (SMPP) and the mill building structural steel erection commenced in April with approximately 160 tonnes of the total 1,500 tonnes of steelwork erected to date. The Electrical, Control & Instrumentation (EC&I) installation work package has been placed, with site establishment and onboarding completed.

Photo: The Shaft 2 headgear concrete structure (right) beside Shaft 1 (left) was completed early in the quarter to a height of approximately 79 metres. Shaft 2's overall height will be approximately 100 metres above ground, including the steel structure housing the main winders.

Photo: Foundation for Platreef's Phase 1 flotation cells is advancing well. Platreef's Phase 1 concentrator is on schedule for first production in Q3 2024, with all foundation concrete poured.

The 10-metre diameter Shaft 2 currently under construction will have a hoisting capacity of 8 Mtpa. Shaft 2 will be utilized in subsequent development phases and will be among the largest hoisting shafts in the world. The Shaft 2 headgear concrete structure was completed early in the quarter to a height of approximately 79 metres. Shaft 2's overall height will be approximately 100 metres above ground, including the steel structure housing the main winders. The Shaft 2 headgear internal structural steel construction is progressing well. The kibble and stage winder civil construction is nearing completion with the winder deliveries planned for December 2023. The kibble winder ropes were recently delivered.

Drilling of the pilot drill hole for the reaming of Shaft 2, which commenced in February 2023, has reached the shaft bottom. Preparations are now underway to commence reaming Shaft 2 to an initial diameter of 3.1 metres. Raise boring will commence from the 950-metre level once bottom access has been established.

Construction of Platreef's first 5-MW solar-power plant commenced in Q4 2022 with commissioning expected later this year. The solar power plant inverter and solar panels were recently delivered to site. The power generated by this plant will support development activities and operations, together with other renewable energy sources to be introduced over time.

Photo: Sina Kekana, surveyor assistant, working at the base of Platreef's Shaft 2, which is on schedule for completion in late 2027.

Optimization work is underway to potentially accelerate Platreef's Phase 2 expansion

Ivanhoe has initiated optimization work to identify value-accretive options for installing hoisting capacity in Shaft 3 (previously named Vent Shaft 1). Shaft 3, originally planned as a ventilation and secondary escape shaft, is currently under construction and is now planned to be equipped for hoisting, which will provide additional hoisting capacity to remove ore and waste from the underground mine. This has the benefit of de-risking the development and ramp-up of the Phase 1 mine and may be used to accelerate the ramp-up of underground mining activities for Phase 2, in advance of the completion of Shaft 2, which is expected in 2027.

Shaft 3 is currently being reamed to a diameter of 5.1 metres. Approximately 340 metres of 950 metres have been reamed to date, with planned completion in Q4 2023. The manufacturing of the auxiliary winder for the Shaft 3 headgear is well-advanced and on schedule. The civil contractor responsible for the foundations of the stage winder and equipping winder has been appointed and is mobilizing.

Long-term supply of bulk water for the Platreef Mine

The water requirement for the Phase 1 operation is projected to peak at approximately three million litres per day, which will then increase to nine million litres per day once the Phase 2 expansion is complete. In January 2022, Ivanplats signed new agreements for the rights to receive local, treated water to supply the bulk water needed for the phased development plan at Platreef. These agreements replace those originally signed in 2018.

Under the terms of a new offtake agreement, the Mogalakwena Local Municipality (MLM) has agreed to supply at least three million litres per day of treated effluent, up to a maximum of 10 million litres per day for 32 years, from the date of first production, sourced from the town of Mokopane's Masodi Wastewater Treatment Works, currently under construction.

Ivanplats also has signed a sponsorship agreement where Ivanplats has undertaken the commitment to complete the partially constructed Masodi Wastewater Treatment Works, which was halted in 2018. Since construction was restarted, work on the completion of the water treatment plant is progressing well towards completion in Q3 2023.

In addition, Ivanplats signed the Memorandum of Agreement to upgrade and refurbish the sewerage treatment infrastructure to increase the water offtake for future expansions.

KIPUSHI PROJECT

The Kipushi zinc-copper-germanium-silver-lead mine in the DRC is adjacent to the town of Kipushi, approximately 30 kilometres southwest of Lubumbashi on the Central African Copperbelt. Kipushi is approximately 250 kilometres southeast of the Kamoa-Kakula Copper Complex and less than one kilometre from the Zambian border. Ivanhoe acquired its 68% interest in the Kipushi Project in November 2011, through Kipushi Holding which is 100%-owned by Ivanhoe Mines. The balance of 32% in the Kipushi Project is held by the state-owned mining company, Gécamines.

The Kipushi 2022 Feasibility Study focuses on the mining of Kipushi's zinc-rich Big Zinc and Southern Zinc zones, with an estimated 11.8 million tonnes of Measured and Indicated Mineral Resources grading 35.3% zinc. Kipushi's exceptional zinc grade is more than twice that of the world's next- highest-grade zinc project, according to Wood Mackenzie, a leading, international industry research and consulting group.

On April 27, 2023, Ivanhoe Mines announced the signing of a tri-partite offtake and financing term sheet between Kipushi Corporation SA, Gécamines and Glencore International AG (Glencore) to return the historic Kipushi zinc-copper-lead-germanium mine to production.

The offtake is for 100% of Kipushi's zinc concentrates; between 400,000 and 600,000 dry metric tonnes per annum over a five-year term. The offtake term sheet contains standard, international commercial terms, including payables and treatment charges based on the zinc industry's annual benchmark. The concentrate produced by Kipushi is expected to contain approximately 55% zinc and low levels of impurities. The buyer will purchase the concentrate at the Kipushi Mine on a free-carrier basis, meaning the buyer will be responsible for arranging freight and shipment to the destination, with such costs reimbursed by Kipushi.

The $250 million term financing facility will be split into two tranches and drawn down quarterly, subject to conditions precedent. The facility will bear an annual interest rate of the Secured Overnight Financing Rate (SOFR) plus 7% and shall be repaid, following a 24-month grace period from signing, in quarterly instalments over 36 months.

The offtake and financing term sheet is subject to the execution of final, binding agreements, which are expected to be concluded in conjunction with the new Kipushi joint-venture agreement.

In June 2023, Kipushi Corporation finalized an unsecured, $80-million financing facility with Rawbank SA. Rawbank is the largest domestic bank in the DRC, with a loan book to the DRC's mining industry expected to increase to over $1 billion by the end of 2024.

The new facility has an annual interest rate of 8% and will rank junior to the $250 million facility supported by Glencore. In addition, a corporate guarantee is provided by Ivanhoe Mines. Kipushi Holding has also drawn down the first of the two $40 million tranches. The facility will be used to finance ongoing construction activities, reducing the shareholder loan requirement to Kipushi Corporation by Ivanhoe Mines.

The remaining initial capital for the Kipushi Project is $354 million, which will be funded by a combination of the new $80 million Rawbank facility and the $250 million facility supported by Glencore, with any shortfall covered by additional shareholder loans from Ivanhoe Mines.

As previously reported, Kipushi Holding and Gécamines signed a new agreement to return the ultra-high-grade Kipushi Mine to commercial production in Q1 2022, which sets out the commercial terms that will form the basis of a new Kipushi joint-venture agreement establishing a robust framework for the mutually beneficial operation of Kipushi for years to come and are subject to execution of definitive documentation. Once the agreement is concluded, it is anticipated that Ivanhoe Mines' ownership in the Kipushi Project will reduce to 62%, with Gécamines holding the balance of 38%.

Photo: Construction of the new 800,000-tonne-per-annum concentrator facility is well underway. The concentrator is expected to produce more than 270,000 tonnes of zinc over the first five years of production.

Over 69 years, Kipushi produced a total of 6.6 million tonnes of zinc and 4.0 million tonnes of copper from 60 million tonnes of ore grading 11% zinc and approximately 7% copper. It also produced 278 tonnes of germanium and 12,673 tonnes of lead between 1956 and 1978. There is no formal record of the production of precious metals as the concentrate was shipped to Belgium and the recovery of precious metals remained undisclosed during the colonial era; however, drilling by Ivanhoe Mines has encountered significant silver values within Kipushi's current zinc- and copper-rich deposits.

Since acquiring its interest in the Kipushi Mine in 2011, Ivanhoe's drilling campaigns have upgraded and expanded the mine's zinc-rich Measured and Indicated Mineral Resources to an estimated 11.78 million tonnes grading 35.34% zinc, 0.80% copper, 23 grams/tonne (g/t) silver and 64 g/t germanium, at a 7% zinc cut-off, containing 9.2 billion pounds of zinc, 8.7 million ounces of silver and 24.4 million ounces of germanium.

Based on testwork conducted for the Kipushi 2022 Feasibility Study, concentrate assays for the Kipushi Mine include significant quantities of germanium and gallium.

Germanium is a strategic metal used today in electronic devices, flat-panel display screens, light-emitting diodes, night vision devices, optical fibre, optical lens systems, and solar power arrays.

Gallium is a strategic metal used today to manufacture compound semiconductor wafers used in integrated circuits, and optoelectronic devices such as laser diodes, light-emitting diodes, photodetectors, and solar cells.

Kipushi concentrator is on schedule for first production in Q3 2024, with the overall project approximately 50% complete

Construction of the new 800,000-tonne-per-annum concentrator facility is well underway. The concentrator includes dense media separation (DMS) and a milling and flotation circuit and is expected to produce more than 270,000 tonnes of zinc contained in concentrate over the first five years of operations. Design recoveries are targeted at 96%, with a concentrate grade of 55% contained zinc.

With overall project progress at approximately 50% complete, the Kipushi concentrator is on schedule and expected to be commissioned in Q3 2024. Detailed design is effectively complete, ahead of schedule. Procurement activities are nearing completion, with only five equipment packages outstanding. To date, 15 of the total 73 equipment packages have been delivered to site with a number, including the ball mill, currently en route.

The ball mill, fabricated by CITIC Heavy Industries of Henan Province, China, has arrived at the port of Durban, South Africa, and is expected to be delivered to site within a month. The DMS plant fabricated by Bond Equipment in Gauteng, South Africa, has been completed and is being prepared to be trucked to site. The fabrication of the flotation cells by FL Smidth in Gauteng, South Africa, is also complete and will be delivered to site in the coming month.

Photo: Kipushi steel erection commenced in April 2023 with 1,342 tonnes of total 2,074 tonnes dispatched to site. With overall project progress at approximately 50% complete, the Kipushi concentrator is on schedule and expected to be commissioned in Q3 2024.

The structural, mechanical, piping and plate work (SMPP) contractor has completed and handed over its first structure, which is the electrical substation building.

Underground development activity is ramping up, with 2,147 metres of lateral development completed since September 2022. Stoping of the ultra-high-grade Big Zinc orebody is expected to begin in January 2024.

In line with the 2022 Kipushi Feasibility Study, mining will focus on the zinc-rich Big Zinc and Southern Zinc zones, with an estimated 11.8 million tonnes of Measured and Indicated Mineral Resources grading 35.3% zinc. Kipushi's exceptional zinc grade is more than twice that of the world's next- highest-grade zinc project, according to Wood Mackenzie, a leading, international industry research and consulting group.

In the first quarter of 2023, the underground mining contractor was appointed, and the phased on-site mobilization of mining crews and equipment is well underway. The primary mining fleet is supplied by Epiroc of Stockholm, Sweden. Over half of the primary fleet and secondary support equipment has been mobilized, with the remainder expected to be delivered at the end of the third quarter.

The underground mining operation is fully mechanized, highly efficient and designed to enable a quick ramp-up to a steady state. At the end of the second quarter, three mining crews have been deployed underground. Each mining crew made up of five miners per shift, is equipped with a primary fleet consisting of an Epiroc 282 Twin Boomer, a ST 14 Scooptram (LHD) and two MT42 dump trucks.

Photo: Tinette Brümmer from Epoch Resources at the earthworks site for Kipushi's new tailings storage facility.

The first Simba long-hole drill rig for stoping (production mining) has also arrived on site and is being prepared to be lowered underground. Concurrent training of new underground miners is ongoing, targeting a full complement of four crews by the end of the third quarter.

Underground development is taking place to open multiple access levels to the Big Zinc orebody, from the top down. Perimeter, access and ventilation drives are under development at several locations between the 1,220-metre and 1,335-metre levels, while decline development continues to spiral down parallel to the plunging Big Zinc deposit. 1,526 metres of horizontal development have been completed year to date, approximately 20% ahead of schedule.

The year-to-date underground development rate have averaged approximately 250 metres per month. Following the mobilization of the remaining underground equipment fleet and the fourth mining crew, the underground development rate is expected to increase to approximately 450 metres per month by year-end.

Underground development throughout the remainder of the year will increasingly be in ore, grading between 20-25% zinc. The ore will be hauled to surface and stored on the stockpile ahead of concentrator commissioning.

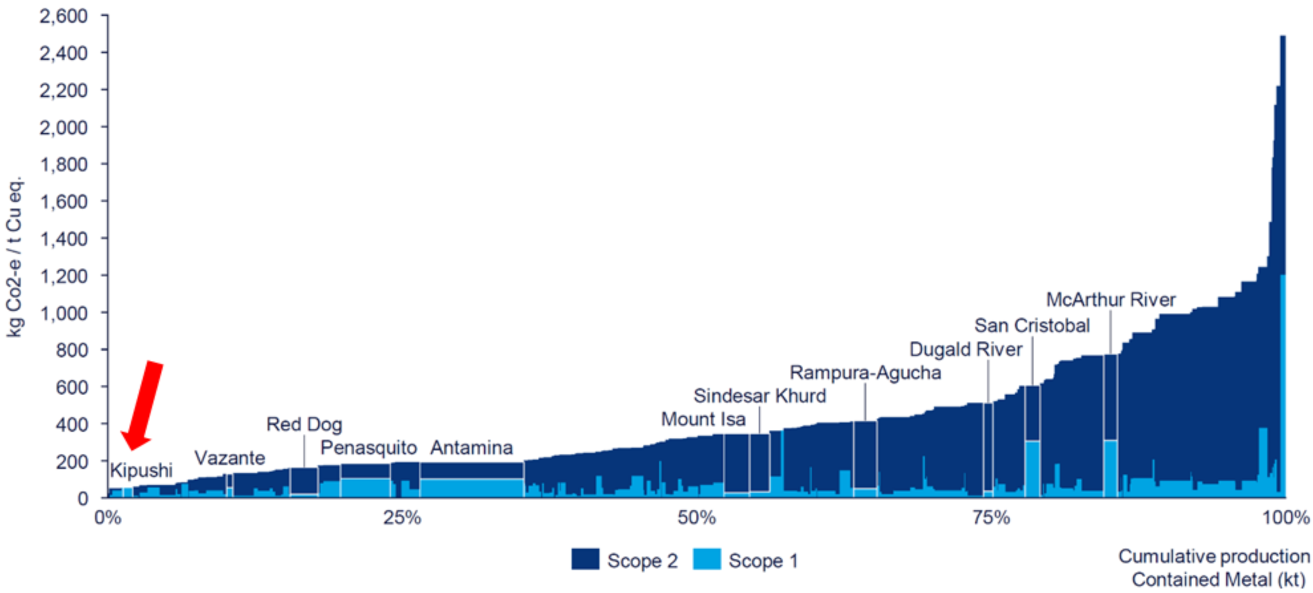
With underground development well ahead of schedule, stoping of the ultra-high-grade Big Zinc orebody has been accelerated to commence in January 2024. Stoping is the process of extracting the ore from an underground mine, leaving behind an open space known as a stope.

The mining method of the Big Zinc orebody will be transverse sublevel open stoping in a primary and secondary sequence. The void of the mined-out stopes will be filled with cemented aggregate to maximize the extraction of the ultra-high-grade ore.

The total mining height of long-hole stopes is 60 metres (comprising of an upper 30-metre-high stope and lower 30-metre-high stope), which will be separated by 15-metre-high sill pillars. The long-hole stopes will be mined with a bottom-up mining sequence, with the lower stope extracted first followed by the upper stope. The stopes will be extracted using a primary and secondary long-hole stoping sequence.

Kipushi's operations will be supplied with hydroelectric power from DRC's state-owned electricity company, SNEL. A study completed in 2020 by Wood Mackenzie ranked Kipushi at the 2nd percentile of the Scope 1 + 2 emissions curve. See Figure 3 below.

Figure 3. Global zinc mine site scope 1+2 greenhouse gas (GHG) emissions in equivalent kilograms of carbon dioxide per tonne of equivalent zinc produced (kg CO2-e / t Zn eq.). Scope 1+2 annual GHG emissions from the Kipushi mine are forecast to be 0.06 equivalent tonnes of carbon dioxide per tonne of zinc produced (tCO2e/t Zn).



Dedicated Kipushi commercial border crossing to unlock direct access to Zambia

Kipushi Mine is adjacent to the border town of Kipushi, approximately 30 kilometres southwest of Lubumbashi on the DRC Copperbelt. Kipushi is approximately 250 kilometres southeast of the Kamoa-Kakula Copper Complex and less than one kilometre from the Zambian border.

The commercial border crossings at Kasumbalesa and Sakania, also in Haut-Katanga province, handle most of the DRC Copperbelt's imports and exports. They are located 110 kilometres and 230 kilometres by road southeast of Kipushi, respectively. The Kasumbalesa border experienced significant congestion in 2022 and Ivanhoe Mines has been working with the provincial government of Haut-Katanga on a series of initiatives to de-bottleneck the exporting of mineral products from the DRC.

One such initiative is a new commercial DRC-Zambia road border crossing at the town of Kipushi. Earlier this year, a series of study options were presented and reviewed by the provincial government of Haut-Katanga and the national authorities in the DRC. An agreement has since been reached to go ahead with building the new border crossing at Kipushi.

The new commercial border infrastructure consists of three project areas: a new 11-kilometre, street-lit, sealed by-pass road looping around the southern edge of Kipushi town; a new one-stop border post on the southern edge of the Kipushi town on the DRC side of the border, consisting of a staging area and a new administration building; and a new one-stop border post also consisting of a staging area and new administration building on the Zambian side of the border.

The vendor appointment by the Haut-Katanga province for the 11-kilometre, by-pass road is expected to be made imminently, with the mobilization of construction contractors to be made in the coming month. Project award for the border infrastructure is expected to be made towards the end of 2023.

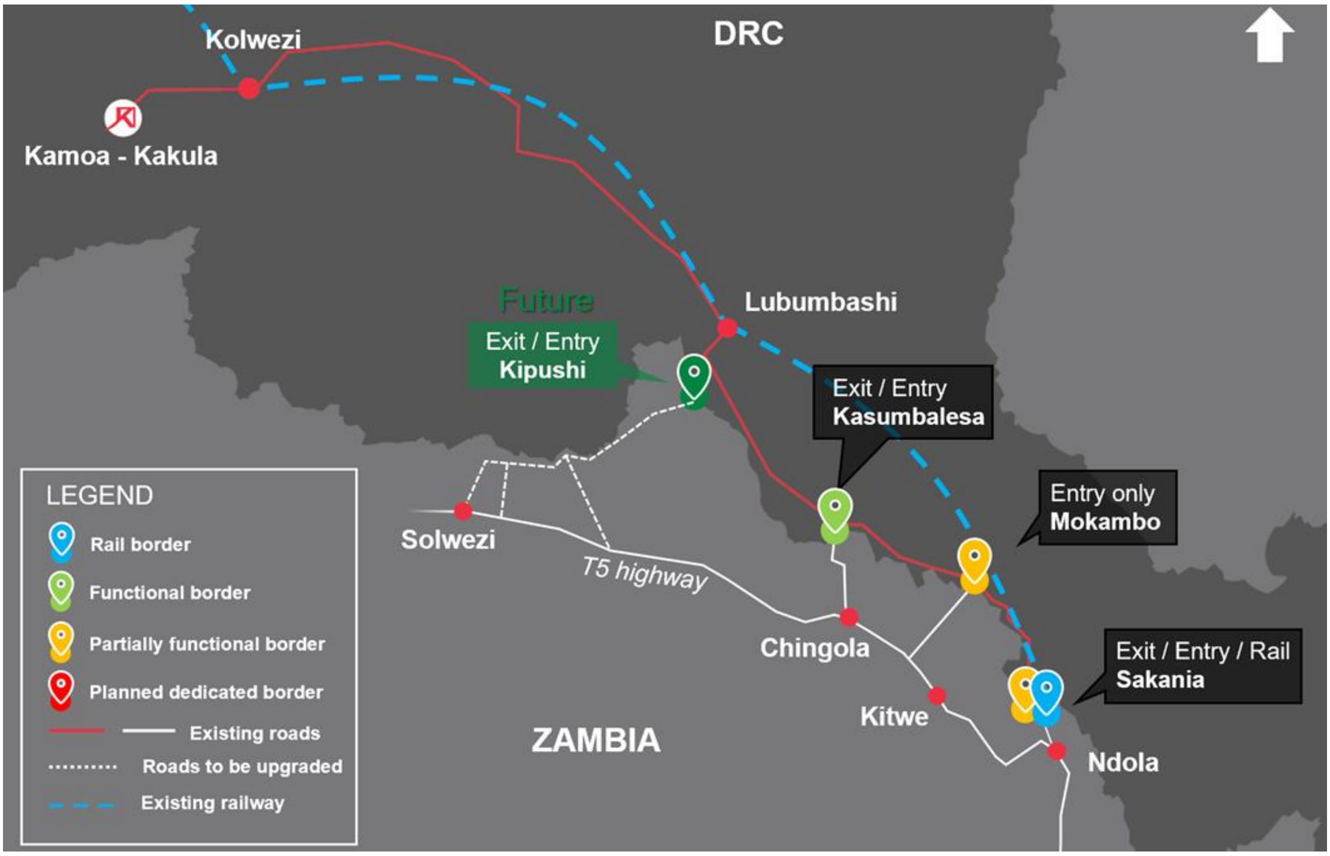
Concurrently, work is underway by the Zambian government to upgrade roads for commercial traffic on the Zambian side of the border, connecting the T5 highway to the new commercial Kipushi border (See Figure 4). Upgrades have already commenced on some sections of road, with further infrastructure upgrades and all-weather proofing planned to take place over the next 12 to 18 months.

A new commercial DRC-Zambia border crossing at Kipushi will not only benefit the Kipushi Mine but also Kamoa-Kakula as an additional route for exporting concentrate products. In addition, the border crossing will provide socio-economic benefits to the community of Kipushi and the city of Lubumbashi, the capital of Haut-Katanga province, which is approximately 30 kilometres away.

Kipushi follows in Kamoa-Kakula's footsteps with a strong focus on local recruitment and progressive workforce training. There are currently more than 1,800 employees and contractors working at the Kipushi site, peaking at approximately 2,000 in the fourth quarter of 2023. Once operations have ramped up to steady-state, total on-site labour, including mining and support contractors, is expected to be approximately 1,200. Of the current 504 full-time employees at Kipushi, approximately 97% are Congolese.

A training program is underway to ensure that skills and practical experience gained during Kamoa-Kakula's construction, commissioning and operations are shared with the leadership and operations staff at Kipushi. Staff from Ivanhoe Mines regularly visit Kipushi and contribute to building on-site capacity, coaching and training, sharing lessons learned and experience gained at Kamoa-Kakula, while key personnel from Kipushi visit Kamoa-Kakula to learn from practical experience. A comprehensive up-skilling training program is also under development for Kipushi and is expected to be rolled out later this month.

Figure 4. Map of the current and planned commercial DRC-Zambia border infrastructure.



WESTERN FORELAND EXPLORATION PROJECT

Ivanhoe's DRC exploration group is targeting Kamoa-Kakula-style copper mineralization on its Western Foreland Exploration Project. The 17 licences in the Western Foreland cover a combined area of 2,407 square kilometres to the north, south and west of the Kamoa-Kakula Copper Complex. The exploration group is using models that successfully led to the discoveries of Kakula, Kakula West, and the Kamoa North Bonanza Zone on the Kamoa Copper SA mining licence. The group is composed of a mixture of the same exploration geologists responsible for the previous discoveries and others with experience in the greater Copperbelt.

The focus of exploration during Q2 2023 has been on diamond and air core drilling, with four contractor diamond core drill rigs, one Ivanhoe Landcruiser diamond core drill rig, and one Ivanhoe air core drill rig working by the end of the quarter. A total of 15,736 metres of diamond core have been drilled in the first half of 2023, with 10,853 metres for a total of 37 holes completed in Q2 2023. Air core drilling has completed 69 holes year-to-date for a total of 1,795 metres.

Two drill holes were started during the quarter between the Makoko and Kakula deposits on the Kakula-Monwezi trend to investigate the potential for mineralization at depth between the two identified deposits, and proximal to regional structures. One hole deviated from the planned orientation and has been put on hold. The second hole intersected a splay fault off the Nchana Fault which prevented the hole from reaching target depth. Further drilling in this area will be carried out as deflections off the two existing holes, with directional drilling tools to be mobilized to the DRC later in the year to ensure the lower contact of the Foreland shelf stratigraphy with basement lithologies is intersected.

A further four holes were completed down dip of Makoko West to determine the potential for extension of mineralization into deeper parts of the Western Foreland shelf. These holes drilled Nguba Group stratigraphy before intersecting the Kibaran basement. Follow-up drilling is planned along sections to enhance the 3D geological interpretation of the area.

Road and bridge access to more remote parts of the Sakanama prospect were upgraded or constructed during the quarter. A single hole was drilled on this prospect, intersecting Roan group sediments to a depth of 443 metres.

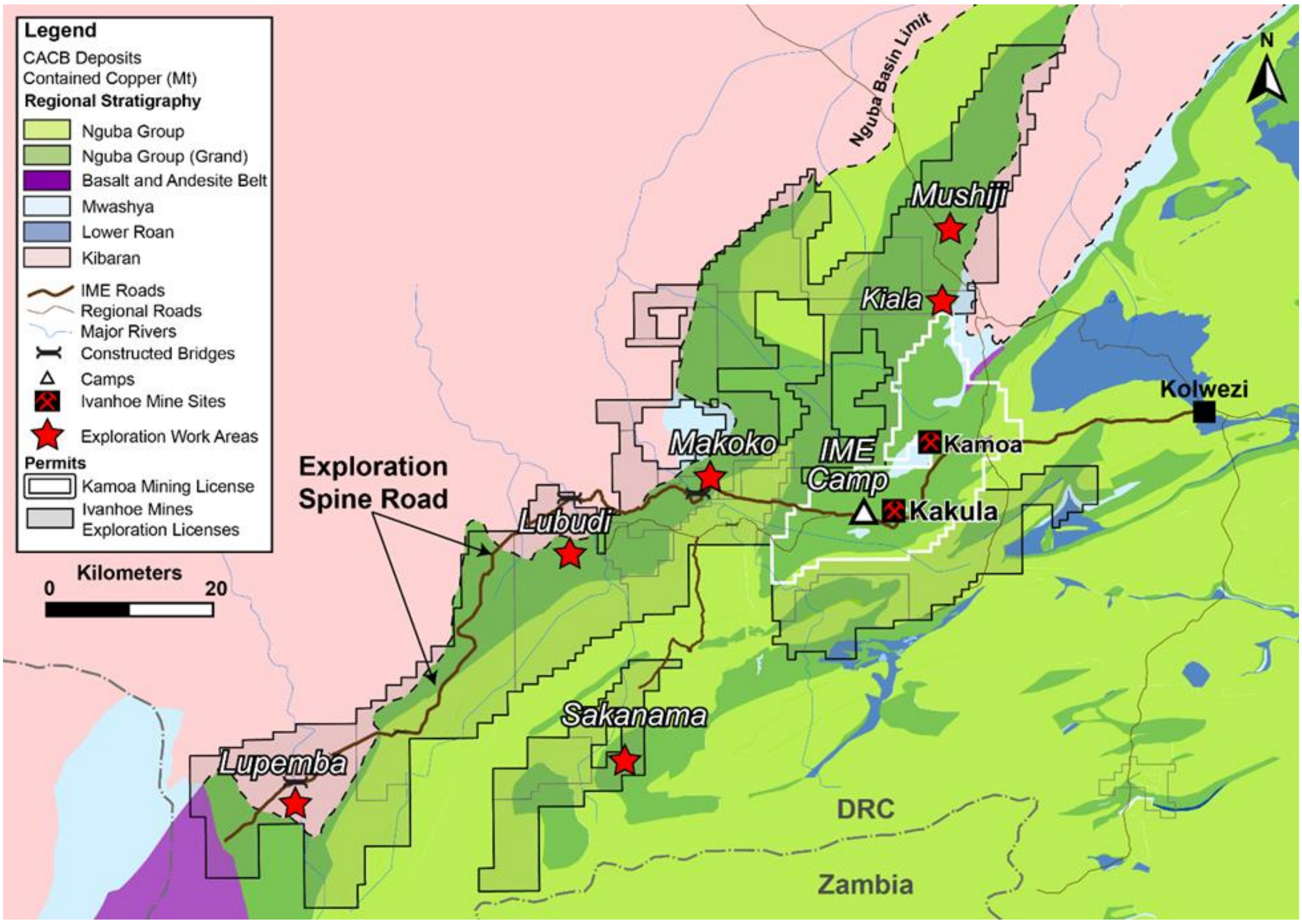
Air core drilling was recommenced on the Lupemba prospect during the quarter, extending the 800- by 800-metre grid of holes through exotic Kalahari sand cover. Drilling was carried out using a single air core rig, with a second air core rig planned to start drilling early in Q3 following repairs. Rock-chip samples are collected from each hole below the Kalahari sands, which average between 5 and 30 metres thick. These samples will be analyzed for multi-element geochemistry to map lithology and identify copper anomalism under variable thickness Kalahari sand cover.

Collection of ground gravity began in the quarter along regional lines across the Western Foreland Shelf on a tight grid in the extended Makoko west area. The ground gravity will be used to identify thicker sequences of Nguba Group sediments, which are an indication of growth faults. Pre-Katangan growth faults are a key targeting tool for sediment-hosted copper mineralization as they generate sub-grabens with thicker siltstone host rock units and increased primary sedimentary pyrite. These faults are also thought to have played a key role in focusing mineralized fluid movement through the basal Roan sedimentary package.

An internal mineral resource model completed in early Q2 identified locations where additional infill diamond drilling is required in the Makoko resource. Fourteen holes were drilled in Q2 using the Ivanhoe Landcruiser rig for short holes (<150m) and two Titan drill rigs for deeper holes. The holes produced a total of 2,200 metres of core which will be added to the Makoko geological database.

The maiden inferred Mineral Resource Estimate for Makoko and Kiala is on course to be released in Q3 2023.

Figure 5. Map highlighting Ivanhoe Mines' current exploration target areas across the Western Foreland licences.

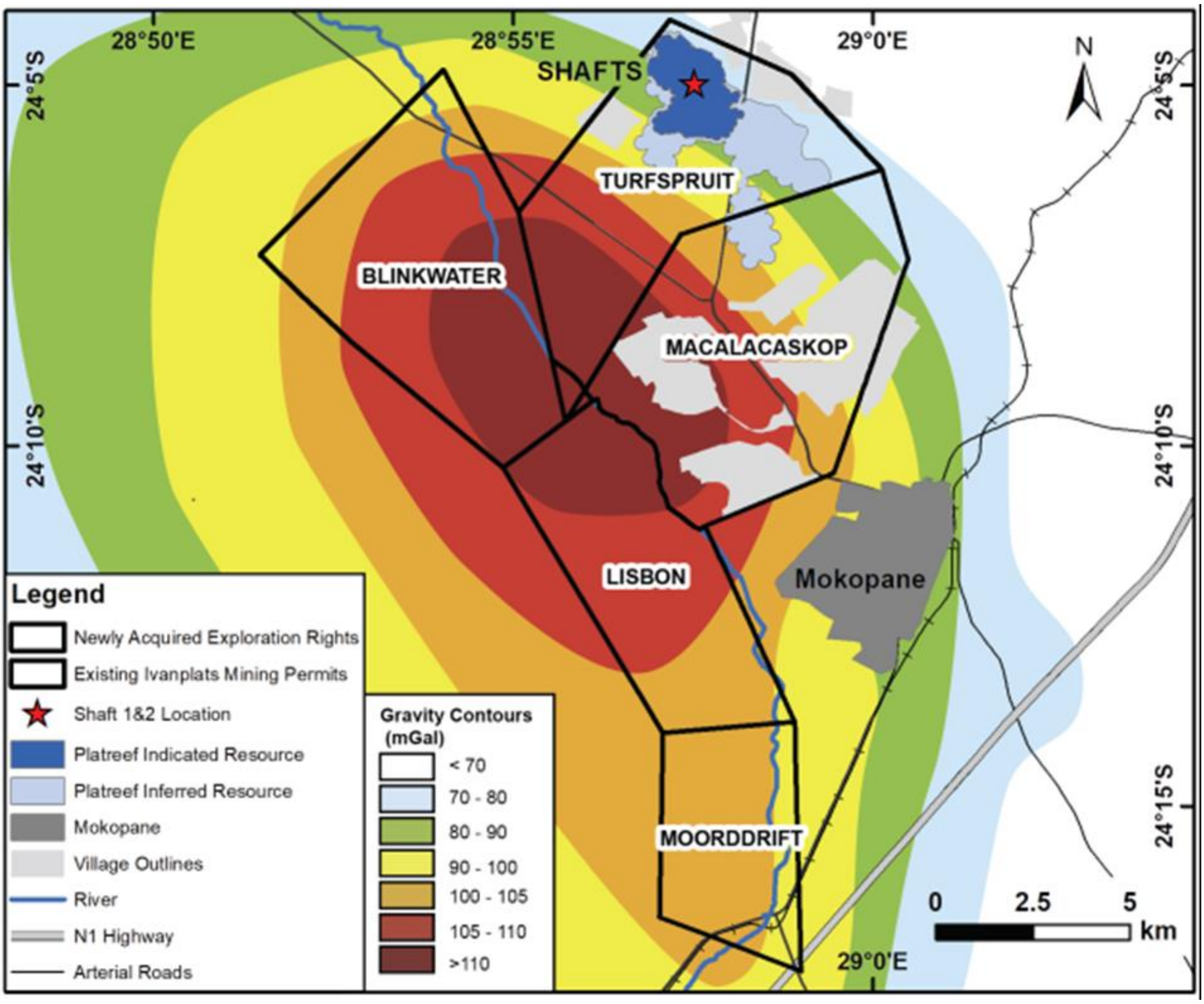


THE MOKOPANE FEEDER EXPLORATION PROJECT

Three new 100%-owned exploration rights were granted on the Northern Limb of the Bushveld complex in South Africa during Q4 2022. The three new exploration rights (Blinkwater 244KR, Moordrift 289KR and Lisbon 288KR) cover 80 square kilometres forming a continuous block situated on the southwest border of the existing Platreef Project's mining rights.

This anomaly is interpreted to represent a primary feeder zone to the Rustenburg Layered Suite of the Northern Limb of the Bushveld Complex. Significant thickening of the Rustenburg Layered Suite, particularly of the more-dense Lower Zone units, is necessary to explain the large gravity anomaly. The proximity of the inferred feeder to the regional-scale crustal faults (the Ysterberg-Planknek and the Zebediela faults), as well as the anomalously thick zones of platinum-group metals mineralization at the Platreef Deposit, lead Ivanhoe to believe there is significant potential for Ni-Cu-PGE mineralization associated with this gravity feature.

Figure 6. Image of the Platreef and Mokopane Feeder licences overlaid on the gravity geophysics anomaly.



Detailed high-resolution fixed-wing airborne magnetic and Falcon airborne gravity gradiometer geophysical surveys are being carried out to map and model the subsurface petrophysical characteristics of the anomaly. The magnetic survey was completed during Q2 2023, with the gravity survey to be flown during Q3 2023 due to equipment breakdown delays. Deep diamond drilling is now planned to commence in Q4 2023 to test targets identified from the results of the two surveys.

SAFETY AND SUSTAINABILITY

Kamoa-Kakula recorded two lost time injuries during Q2 2023 with a Total Recordable Injury Frequency Rate (TRIFR) (total injuries recorded per 1,000,000 hours worked) of 0.61 for the first six months of 2023. The Platreef Project recorded one lost time injury in the quarter with a TRIFR of 3.15, and the Kipushi Project also recorded one lost time injury in the quarter and with a TRIFR of 1.00.

Ivanhoe invites its investors and stakeholders to learn more about its exceptional sustainability efforts, by reading and experiencing the 2022 Sustainability Report at:

https://ivanhoemines.com/investors/sustainability-report/

SELECTED QUARTERLY FINANCIAL INFORMATION

The following table summarizes selected financial information for the prior eight quarters. Ivanhoe had no operating revenue in any financial reporting period. All revenue from commercial production at Kamoa-Kakula is recognized within the Kamoa Holding joint venture. Ivanhoe did not declare or pay any dividend or distribution in any financial reporting period.

	Three months ended			
	June 30, 2023	March 31, 2023	December 31, 2022	September 2022
	$'000	$'000	$'000	$'000
Share of profit from joint venture	73,066	82,659	83,324	34,057
Finance income	61,956	57,826	58,477	46,720
Deferred tax recovery (expense)	1,965	926	(3,839)	4,252
Gain (loss) on fair valuation of financial asset	488	(1,595)	(1,170)	(2,873)
Loss on fair valuation of embedded derivative liability	(26,618)	(30,900)	(66,600)	(27,700)
General administrative expenditure	(10,474)	(8,571)	(11,870)	(9,199)
Share-based payments	(7,120)	(7,702)	(7,809)	(7,381)
Finance costs	(5,539)	(10,465)	(10,457)	(10,223)
Exploration and project evaluation expenditure	(4,375)	(3,381)	(3,887)	(4,312)
Profit (loss) attributable to:				
Owners of the Company	92,042	86,637	41,884	26,344
Non-controlling interests	(4,859)	(4,157)	(4,705)	(2,477)
Total comprehensive income (loss) attributable to:				
Owners of the Company	86,588	74,154	53,078	4,588
Non-controlling interest	(5,443)	(5,420)	(3,621)	(4,678)
Basic profit per share	0.08	0.07	0.03	0.02
Diluted profit per share	0.07	0.07	0.03	0.02

	Three months ended			
	June 30, 2022	March 31, 2022	December 31, 2021	September 2021
	$'000	$'000	$'000	$'000
Gain (loss) on fair valuation of embedded derivative liability	183,600	(66,400)	(88,500)	54,900
Deferred tax recovery (expense)	114,184	(1,347)	74,069	(50)
Share of profit from joint venture	49,690	87,109	78,391	41,404
Finance income	38,596	31,505	27,978	26,437
Exploration and project evaluation expenditure	(13,470)	(12,243)	(15,800)	(15,677)
Finance costs	(10,013)	(7,391)	(10,539)	(10,451)
General administrative expenditure	(8,957)	(6,238)	(10,658)	(6,731)
Share-based payments	(4,637)	(7,389)	(7,490)	(5,117)
Profit (loss) attributable to:				
Owners of the Company	316,242	26,394	45,833	89,806
Non-controlling interests	35,278	(4,854)	2,333	(4,456)
Total comprehensive income (loss) attributable to:				
Owners of the Company	306,381	45,495	29,774	72,470
Non-controlling interest	34,495	(2,858)	632	(6,277)
Basic profit per share	0.26	0.02	0.04	0.07
Diluted profit per share	0.11[(1)]	0.02	0.04	0.03[(1)]

(1) During the period, the Company identified that it had not considered the effect of the convertible notes in the diluted profit per share calculation since issuance of the notes in March 2021. As a result, the diluted profit per share disclosed during the three and six months ended June 30, 2022 was overstated. Refer to Ivanhoe Mines Ltd. condensed consolidated interim financial statements for the three and six months ended June 30, 2023 for additional information.

DISCUSSION OF RESULTS OF OPERATIONS

Review of the three months ended June 30, 2023 vs. June 30, 2022

The Company recorded a profit for Q2 2023 of $87 million compared to a profit of $352 million for the same period in 2022. The profit for Q2 2022 included a gain on the fair valuation of the embedded derivative financial liability of $184 million, compared to a loss on the fair valuation of the embedded derivative financial liability of $27 million in Q2 2023, as well as the recognition of the deferred tax asset relating to the Kipushi Project of $114 million, both of which are described in greater detail below. The total comprehensive income for Q2 2023 was $81 million compared to $341 million for Q2 2022.

The Kamoa-Kakula Copper Complex sold 101,526 tonnes of payable copper in Q2 2023, realizing revenue of $702 million for the Kamoa Holding joint venture, compared to 85,794 tonnes of payable copper sold for revenue of $494 million for the same period in 2022. The Company recognized income in aggregate of $123 million from the joint venture in Q2 2023, which can be summarized as follows:

	Three months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Company's share of profit from joint venture	73,066	49,690
Interest on loan to joint venture	49,837	34,874
Company's income recognized from joint venture	**122,903**	**84,564**

The Company’s share of profit from the Kamoa Holding joint venture was $23 million more in Q2 2023 compared to the same period in 2022 and is broken down in the following table:

	Three months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Revenue from contract receivables	729,924	699,381
Remeasurement of contract receivables	(27,542)	(205,248)
Revenue	**702,382**	**494,133**
Cost of sales	(277,646)	(217,112)
Gross profit	**424,736**	**277,021**
General and administrative costs	(27,794)	(23,964)
Amortization of mineral property	(3,005)	–
Profit from operations	**393,937**	**253,057**
Finance costs	(90,701)	(66,828)
Foreign exchange (loss) gain	(29,333)	863
Finance income and other	5,193	2,449
Profit before taxes	**279,096**	**189,541**
Current tax expense	(119,120)	(4,726)
Deferred tax recovery (expense)	30,278	(57,389)
Profit after taxes	**190,254**	**127,426**
Non-controlling interest of Kamoa Holding	(42,645)	(27,044)
Total comprehensive income for the period	147,609	100,382
Company's share of profit from joint venture (49.5%)	**73,066**	**49,690**

The realized and provisional copper prices used for the remeasurement (mark-to-market) of contract receivables for the three months ended June 30, 2023, and for the same period in 2022, can be summarized as follows:

	Three months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Realized during the period - open at the start of the period		
Opening forward price ($/lb.)(1)	4.05	4.69
Realized price ($/lb.)(1)	3.79	4.34
Payable copper tonnes sold	37,092	50,608
Remeasurement of contract receivables ($'000)	(21,356)	(39,227)
Realized during the period - new copper sold in the current period		
Provisional price ($/lb.)(1)	4.00	–
Realized price ($/lb.)(1)	3.80	–
Payable copper tonnes sold	30,792	–
Remeasurement of contract receivables ($'000)	(13,006)	–
Open at the end of the period - open at the start of the period		
Opening forward price ($/lb.)(1)	–	4.69
Closing forward price ($/lb.)(1)	–	3.80
Payable copper tonnes sold	–	39,797
Remeasurement of contract receivables ($'000)	–	(78,391)
Open at the end of the period - new copper sold in current period		
Provisional price ($/lb.)(1)	3.77	4.26
Closing forward price ($/lb.)(1)	3.81	3.79
Payable copper tonnes sold	69,935	85,794
Remeasurement of contract receivables ($'000)	6,820	(87,630)
Total remeasurement of contract receivables ($'000)	**(27,542)**	**(205,248)**

(1) Calculated on a weighted average basis

Of the $91 million (Q2 2022: $67 million) finance costs recognized in the Kamoa Holding joint venture for Q2 2023, $72 million (Q2 2022: $58 million) relates to interest on shareholder loans where each shareholder funded Kamoa Holding in an amount equivalent to its proportionate shareholding interest before generating sufficient operational cashflow. Of the remaining finance costs, $14 million (Q2 2022: $7 million) relates to the provisional payment facility available under Kamoa-Kakula's offtake agreements, while $3 million (Q2 2022: $2 million) relates to the equipment financing facilities and $2 million relates to bank over-drafts (Q2 2022: $nil).

Ivanhoe's exploration and project evaluation expenditure amounted to $4 million in Q2 2023 and $13 million for the same period in 2022. Exploration and project evaluation expenditure for Q2 2023 related mainly to exploration at Ivanhoe's Western Foreland exploration licences, while Q2 2022 also included amounts spent at the Kipushi Project, for which expenditure was capitalized in Q2 2023 due to the recommencement of the development of the project.

Finance income for Q2 2023 amounted to $62 million and was $23 million more than for the same period in 2022 ($39 million). Included in finance income is the interest earned on loans to the Kamoa Holding joint venture to fund past development, which amounted to $50 million for Q2 2023, and $35 million for the same period in 2022, and increased due to the higher LIBOR rates and accumulated loan balance. The Company earns interest on the loan at USD 12-month LIBOR +7%. The average USD 12-month LIBOR rate for the three months ended June 30, 2023, was 5.53% compared to 2.81% for the same period in 2022. Interest will be calculated based on the term SOFR reference rate effective from July 1, 2023.

The Company recognized a loss on the fair valuation of the embedded derivative financial liability of $27 million for Q2 2023, compared to a gain on the fair valuation of the embedded derivative financial liability of $184 million for Q2 2022, which is further explained in the accounting for the convertible notes section on page 41.

In Q2 2022, the Company recognized the deferred tax asset relating to the Kipushi Project resulting in a deferred tax recovery (income) of $114 million. With the agreement of the development plan by the shareholders of Kipushi and the approval of the development budget consistent with the Kipushi 2022 Feasibility Study, it was deemed probable that future taxable profit will be available from the Kipushi Project, against which the unused tax losses and unused tax credits can be utilized.

Review of the six months ended June 30, 2023, vs. June 30, 2022

The Company recorded a profit of $170 million and a total comprehensive income of $150 million for the six months ended June 30, 2023, compared to a profit of $373 million and a total comprehensive income of $384 million for the same period in 2022. The profit for the six months ended June 30, 2022, included a gain on fair valuation of embedded derivative liability of $117 million, compared to a loss on fair valuation of embedded derivative financial liability of $58 million for the same period in 2023, as well as the recognition of the deferred tax asset relating to the Kipushi Project of $114 million described above.

The Company recognized income in aggregate of $253 million from the joint venture in the six months ended June 30, 2023 (2022: $200 million), which can be summarized as follows:

	Six months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Company's share of profit from joint venture	155,725	136,799
Interest on loan to joint venture	97,429	63,163
Company's income recognized from joint venture	**253,154**	**199,962**

The Company’s share of profit from the Kamoa Holding joint venture was $156 million for the six months ended June 30, 2023, compared to a profit of $137 million for the same period in 2022, the breakdown of which is summarized in the following table:

	Six months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Revenue from contract receivables	1,389,453	1,166,834
Remeasurement of contract receivables	2,052	(153,106)
Revenue	**1,391,505**	**1,013,728**
Cost of sales	(517,223)	(340,482)
Gross profit	**874,282**	**673,246**
General and administrative costs	(58,440)	(39,732)
Amortization of mineral property	(5,601)	–
Profit from operations	**810,241**	**633,514**
Finance costs	(179,374)	(121,471)
Foreign exchange (loss) gain	(34,218)	4,536
Finance income and other	10,188	4,280
Profit before taxes	**606,837**	**520,859**
Current tax expense	(195,593)	(9,941)
Deferred tax expense	(9,339)	(162,218)
Profit after taxes	**401,905**	**348,700**
Non-controlling interest of Kamoa Holding	(87,308)	(72,339)
Total comprehensive income for the period	314,597	276,361
Company's share of profit from joint venture (49.5%)	**155,725**	**136,799**

The realized and provisional copper prices used for the remeasurement (mark-to-market) of contract receivables for the six months ended June 30, 2023, and for the same period in 2022, can be summarized as follows.

	Six months ended June 30,	
	2023	2022
	$'000	$'000
Realized during the period - open at the start of the period		
Opening forward price ($/lb.)[1]	3.90	4.55
Realized price ($/lb.)[1]	3.95	4.43
Payable copper tonnes sold	88,271	103,673
Remeasurement of contract receivables ($'000)	11,269	(28,171)
Realized during the period - new copper sold in the current period		
Provisional price ($/lb.)[1]	4.05	–
Realized price ($/lb.)[1]	3.94	–
Payable copper tonnes sold	86,913	–
Remeasurement of contract receivables ($'000)	(21,556)	–
Open at the end of the period - open at the start of the period		
Opening forward price ($/lb.)[1]	3.79	4.55
Closing forward price ($/lb.)[1]	4.05	4.23
Payable copper tonnes sold	6,625	76,716
Remeasurement of contract receivables ($'000)	3,748	(55,278)
Open at the end of the period - new copper sold in current period		
Provisional price ($/lb.)[1]	3.84	4.36
Closing forward price ($/lb.)[1]	3.88	4.13
Payable copper tonnes sold	100,241	137,713
Remeasurement of contract receivables ($'000)	8,591	(69,657)
Total remeasurement of contract receivables ($'000)	**2,052**	**(153,106)**

[1] Calculated on a weighted average basis

Of the $179 million (2022: $121 million) finance costs recognized in the Kamoa Holding joint venture for the six months ended June 30, 2023, $145 million (2022: $107 million) relates to interest on shareholder loans where each shareholder funded Kamoa Holding in an amount equivalent to its proportionate shareholding interest before generating sufficient operational cashflow. Of the remaining finance costs, $27 million (2022: $12 million) relates to the provisional payment facility available under Kamoa-Kakula’s offtake agreements, while $5 million (2022: $3 million) relates to the equipment financing facilities and $2 million relates to bank overdrafts (2022: $nil).

Exploration and project evaluation expenditure amounted to $8 million for the six months ended June 30, 2023, and was $18 million less than for the same period in 2022 ($26 million). Exploration and project evaluation expenditure for 2023 related mainly to exploration at Ivanhoe’s Western Foreland exploration licences while 2022 also included amounts spent at the Kipushi Project. Expenditure incurred at the Kipushi Project was capitalized in 2023 due to the recommencement of the development of the Project.

Finance income amounted to $120 million for the six months ended June 30, 2023, and $70 million for the same period in 2022. Included in finance income is the interest earned on loans to the Kamoa Holding joint venture to fund operations that amounted to $97 million for the six months ended June 30, 2023, and $63 million for the same period in 2022. No additional loans were advanced in 2023 with joint venture cashflow funding its operations and expansions. Interest increased due to higher LIBOR rates and due to the higher accumulated loan balance. The average USD 12-month LIBOR rate for the six months ended June 30, 2023, was 5.46% compared with 2.02% for the same period in 2022.

As explained in the accounting for the convertible notes section on page 41, the Company recognized a loss on fair valuation of the embedded derivative financial liability of $58 million for the six months ended June 30, 2023 (2022: gain of $117 million).

The total comprehensive income for the six months ended June 30, 2023, included an exchange loss on translation of foreign operations of $20 million, compared to an exchange gain on translation of foreign operations recognized for the same period in 2022 of $10 million, resulting mainly from the weakening of the South African Rand by 10% from December 31, 2022, to June 30, 2023.

Financial position as at June 30, 2023 vs. December 31, 2022

The Company’s total assets increased by $268 million, from $3,969 million as at December 31, 2022, to $4,237 million as at June 30, 2023. The increase in total assets was mainly attributable to the increase in the Company’s investment in the Kamoa Holding joint venture by $253 million, the increase in property, plant and equipment of $180 million as project development continued at the Platreef and Kipushi projects, as well as the increase in deferred tax assets by $13 million.

The Company’s investment in the Kamoa Holding joint venture increased by $253 million from $2,047 million as at December 31, 2022, to $2,300 million as at June 30, 2023. The Company’s investment in the Kamoa Holding joint venture can be broken down as follows:

	June 30, 2023	December 31, 2022
	$'000	**$'000**
Company's share of net assets in joint venture	666,165	510,439
Loan advanced to joint venture	1,634,030	1,536,601
Total investment in joint venture	**2,300,195**	**2,047,040**

The Company's share of net assets in the Kamoa Holding joint venture can be broken down as follows:

	June 30, 2023		December 31, 2022	
	100%	**49.5%**	**100%**	**49.5%**
	$'000	**$'000**	**$'000**	**$'000**
Assets				
Property, plant and equipment	3,340,132	1,653,365	2,733,176	1,352,922
Mineral property	784,286	388,222	789,888	390,995
Indirect taxes receivable	335,736	166,189	279,385	138,296
Cash and cash equivalents	333,204	164,936	365,633	180,988
Consumable stores	314,843	155,847	257,434	127,430
Other receivables	297,050	147,040	212,221	105,049
Long-term loan receivable	263,096	130,233	252,523	124,999
Non-current inventory	231,960	114,820	246,424	121,980
Trade receivables	106,031	52,485	63,196	31,282
Current inventory	78,141	38,680	27,011	13,370
Right-of-use asset	46,554	23,044	11,549	5,717
Prepaid expenses	14,253	7,055	9,216	4,562
Non-current deposits	1,872	927	2,272	1,125
Deferred tax asset	626	310	710	351
Liabilities				
Shareholder loans	(3,300,152)	(1,633,575)	(3,103,381)	(1,536,174)
Trade and other payables	(345,098)	(170,824)	(309,710)	(153,306)
Deferred tax liability	(283,180)	(140,174)	(273,841)	(135,551)
Income taxes payable	(137,368)	(67,997)	(14,600)	(7,227)
Equipment finance facility	(113,490)	(56,178)	(102,890)	(50,931)
Rehabilitation provision	(84,413)	(41,784)	(45,231)	(22,389)
Other provisions	(58,833)	(29,122)	(26,675)	(13,204)
Provisional payment facility	(53,520)	(26,492)	(38,866)	(19,239)
Lease liability	(47,624)	(23,574)	(13,243)	(6,555)
Non-controlling interest	(378,319)	(187,268)	(291,012)	(144,051)
Net assets of the joint venture	**1,345,787**	**666,165**	**1,031,189**	**510,439**

Before commencing commercial production in July 2021, the Kamoa Holding joint venture principally used loans advanced to it by its shareholders to advance the Kamoa-Kakula Copper Complex through investing in development costs and other property, plant and equipment. No additional shareholder loans were advanced in 2022 or 2023 with joint venture cashflow funding its operations and expansions. The joint venture had a healthy cash position as at June 30, 2023, with cash and cash equivalents of $333 million on hand.

The Kamoa-Kakula's Phase 1 and 2 operations are anticipated to generate significant operating cash flow to fund Phase 3 capital cost requirements at current copper prices and the joint venture is arranging short-term financing facilities should a shortfall occur due to a significant decrease in copper prices. Kamoa-Kakula has $150 million in overdraft facilities in place from local DRC banks.

The cash flows of the Kamoa Holding joint venture can be summarized as follows:

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
	$'000	$'000	$'000	$'000
Net cash generated from operating activities before change in working capital items	405,417	249,877	851,957	634,362
Change in working capital items	(83,794)	116,320	(256,913)	(43,646)
Net cash used in investing activities	(370,232)	(143,751)	(623,388)	(250,767)
Net cash (used in) generated from financing activities	(6,142)	(895)	(3,744)	1,133
Effect of foreign exchange rates on cash	(1,669)	(5,097)	(341)	(6,664)
Net cash (outflow) inflow	**(56,420)**	**216,454**	**(32,429)**	**334,418**
Cash and cash equivalents - beginning of the period	389,624	139,995	365,633	22,031
Cash and cash equivalents - end of the period	**333,204**	**356,449**	**333,204**	**356,449**

The Kamoa Holding joint venture's net increase in property, plant and equipment from December 31, 2022, to June 30, 2023, amounted to $607 million and can be further broken down as follows:

	Six months ended June 30,	
	2023	2022
	$'000	$'000
Kamoa Holding joint venture		
Expansion capital	518,049	267,756
Sustaining capital	105,707	25,709
Initial capital	–	9,009
	623,756	302,474
Depreciation capitalized	18,197	5,340
Total capital expenditure	641,953	307,814
Borrowing costs capitalized	51,544	21,554
Total additions to property, plant and equipment for Kamoa Holding	693,497	329,368
Less depreciation, disposals and foreign exchange translation	(86,541)	(54,296)
Net increase in property, plant and equipment of Kamoa Holding	**606,956**	**275,072**

Ivanhoe's cash and cash equivalents decreased by $204 million, from $597 million as at December 31, 2022, to $393 million as at June 30, 2023. The Company spent $198 million on project development and acquiring other property, plant and equipment and $28 million on its operating activities.

The net increase in property, plant and equipment amounted to $180 million, with additions of $206 million to project development and other property, plant and equipment. Of this total, $106 million pertained to development costs and other acquisitions of property, plant and equipment at the Platreef Project, while $70 million pertained to development costs and other acquisitions of property, plant and equipment at the Kipushi Project as set out on page 40. Ivanhoe also purchased a corporate aircraft in Q2 2023 for $29 million.

The main components of the additions to property, plant and equipment – including capitalized development costs – at the Platreef and Kipushi projects for the six months ended June 30, 2023, and for the same period in 2022, are set out in the following tables:

	Six months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Platreef Project		
Phase 1 construction	55,912	17,959
Phase 2 construction	25,785	4,722
Salaries and benefits	6,478	6,706
Administrative and other expenditure	3,288	3,053
Depreciation	3,152	739
Studies and contracting work	2,181	2,079
Site costs	1,984	1,034
Social and environmental	883	556
Total development costs	99,663	36,848
Other additions to property, plant and equipment	6,233	2,093
Total additions to property, plant and equipment for Platreef	105,896	38,941

	Six months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Kipushi Project		
Mine construction costs	39,159	–
Salaries and benefits	7,832	5,725
Administration and overheads	6,619	3,519
Other expenditure	5,186	2,107
Depreciation - development	4,170	–
Studies and contracting work	3,569	1,698
Electricity	3,533	1,544
Other additions to property, plant and equipment	427	1,459
Depreciation - exploration and project evaluation	–	3,759
Total project expenditure	70,495	19,811
Accounted for as follows:		
Additions to property, plant and equipment	38,265	1,459
Development costs capitalized to property, plant and equipment	32,230	–
Exploration and project evaluation expenditure in the loss from operating activities	–	18,352
Total project expenditure	70,495	19,811

Costs incurred during 2023 at the Platreef and Kipushi projects are deemed necessary to bring the project to commercial production and are therefore capitalized as property, plant and equipment.

On June 30, 2023, the Company entered into an exchange agreement with I-Pulse Inc. (I-Pulse), under which the Company replaced the outstanding convertible loan balance owed to it by HPX Inc. (HPX) with an equity investment in I-Pulse. The Company extended a $50 million convertible loan to HPX on April 25, 2019. As at June 30, 2023, the loan balance was $77 million, comprising a principal amount of $50 million and accrued interest of $27 million. Under the exchange agreement, the Company transferred all convertible loan obligations from HPX to I-Pulse, in exchange for the issuance of common stock in I-Pulse to Ivanhoe. HPX is a subsidiary of I-Pulse. The equity investment in I-Pulse represents approximately 5% of the issued and outstanding common stock of I-Pulse.

The Company's total liabilities increased by $102 million to $1,230 million as at June 30, 2023, from $1,128 million as at December 31, 2022, with the increase mainly due to the loss on the fair valuation of the embedded derivative liability of $58 million and the loan facility of $40 million entered into by the Kipushi Project explained below.

On May 22, 2023, Kipushi Corporation SA (Kipushi), a subsidiary of the Company and the operator of the Kipushi Project, entered into a loan agreement with Rawbank SA (Rawbank), a financial institution in the DRC. Under the terms of the loan agreement, Rawbank provided an $80 million loan, to be drawn down in two tranches of $40 million each, to Kipushi to fund its working capital requirements. The first tranche of the loan was drawn down by Kipushi on June 27, 2023. The loan incurs interest at 8% per year plus a commission of 0.5% per quarter. The loan and accumulated interest and commission are repayable on May 31, 2024. Ivanhoe has guaranteed all amounts due by Kipushi to Rawbank under this loan agreement.

Accounting for the convertible notes closed in March 2021

The Company closed a private placement offering of $575 million of 2.50% convertible senior notes maturing in 2026 on March 17, 2021. Upon conversion, the convertible notes may be settled, at the Company's election, in cash, common shares or a combination thereof. Due to this election right and conversion feature, the convertible notes have an embedded derivative liability that is measured at fair value with changes in value being recorded in profit or loss, as well as the host loan that is accounted for at amortized cost.

The convertible senior notes are senior, unsecured obligations of the Company which will accrue interest payable semi-annually in arrears at a rate of 2.50% per annum and will mature on April 15, 2026, unless earlier repurchased, redeemed or converted. The initial conversion rate of the notes is 134.5682 Class A common shares of the Company per $1,000 principal amount of notes, or an initial conversion price of approximately $7.43 per common share.

Holders of the notes may convert the notes, at their option, in integral multiples of $1,000 principal amount, or in excess thereof, at any time until the close of business on the business day immediately preceding October 15, 2025, but only under the following circumstances:

- During any calendar quarter commencing after the calendar quarter ending on June 30, 2021 (and only during such calendar quarter), if the last reported sale price of the Company's Class A common shares for at least 20 trading days (whether consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; or
- During the five consecutive business day period after any ten consecutive trading day period (the "measurement period") in which the trading price per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's Class A common shares and the conversion rate on each such trading day; or
- If the Company calls any or all the notes for redemption in certain circumstances or upon the occurrence of certain corporate events.

On or after October 15, 2025, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their notes, in multiples of $1,000 principal amount, at the option of the holder regardless of the foregoing conditions.

The convertible notes will not be redeemable at the Company's option before April 22, 2024, except upon the occurrence of certain tax law changes. On or after April 22, 2024, and on or before the 41st scheduled trading day immediately preceding the maturity date, the notes will be redeemable at the Company's option if the last reported sale price of the Company's common shares has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption at a redemption price equal to 100% of the principal amount of the convertible notes to be redeemed, plus accrued and unpaid interest to, but excluding the redemption date.

Since upon conversion, the notes may be settled, at the Company's election, in cash, common shares or a combination thereof, the conversion feature is an embedded derivative liability. The effect of this is that the host liability will be accounted for at amortized cost, with an embedded derivative liability being measured at fair value with changes in value being recorded in profit or loss.

The effective interest rate of the host liability was deemed to be 9.39% and the interest recognized on the convertible notes amounted to $22 million in 2023, before capitalization of borrowing costs on the notes of $6 million. Repayments of coupon interest during 2023 amounted to $7 million. The carrying value of the host liability was $480 million as at June 30, 2023, up from $465 million as at December 31, 2022.

The embedded derivative liability had a fair value of $151 million on the closure of the convertible notes offering and increased to $221 million as at December 31, 2022 and increased to $279 million as at June 30, 2023. The change in the fair value of the embedded derivative liability is largely due to the increase in the closing price of the Company's shares as reported on the Toronto Stock Exchange from the beginning of the year to June 30, 2023.

The following key inputs and assumptions were used in determining the fair value of the embedded derivative liability:

	March 17, 2021	**March 31, 2022**	**June 30, 2022**	**December 31, 2022**	**March 31, 2023**	**June 30, 2023**
Share price	C$7.00	C$11.66	C$7.41	C$10.70	C$12.21	C$12.10
Credit spread (basis points)	630	277	541	419	140	263
Volatility	42%	40%	40%	40%	40%	36%
Borrowing costs (basis points)	50	25	25	25	25	25
Fair value of embedded derivative liability ($'million)	$150.5	$310.6	$127.0	$221.3	$252.2	$278.8

Transaction costs on the convertible notes offering relating to the embedded derivative liability amounted to $4 million and were expensed and included in the profit and loss for Q1 2021.

LIQUIDITY AND CAPITAL RESOURCES

The Company had $393 million in cash and cash equivalents as at June 30, 2023. At this date, the Company had consolidated working capital of approximately $349 million, compared to $595 million at December 31, 2022.

The Company's capital expenditure for 2023 and 2024 can be summarized as follows:

Capital Expenditure	H1 2023 Actuals	2023 Guidance	2024 Guidance
	($' million)	**($' million)**	**($' million)**
Kamoa-Kakula			
Phase 3 expansion	407	1,400 – 1,800	1,100 – 700
Phase 2 and other expansion capital	111	120	–
Sustaining capital	106	180	80
	624	**1,700 – 2,100**	**1,180 – 780**
Platreef			
Phase 1 initial capital	77	190 – 240	200 – 150
Phase 2 capital	26	60	60
	103	**250 – 300**	**260 – 210**
Kipushi			
Initial capital	**66**	**200 – 250**	**180 – 130**

All capital expenditure figures are presented on a 100%-project basis.

The ranges provided reflect uncertainty in the timing of Kamoa-Kakula Phase 3 expansion, Platreef Phase 2 capital and Kipushi cash flows between calendar years 2023 and 2024. The 2024 capital expenditure guidance for Platreef and Kipushi excludes sustaining capital required in 2024 post-initial production.

As documented in the Kamoa-Kakula 2023 Integrated Development Plan announced on January 30, 2023, the remaining capital cost for the total Phase 3 expansion was estimated at $3.0 billion, including the mine, concentrator, smelter, infrastructure and investment in off-site hydropower infrastructure. The Phase 1 and 2 operations are anticipated to generate significant operating cash flow in 2023 and 2024 and are expected to fund capital cost requirements at current copper prices. The joint venture had cash and cash equivalents of $333 million on hand at the end of June 2023.

Construction for Platreef's Phase 1 Mine is well underway, with the first production on track for Q3 2024. The planned Phase 2 capital expenditure at Platreef mainly represents the continuation of sinking Shaft 2 and the construction of the Shaft 2 headframe, as well as Shaft 3 construction and equipping, allowing optionality for possible acceleration in Phase 2, which is currently under review.

Construction of the Kipushi Mine is also underway, with the processing plant scheduled for completion by Q3 2024. Of the $380 million capital budget to completion, approximately $163 million has been committed to date. On April 27, 2023, Ivanhoe and joint-venture partner Gécamines announced an offtake term sheet for 100% of Kipushi's zinc concentrate, together with a $250 million facility supported by Glencore International AG. The offtake and financing term sheet is subject to the execution of final, binding agreements, which are expected to be concluded in conjunction with the new Kipushi Corporation joint-venture agreement in the coming months.

On May 22, 2023, Kipushi entered into a loan agreement with Rawbank SA, a financial institution in the DRC. Under the terms of the loan agreement, Rawbank provided an $80 million loan, to be drawn down in two tranches of $40 million each, to Kipushi to fund its working capital requirements. The first tranche of the loan was drawn down by Kipushi on June 27, 2023. The loan incurs interest at 8% per year plus a commission of 0.5% per quarter. The loan and accumulated interest and commission are repayable on May 31, 2024. Ivanhoe has guaranteed all amounts due by Kipushi to Rawbank under this loan agreement.

Exploration activities at the Western Foreland Exploration Project in the DRC and other targets will continue in 2023 with an initial budget of $31 million.

On March 17, 2021, the Company closed a private placement offering of $575 million of 2.50% convertible senior notes maturing in 2026. The convertible senior notes are senior unsecured obligations of the Company which will accrue interest payable semi-annually in arrears at a rate of 2.50% per annum and will mature on April 15, 2026, unless earlier repurchased, redeemed or converted. The notes will be convertible at the option of holders, before the close of business on the business day immediately preceding October 15, 2025, only under certain circumstances and during certain periods, and thereafter, at any time until the close of business on the second scheduled trading day immediately preceding the maturity date. Upon conversion, the notes may be settled, at the Company's election, in cash, common shares or a combination thereof. The carrying value of the host liability was $480 million and the fair value of the embedded derivative liability was $279 million as at June 30, 2023.

The Company has a mortgage bond outstanding on its offices in London, United Kingdom, of £3.2 million ($4.1 million). The bond is fully repayable on August 28, 2025, secured by the property, and incurs interest at a rate of 1-month Sterling Overnight Index Average (SONIA) plus 1.90% payable monthly in arrears. Only interest will be payable until maturity.

In 2013, the Company became a party to a loan payable to ITC Platinum Development Limited, which had a carrying value and contractual value of $37 million as at June 30, 2023. The loan is repayable once the Platreef Project has residual cash flow, which is defined in the loan agreement as gross revenue generated by the Platreef Project, less all operating costs attributable thereto, including all mining development and operating costs. The loan incurs interest of USD 3-month LIBOR plus 2% calculated monthly in arrears. Interest is not compounded. Interest will be calculated based on the Term SOFR applicable to United States Dollars on a 3-month deposit plus 2.26% effective from June 30, 2023.

The Company has an implied commitment in terms of spending on work programs submitted to regulatory bodies to maintain the good standing of exploration and exploitation permits at its mineral properties. The following table sets forth the Company's long-term obligations:

	Payments Due By Period				
Contractual obligations as at June 30, 2023	**Total $'000**	**Less than 1 year $'000**	**1-3 years $'000**	**4-5 years $'000**	**After 5 years $'000**
Convertible notes	577,993	2,993	575,000	–	–
Debt	81,429	40,027	4,072	–	37,330
Lease commitments	1,689	348	770	571	–
Total contractual obligations	**661,111**	**43,368**	**579,842**	**571**	**37,330**

Debt in the above table represents the mortgage bond owing to Citibank, the loan payable to ITC Platinum Development Limited and the loan from Rawbank, as described above.

The Company is required to fund its Kamoa Holding joint venture in an amount equivalent to its proportionate shareholding interest.

NON-GAAP FINANCIAL PERFORMANCE MEASURES

Kamoa-Kakula's C1 cash costs and C1 cash costs per pound

C1 cash costs and C1 cash costs per pound are non-GAAP financial measures. These are disclosed to enable investors to better understand the performance of Kamoa-Kakula in comparison to other copper producers who present results on a similar basis.

C1 cash costs are prepared on a basis consistent with the industry standard definitions by Wood Mackenzie cost guidelines but are not measures recognized under IFRS. In calculating the C1 cash cost, the costs are measured on the same basis as the Company's share of profit from the Kamoa Holding joint venture that is contained in the financial statements. C1 cash costs are used by management to evaluate operating performance and include all direct mining, processing, and general and administrative costs. Smelter charges and freight deductions on sales to the final port of destination, which are recognized as a component of sales revenues, are added to C1 cash cost to arrive at an approximate cost of finished metal. C1 cash costs and C1 cash costs per pound exclude royalties and production taxes and non-routine charges as they are not direct production costs.

Reconciliation of Kamoa-Kakula's cost of sales to C1 cash costs, including on a per pound basis:

	Three months ended June 30,		Six months ended June 30,	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Cost of sales	**277,646**	**217,112**	**517,223**	**340,482**
Logistics, treatment and refining charges	123,887	113,671	235,330	162,512
General and administrative expenditure	27,794	23,964	58,440	39,732
Royalties and production taxes	(59,994)	(55,651)	(113,806)	(84,227)
Depreciation	(47,722)	(32,457)	(86,210)	(47,693)
Power rebate	(4,779)	–	(9,272)	–
Movement in finished goods inventory	(774)	545	(1,462)	548
General and administrative expenditure of other group entities	(4,321)	(2,074)	(4,645)	(2,302)
C1 cash costs	**311,737**	**265,110**	**595,598**	**409,052**
Cost of sales per pound of payable copper sold ($ per lb.)	1.24	1.15	1.25	1.12
C1 cash costs per pound of payable copper produced ($ per lb.)	1.41	1.42	1.41	1.34
Payable copper produced in concentrate (tonnes)	100,413	84,476	190,974	138,271

Figures in the above table are for the Kamoa-Kakula joint venture on a 100% basis.

EBITDA, Adjusted EBITDA, EBITDA margin and normalized profit

EBITDA, Adjusted EBITDA, EBITDA margin and normalized profit are non-GAAP financial measures. Ivanhoe believes that Kamoa-Kakula's EBITDA is a valuable indicator of the mine's ability to generate liquidity by producing operating cash flow to fund its working capital needs, service debt obligations, fund capital expenditures and distribute cash to its shareholders. EBITDA and Adjusted EBITDA are also frequently used by investors and analysts for valuation purposes. Kamoa-Kakula's EBITDA and the EBITDA and Adjusted EBITDA for the Company are intended to provide additional information to investors and analysts and do not have any standardized definition under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared per IFRS. EBITDA and Adjusted EBITDA excludes the impact of cash costs of financing activities and taxes, and the effects of changes in operating working capital balances, and therefore are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Other companies may calculate EBITDA and Adjusted EBITDA differently.

The EBITDA margin is an indicator of Kamoa-Kakula's overall health and denotes its profitability, which is calculated by dividing EBITDA by revenue. The EBITDA margin is intended to provide additional information to investors and analysts, does not have any standardized definition under IFRS, and should not be considered in isolation, or as a substitute, for measures of performance prepared per IFRS.

Reconciliation of profit after tax to Kamoa-Kakula's EBITDA:

	Three months ended June 30,		**Six months ended June 30,**	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Profit after taxes	**190,254**	127,426	**401,905**	348,700
Finance costs	**90,701**	66,828	**179,374**	121,471
Current and deferred tax expense	**88,842**	62,115	**204,932**	172,159
Depreciation	**50,727**	32,457	**91,811**	47,693
Unrealized foreign exchange loss (gain)[1]	**41,355**	(836)	**46,244**	(6,011)
Finance income	**(5,251)**	(2,513)	**(10,327)**	(4,319)
EBITDA	**456,628**	285,477	**913,939**	679,693

Figures in the above table are for the Kamoa-Kakula joint venture on a 100% basis.

(1) Unrealized foreign exchange losses (gains) have been excluded from EBITDA in the current and prior periods presented, as the Company believes that including the unrealized foreign exchange gains and losses does not give a useful indication of Kamoa-Kakula's overall health and profitability.

Reconciliation of profit after tax to Ivanhoe's EBITDA and Adjusted EBITDA:

	Three months ended June 30,		Six months ended June 30,	
	2023	**2022**	**2023**	**2022**
			$'000	**$'000**
Profit after taxes	**87,183**	351,520	**169,663**	373,060
Finance income	**(61,956)**	(38,596)	**(119,782)**	(70,101)
Current and deferred tax recovery	**(1,769)**	(114,183)	**(2,650)**	(112,976)
Finance costs	**5,539**	10,013	**16,004**	17,404
Unrealized foreign exchange loss(1)	**1,934**	2,384	**3,225**	752
Depreciation	**609**	2,276	**1,085**	4,538
EBITDA	**31,540**	213,414	**67,545**	212,677
Share of profit from joint venture net of tax	**(73,066)**	(49,690)	**(155,725)**	(136,799)
Company's share of EBITDA from Kamoa-Kakula joint venture(2)	**180,489**	114,309	**361,285**	268,934
Loss (gain) on fair valuation of embedded derivative liability	**26,618**	(183,600)	**57,518**	(117,200)
Non-cash share-based payments	**6,589**	6,457	**13,127**	12,710
Adjusted EBITDA	**172,170**	100,890	**343,750**	240,322

(1) Unrealized foreign exchange losses have been excluded from EBITDA in the current and prior periods presented, as the Company believes that including the unrealized foreign exchange gains and losses does not give a valuable indication of the Company's ability to generate liquidity and operating cash flow and distribute cash to its shareholders.

(2) The Company's attributable share of EBITDA from the Kamoa-Kakula joint venture is calculated using the Company's effective shareholding in Kamoa Copper SA (39.6%), Ivanhoe Mines Energy DRC SARL (49.5%), Kamoa Holding Limited (49.5%) and Kamoa Services (Pty) Ltd (49.5%).

The following table is a reconciliation of profit after tax to Ivanhoe's EBITDA and Adjusted EBITDA.

	Q2 2023	Q1 2023	Q4 2022	Q3 2022
	$'000	$'000	$'000	$'000
Profit after taxes	87,183	82,480	37,179	23,867
Finance income	(61,956)	(57,826)	(58,477)	(46,720)
Current and deferred tax recovery (expense)	(1,769)	(881)	3,839	(4,232)
Finance costs	5,539	10,465	10,457	10,223
Unrealized foreign exchange loss (gain)(1)	1,934	1,291	(231)	1,806
Depreciation	609	476	476	441
EBITDA	**31,540**	**36,005**	**(6,757)**	**(14,615)**
Share of profit from joint venture net of tax	(73,066)	(82,659)	(83,324)	(34,057)
Company's share of EBITDA from Kamoa-Kakula joint venture(2)	180,489	180,796	179,082	99,499
Loss on fair valuation of embedded derivative liability	26,618	30,900	66,600	27,700
Non-cash share-based payments	6,589	6,538	6,461	6,558
Adjusted EBITDA	**172,170**	**171,580**	**162,062**	**85,085**

(1) Unrealized foreign exchange losses have been excluded from EBITDA in the current and prior periods presented, as the Company believes that including the unrealized foreign exchange gains and losses does not give a valuable indication of the Company's ability to generate liquidity and operating cash flow and distribute cash to its shareholders.

(2) The Company's attributable share of EBITDA from the Kamoa-Kakula joint venture is calculated using the Company's effective shareholding in Kamoa Copper SA (39.6%), Ivanhoe Mines Energy DRC SARL (49.5%), Kamoa Holding Limited (49.5%) and Kamoa Services (Pty) Ltd (49.5%).

Below is a table reconciling the Company's profit after taxes to the Company's normalized profit after taxes. Normalized profit after taxes excludes the loss (gain) on fair valuation of the embedded derivative liability and the previously unrecognized deferred tax of Kipushi.

	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
	$'000	$'000	$'000	$'000	$'000
Profit after taxes	87,183	82,480	37,179	23,867	351,520
Loss (gain) on fair valuation of embedded derivative liability	26,618	30,900	66,600	27,700	(183,600)
Initial recognition of Kipushi deferred tax	–	–	–	–	(113,207)
Normalized profit after taxes	**113,801**	**113,380**	**103,779**	**51,567**	**54,713**

OFF-BALANCE SHEET ARRANGEMENTS

The Company had no off-balance sheet arrangements for the periods under review.

TRANSACTIONS WITH RELATED PARTIES

The following tables summarize related party income earned and expenses incurred by the Company, primarily on a cost-recovery basis, with companies related by way of directors or significant shareholders in common. The tables summarize the transactions with related parties and the types of income earned and expenditures incurred with related parties. Amounts in brackets denote expenses.

	Three months ended June 30,		Six months ended June 30,	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Kamoa Holding Limited (a)	**49,837**	34,874	**97,429**	63,163
High Power Exploration Inc. (b)	**5,485**	1,408	**7,792**	2,887
Kamoa Services (Pty) Ltd. (c)	**1,063**	806	**2,214**	1,416
Kamoa Copper SA (d)	**240**	362	**527**	652
Ivanhoe Mines Energy DRC SARL (e)	**32**	46	**80**	81
I-Pulse Inc. (f)	**11**	–	**11**	–
Ivanhoe Electric Inc. (g)	**10**	120	**15**	120
Ivanhoe Capital Aviation Ltd. (h)	**(1,125)**	(1,125)	**(2,250)**	(2,250)
Ivanhoe Capital Services Ltd. (i)	**(127)**	(107)	**(222)**	(255)
CITIC Metal Africa Investments Limited (j)	**(52)**	(52)	**(105)**	(105)
Global Mining Management Corporation (k)	**(47)**	(67)	**(115)**	(150)
Ivanhoe Capital Pte Ltd. (l)	**–**	–	**–**	(3)
	55,327	36,265	**105,376**	65,556
Finance income	**55,326**	36,291	**105,225**	66,055
Intergroup recharges and cost recovery	**1,358**	1,214	**2,819**	2,153
Travel	**(1,128)**	(1,103)	**(2,250)**	(2,231)
Salaries and benefits	**(137)**	(123)	**(239)**	(280)
Directors fees	**(52)**	(52)	**(105)**	(105)
Office and administration	**(34)**	67	**(51)**	35
Consulting	**(6)**	(29)	**(23)**	(71)
	55,327	36,265	**105,376**	65,556

The transactions summarized above were in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

As at June 30, 2023, trade and other payables included $1.3 million (December 31, 2022: $0.3 million) with regards to amounts due to parties related by way of director, officers or shareholder in common. These amounts are unsecured and non-interest bearing.

Amounts included in other receivables due from parties related by way of director, officers or shareholder in common as at June 30, 2023 amounted to $7.6 million (December 31, 2022: $6.9 million). Of this, $6.2 million related to receivables from the joint venture (December 31, 2022: $6.6 million).

The directors of the Company are considered to be related parties and remuneration paid to the directors is disclosed in the Company's Management Proxy Circular available on the Company's website.

(a) Kamoa Holding Limited ("Kamoa Holding") is a company registered in Barbados. The Company has an effective 49.5% ownership in Kamoa Holding. The Company earns interest on the loans advanced to Kamoa Holding.

(b) High Power Exploration Inc. ("HPX") is a private company incorporated under the laws of Delaware, USA. A director of the Company is a director and member of executive management of HPX.

(c) Kamoa Services (Pty) Ltd. ("Kamoa Services") is a company registered in South Africa. The Company has an effective 49.5% ownership in Kamoa Services. The Company provides administration, accounting and other services to Kamoa Services on a cost-recovery basis.

(d) Kamoa Copper SA ("Kamoa Copper") is a company incorporated in the DRC. The Company has an effective 39.6% ownership in Kamoa Copper. The Company provides administration, accounting and other services to Kamoa Copper on a cost-recovery basis.

(e) Ivanhoe Mines Energy DRC Sarl ("Energy") is a company incorporated in the DRC. The Company has an effective 49.5% ownership in Energy. The Company provides administration, accounting and other services to Energy on a cost-recovery basis.

(f) I-Pulse Inc. ("I-Pulse") is a private company incorporated in the United States of America. The Company's Executive Co-Chairman is also the Chairman of I-Pulse.

(g) Ivanhoe Electric Inc. ("Ivanhoe Electric") is a company incorporated under the laws of Delaware, USA. A director of the Company is a director and member of executive management of Ivanhoe Electric. The Company provides services to Ivanhoe Electric on a cost-recovery basis.

(h) Ivanhoe Capital Aviation Ltd. ("Aviation") is a private company owned indirectly by a director of the Company. Aviation operates an aircraft for which the Company contributes toward the running costs.

(i) Ivanhoe Capital Services Ltd. ("Services") is a private company owned indirectly by a director of the Company. Services provides for salaries administration and other services to the Company in Singapore and Beijing on a cost-recovery basis.

(j) Citic Metal Africa Investments Limited ("Citic Metal Africa") is a private company incorporated in Hong Kong. Citic Metal Africa is a shareholder in the Company and nominates two directors who serve of the Company's Board of Directors.

(k) Global Mining Management Corporation ("Global") is a private company based in Vancouver, Canada. The Company and a director of the Company hold an indirect equity interest in Global. Global provides administration, accounting and other services to the Company on a cost-recovery basis.

(l) Ivanhoe Capital Pte Ltd. ("Capital") is a private company owned indirectly by a director of the Company. Capital provides administration, accounting and other services in Singapore on a cost-recovery basis.

CRITICAL ACCOUNTING ESTIMATES

The Company's significant accounting policies are presented in Note 2 to the consolidated financial statements for the year ended December 31, 2022. The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the end of the reporting period presented and reported amounts of expenses during said reporting period. Actual outcomes could differ from these estimates. The consolidated financial statements include estimates that, by their nature, are uncertain. Such estimates have a pervasive effect on the consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the year in which the estimate is revised and future years if the revision affects both current and future years. These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Significant assumptions about the future and other sources of estimation uncertainty at the end of the reporting period, which could result in a material adjustment to the carrying amounts of assets and liabilities in the event that actual results differ from assumptions made, include, but are not limited to, the following:

Recoverability of assets

Property, plant and equipment, including capitalized development costs and finite lived intangible assets are assessed at each reporting period to determine whether there is any indication that those assets have suffered an impairment loss.

In assessing whether an impairment is required, the carrying value of the asset or cash generating unit ("CGU") is compared with its recoverable amount. The recoverable amount is the higher of the CGU's fair value less costs of disposal and value in use. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent, if any, of the impairment loss.

The Company assesses whether an impairment is required on loans receivables. A range of cash flow scenarios are considered, taking into account forward looking information which may impact recoverability of loan receivables.

Given the nature of the Company's activities, information on the fair value of an asset is usually difficult to obtain unless negotiations with potential purchasers or similar transactions are taking place. Consequently, the fair value less costs of disposal for each CGU is estimated based on discounted future estimated cash flows that are expected to be generated from the continued use of the CGUs. They are estimated using market consensus based commodity price and exchange assumptions, estimated quantities of recoverable minerals, production levels, operating costs and capital requirements, including any expansion projects, and its eventual disposal, based on the CGU development plans and latest technical reports. These cash flows were discounted using a discount rate that reflected current market assessments of the time value of money and the risks specific to the CGU.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is impaired to its recoverable amount. An impairment loss is recognized immediately in the statement of comprehensive income. The Company has concluded that there is no impairment required to any of its projects.

Provisionally-priced revenue and remeasurement of contract receivables

Sales in the Kamoa Holding Limited joint venture are provisionally priced at the average market price on the date that the products are delivered to the buyers at the Kamoa-Kakula Mine concentrate warehouse or the demarcated holding area at the Lualaba Copper Smelter premises. Revenue from the contract receivables is recognized for all the sales during the period at the average market price for the month in which the sales occurred. Revenue from contract receivables are remeasured with reference to the forward market price at each reporting date and the remeasurement of contract receivables is recognized as revenue in the statement of comprehensive income of the Kamoa Holding Limited joint venture.

Technical feasibility and commercial viability of projects

All direct costs related to the acquisition of mineral property interests are capitalized by property or project. Exploration costs are charged to operations in the period incurred, until such time as the Company determines that a property is technically feasible and commercially viable, where after development costs are capitalized. In making this determination, the Company considers whether a proposed project is capable of being developed at a sufficient return to justify the capital and managerial resources that must be committed to the project. This determination is made on a property-by-property basis and generally coincides with the finalization of a preliminary economic assessment or pre-feasibility study of the property. Exploration costs include value-added taxes incurred in foreign jurisdictions when recoverability of those taxes is uncertain.

In determining whether an exploration and evaluation property is technically feasible and commercially viable, the Company considers several criteria, including:

- a technical analysis of the basic geology of the project;
- a mine plan for accessing and exploiting the ore body;
- a process flow sheet for processing the ore generated from mining;
- projections as to the capital cost of constructing the project;
- projections as to the cost of operating the project in accordance with the mine plan;
- projections as to revenues from the concentrate or other mineral product to be generated from operations in accordance with the mine plan; and
- an economic analysis of the project based on the projected capital and operating costs and production revenues.

Determination of inputs into lease accounting

Lease payments should be discounted using the interest rate implicit in the lease unless that rate cannot be readily determined, in which case the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions. The Company has used the risk-free interest rate adjusted for credit risk specific to the lease.

In determining the lease term, the Company considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Valuation of the embedded derivative liability

The Company has used key inputs and estimates to determine the fair value of the embedded derivative liability at initial recognition and at period end date.

Deferred revenue

The advance payments received under the stream financing agreements have been accounted for as contract liabilities within the scope of IFRS 15. Under the terms of the agreements, settlement of the contracts will be executed via the delivery of credits to the purchasers. The credits to be delivered are directly linked to the metal contained in concentrate produced at the Platreef mine. The contracts are therefore not financial instruments as the contracts will not be settled in cash or another financial instrument. Performance obligations under the contracts will be satisfied through production at the Platreef mine and revenue will be recognized over the duration of the contracts. As the contracts are long term in nature and a portion of the financing was received at inception of the contracts, it has been determined that the contracts contain a significant financing component under IFRS 15.

Deferred tax

Significant judgment is required in determining whether to recognize the deferred tax asset related to the Platreef and Kipushi projects. This includes the probability that there will be sufficient taxable income in the future against which the deferred tax can be utilized. The Company recognized the previously unrecognized deferred tax asset relating to the Platreef Project in 2021 and the previously unrecognized deferred tax asset relating to the Kipushi Project in 2022. The Company considers it highly probable that the projects will have future taxable profits that will be available against which the deductible temporary differences can be utilized.

Provisions for tax claims

From time to time, the Company becomes subject to claims, temporary measures, legal proceedings, penalties, financial sanctions or assessments made by tax or other authorities in the ordinary course of its business. Such claims may be made against the Company, or its subsidiaries and affiliates, or its joint ventures. Given the complexity, scope and multi- jurisdictional nature of the Company's business, such claims may arise in several jurisdictions and may involve complex legal, tax or accounting matters. Some jurisdictions in which the Company operates have legislation empowering authorities to impose restrictions on the operation of the Company's bank accounts in those jurisdictions, or that have a similar effect, notably due to banks' practices, when receiving such instructions from authorities, pending the payment and/or resolution of such alleged claims, investigations, penalties, financial sanctions or assessments. These restrictions or instructions from authorities having a similar effect may be used routinely in such circumstances. Management assesses the Company's liabilities and contingencies for all tax years open to claims or assessment based upon the latest information available. The Company accrues for such claims, or makes a provision, in its financial statements, when a liability resulting from the claim is both probable and the amount can be reasonably estimated. In order to assess such likelihood management reviews claims with the benefit of internal and external legal advice where appropriate.

CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

Newly adopted accounting standards

The following standards became effective for annual periods beginning on or after January 1, 2023, with earlier application permitted. The Company adopted these standards in the current period and they did not have a material impact on its condensed consolidated interim financial statements.

- Amendment to IAS 1 – Presentation of financial statements. The amendments clarify how to classify debt and other liabilities as current or non-current. Another amendment requires companies to disclose their material accounting policy information rather than their significant accounting policies, with additional guidance added to the Standard to explain how an entity can identify material accounting policy information with examples of when accounting policy information is likely to be material.

- Amendments to IAS 12 – Income Taxes: Deferred tax related to assets and liabilities arising from a single transaction. The amendments require companies to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences.

- Narrow scope amendments to IAS 1 – Presentation of Financial Statements, Practice statement 2 and IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors. The amendments aim to improve accounting policy disclosures and to help users of the financial statements to distinguish changes in accounting policies from changes in accounting estimates.

Accounting standards issued but not yet effective

- Amendment to IFRS 16 – Leases on sale and leaseback. These amendments include requirements for sale and leaseback transactions in IFRS 16 to explain how an entity accounts for a sale and leaseback after the date of the transaction. Sale and leaseback transactions where some or all the lease payments are variable lease payments that do not depend on an index or rate are most likely to be impacted. (i)

- Amendment to IAS 7 and IFRS 7 - Supplier finance. These amendments require disclosures to enhance the transparency of supplier finance arrangements and their effects on a company's liabilities, cash flows and exposure to liquidity risk. The disclosure requirements are the IASB's response to investors' concerns that some companies' supplier finance arrangements are not sufficiently visible, hindering investors' analysis. (i)

- Amendment to IAS 1 – Non-current liabilities with covenants. These amendments clarify how conditions with which an entity must comply within twelve months after the reporting period affect the classification of a liability. The amendments also aim to improve information an entity provides related to liabilities subject to these conditions. (i)

  (i) Effective for annual periods beginning on or after January 1, 2024

The Company has not yet adopted these new and amended standards.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

Fair value of financial instruments

The Company's financial assets and financial liabilities are categorized as follows:

	Level	June 30, 2023	December 31, 2022
		$'000	$'000
Financial assets			
Financial assets at fair value through profit or loss			
Investment in I-Pulse Inc.	Level 3	**79,360**	–
Investment in Renergen Ltd.	Level 1	**6,631**	7,947
Investment in unlisted entity	Level 3	**655**	655
Investment in other listed entities	Level 1	**516**	1,050
Amortized cost			
Loan advanced to joint venture	Level 3	**1,634,030**	1,536,601
Cash and cash equivalents		**392,887**	597,451
Loans receivable	Level 3	**44,945**	112,104
Promissory note receivable	Level 3	**26,782**	26,756
Other receivables		**11,265**	9,983
Financial liabilities			
Financial liabilities at fair value through profit or loss			
Convertible notes - embedded derivative liability	Level 3	**278,818**	221,300
Amortized cost			
Convertible notes - host liability	Level 3	**480,103**	465,323
Borrowings	Level 3	**81,429**	40,823
Trade and other payables		**53,680**	57,356
Advances payable	Level 3	**3,270**	3,123

IFRS 13 - "Fair value measurement", requires an explanation about how fair value is determined for assets and liabilities measured in the financial statements at fair value and established a hierarchy into which these assets and liabilities must be grouped based on whether inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions. The two types of inputs create the following fair value hierarchy:

- Level 1: observable inputs such as quoted prices in active markets;
- Level 2: inputs, other than the quoted market prices in active markets, which are observable, either directly and/or indirectly; and
- Level 3: unobservable inputs for the asset or liability in which little or no market data exists, therefore require an entity to develop its own assumptions.

Finance income

The Company's finance income is summarized as follows:

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
	$'000	$'000	$'000	$'000
Interest from loan to joint venture	**49,837**	34,874	**97,429**	63,163
Interest on bank balances	**5,979**	1,866	**13,278**	3,279
Interest on loan receivable - HPX	**5,487**	1,418	**7,795**	2,893
Interest on long term loan receivable - Gecamines	**646**	436	**1,269**	746
Other	**7**	2	**11**	20
	61,956	38,596	**119,782**	70,101

The interest from the loan to the joint venture is interest earned from the Kamoa Holding joint venture on shareholder loans advanced by the Company where each shareholder is required to fund Kamoa Holding in an amount equivalent to its proportionate shareholding interest.

Financial risk management objectives and policies

The risks associated with the Company's financial instruments and the policies on how to mitigate these risks are set out below. Management manages and monitors these exposures to ensure appropriate measures are implemented in a timely and effective manner.

Foreign exchange risk

The Company incurs certain of its expenses in currencies other than the U.S. dollar. The Company also has foreign currency denominated monetary assets and liabilities. As such, the Company is subject to foreign exchange risk as a result of fluctuations in exchange rates. The Company enters into derivative instruments to manage foreign exchange exposure as deemed appropriate.

The carrying amount of the Company's foreign currency denominated monetary assets and liabilities at the respective statement of financial position dates are as follows:

	June 30, 2023	December 31, 2022
	$'000	$'000
Assets		
South African rand	117,667	227,987
Canadian dollar	7,776	8,875
British pounds	4,818	2,909
Australian dollar	498	958
Liabilities		
South African rand	(30,367)	(29,718)
British pounds	(4,582)	(2,945)
Canadian dollar	(88)	(5,911)
Australian dollar	(21)	–

Foreign currency sensitivity analysis

The following table details the Company's sensitivity to a 5% increase or decrease in the U.S. dollar against the foreign currencies presented. The sensitivity analysis includes only outstanding foreign currency denominated monetary items not denominated in the functional currency of the Company or the relevant subsidiary and adjusts their translation at the end of the period for a 5% change in foreign currency rates. A positive number indicates a decrease in loss for the year where the foreign currencies strengthen against the U.S. dollar. The opposite number will result if the foreign currencies depreciate against the U.S. dollar.

	Six months ended June 30,	
	2023	**2022**
	$'000	**$'000**
Canadian dollar	384	109
Australian dollar	24	56
South African rand	(148)	(150)
British pounds	(2)	–

Credit risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations. Credit risk for the Company is primarily associated with the loan to the joint venture, promissory note receivable, long-term loans receivable, other receivables and cash and cash equivalents.

The Company reviews the recoverable amount of their financial assets at each statement of financial position date to ensure that adequate impairment losses are made for irrecoverable amounts. The Company has considered the requirement of IFRS 9 to recognize a loss allowance for expected credit losses on financial assets. The general approach was applied to these financial assets, where the 12-month expected credit losses are calculated. The Company did not apply lifetime expected credit losses as there has not been a significant increase in credit risk in the period.

A significant increase in credit risk would include:

- Existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant change in the borrower's ability to meet its debt obligations.
- An actual or expected significant change in the operating results of the borrower.
- Significant increases in credit risk on other financial instruments of the same borrower.
- An actual or expected significant adverse change in the regulatory, economic, or technological environment of the borrower that results in a significant change in the borrower's ability to meet its debt obligations.
- Significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements, which are expected to reduce the borrower's economic incentive to make scheduled contractual payments or to otherwise have an effect on the probability of a default occurring.

The Company assesses whether an impairment is required on loan receivables. A range of cash flow scenarios are considered, taking into account forward-looking information which may impact recoverability of loan receivables.

The loan advanced to the joint venture will be repaid as and when there is residual cash flow in Kamoa Holding.

The promissory note receivable will be repaid using proceeds from the sale of Crystal River's 1% stake in Kamoa Holding.

Repayment of the social development loan will be made by offsetting the loan against future royalties and dividends payable to Gécamines which arise from future profits to be earned at Kipushi.

The credit risk on cash and cash equivalents is limited because the cash and cash equivalents are composed of deposits with major banks who have investment-grade credit ratings assigned by international credit ratings agencies and have low risk of default. Management closely monitors it's cash held in the DRC.

The Company continues to monitor its credit risk and assess expected credit losses. The identified impairment loss in 2023 is negligible.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: interest rate risk, currency risk and other price risk, such as equity price risk. Financial instruments affected by market risk include the convertible notes, loan advanced to the joint venture and borrowings.

The Company measures the embedded derivative liability portion of the convertible notes at fair value at each reporting date, recognizing changes in the fair value in the statements of comprehensive income. This requirement to "mark-to-market" the derivative features could significantly affect the results in the statement of comprehensive income. If the Company's share price had been C$1.00 higher than it was on June 30, 2023, the fair value of the embedded derivative liability would have increased by $49 million, which would have resulted in the Company recording a loss on the fair valuation of the embedded derivative liability of $106 million instead of the loss of $58 million. If the Company's share price had been C$1.00 lower than it was on June 30, 2023, the fair value of the embedded derivative liability would have decreased by $47 million, which would have resulted in the Company recording a loss on the fair valuation of the embedded derivative liability of $11 million instead of the loss of $58 million.

Interest rate risk

The Company's interest rate risk arises mainly from long-term borrowings, the long-term loan receivable and the loan advanced to the joint venture. The Company's main exposure to interest rate risk arises from the fact that the Company earns and incurs interest on interest rates linked to LIBOR. If interest rates (including applicable LIBOR rates) had been 50 basis points higher or lower and all other variables were held constant the Company's profit for the period ended June 30, 2023 would have increased or decreased by $6 million (June 30, 2022: $6 million).

Liquidity risk

In the management of its liquidity risk, the Company maintains a balance between continuity of funding and flexibility through the use of borrowings. Management closely monitors the liquidity position with the goal of maintaining adequate sources of funding to finance the Company's projects and operations.

The following table details the Company's expected remaining contractual maturities for its financial liabilities. The table is based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Company can be required to satisfy the liabilities.

	Less than 1 month	1 to 3 months	3 to 12 months	More than 12 months	**Total undiscounted cash flows**
	$'000	$'000	$'000	$'000	**$'000**
As at June 30, 2023					
Convertible notes	–	–	2,993	575,000	**577,993**
Trade and other payables	48,091	976	4,613	–	**53,680**
Non-current borrowings	–	–	–	41,402	**41,402**
Current borrowings	–	–	40,027	–	**40,027**
As at December 31, 2022					
Convertible notes	3,033	–	–	575,000	**578,033**
Non-current borrowings	–	–	–	40,226	**40,226**
Trade and other payables	51,689	987	4,680	–	**57,356**

Trade and other payables in the above table excludes payroll tax, other statutory liabilities and indirect taxes payable.

DESCRIPTION OF CAPITAL STOCK

As at August 2, 2023, the Company's capital structure consists of an unlimited number of Class A common shares without par value (the "Class A Shares"). At this date 1,218,738,532 Class A shares were issued and outstanding. On June 28, 2022, the Company's capital structure was amended by deleting the Class B common shares without par value, and preferred shares without par value, none of which were outstanding.

The Company granted 1,259,090 options in 2022 and 1,148,695 options in 2023 to date. As at August 2, 2023, there were 13,342,869 options outstanding issued in terms of the Equity Incentive Plan exercisable into 13,342,869 Class A Shares.

The Company granted 652,654 restricted share units (RSUs) in 2023 to date and 1,375,041 RSUs in 2022 per the Company's Share Unit Award Plan (formerly the Restricted Share Unit Plan). As at August 2, 2023, there were 4,695,929 RSUs which may vest into 4,695,929 Class A shares.

The Company granted 438,163 performance share units (PSUs) in 2023 to date and 372,113 PSUs in 2022 per the Company's Share Unit Award Plan (formerly the Restricted Share Unit Plan). As at August 2, 2023, there were 810,276 PSUs which may vest into 810,276 Class A shares.

The Company granted 202,806 deferred share units (DSUs) in 2023 to date and 200,991 DSUs in 2022 per the Company's Deferred Share Unit Plan. As at August 2, 2023, there were 684,931 DSUs which may vest into 684,931 Class A shares.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for the design and operation of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR) in order to provide reasonable assurance that material information related to the Company, including its consolidated subsidiaries, is made known to the Company's certifying officers. The Company's President, in the capacity of Chief Executive Officer (CEO), and Chief Financial Officer (CFO) have each evaluated the design and operating effectiveness of the Company's DC&P and ICFR as of June 30, 2023 and, in accordance with the requirements established under National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings, the President and CFO have concluded that these controls and procedures have been designed and operate to provide reasonable assurance that material information relating to the Company is made known to her by others within the Company and that the information required to be disclosed in reports that are filed or submitted under Canadian securities legislation are recorded, processed, summarized and reported within the time period specified in those rules.

As at June 30, 2023, management, including the President, in the capacity of CEO, and CFO, have evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon the results of that evaluation, the President and CFO have concluded that as of the end of the period covered by this MD&A, the Company's disclosure controls and procedures were effective.

The Company's President and CFO have used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework to evaluate the design and operation of the Company's ICFR as of June 30, 2023 and have concluded that these controls and procedures have been designed and operated effectively to provide reasonable assurance that financial information is recorded, processed, summarized and reported in a timely manner. Management of the Company was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. The result of the inherent limitations in all control systems means design and operation of controls cannot provide absolute assurance that all control issues and instances of fraud will be detected.

As at June 30, 2023, management assessed the effectiveness of the Company's internal control over financial reporting and concluded that the Company's internal control over financial reporting was effective.

During the three months ended ended June 30, 2023, there were no changes in the Company's DC&P or ICFR that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

RISK FACTORS

The Company has summarized its foreign exchange risk, credit risk, interest rate risk and liquidity risk under the “Financial risk management objectives and policies” sub-heading under the “Financial instruments and other instruments” section in this MD&A. Additional risks and uncertainties are discussed in the Company’s Annual Information Form filed with Canadian provincial regulatory authorities and available at www.sedarplus.ca.

DISCLOSURE OF TECHNICAL INFORMATION

Disclosures of a scientific or technical nature in this MD&A regarding the Kamoa-Kakula Copper Complex (other than stockpiles estimation), the Platreef Project and the Kipushi Project 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 National Instrument 43-101 (NI 43-101). Mr. Amos is not considered independent under NI 43-101 as he is the Executive Vice President, Projects, at Ivanhoe Mines. Mr. Amos has verified the technical data related to the foregoing disclosed in this MD&A.

Disclosures of a scientific or technical nature regarding the Kamoa-Kakula stockpiles in this MD&A have been reviewed and approved by George Gilchrist, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Gilchrist is not considered independent under NI 43- 101 as he is the Vice President, Resources, at Ivanhoe Mines. Mr. Gilchrist has verified the technical data regarding the Kamoa-Kakula stockpiles disclosed in this MD&A.

Disclosures of a scientific or technical nature regarding the Western Foreland Exploration Project in this MD&A have been reviewed and approved by Stephen Torr, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Torr is not considered independent under NI 43-101 as he is the Vice President, Geosciences, at Ivanhoe Mines. Mr. Torr has verified the technical data regarding the Western Foreland Exploration Project disclosed in this MD&A.

Ivanhoe has prepared an independent, NI 43-101-compliant technical report for the Kamoa-Kakula Project, the Platreef Project and the Kipushi Project, each of which is available on the Company's website and under the Company's SEDAR+ profile at www.sedarplus.ca:

- Kamoa-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 Kipushi 2022 Feasibility Study dated February 14, 2022, prepared by OreWin Pty Ltd., MSA Group (Pty) Ltd., SRK Consulting (South Africa) (Pty) Ltd, and METC Engineering.
- The Platreef 2022 Feasibility Study dated February 28, 2022, prepared by OreWin Pty Ltd., Mine Technical Services, SRK Consulting Inc., DRA Projects (Pty) Ltd and Golder Associates Africa.

These technical reports include relevant information regarding the effective dates and the assumptions, parameters and methods of the mineral resource estimates on the Platreef Project, the Kipushi Project and the Kamoa-Kakula Copper Complex cited in this MD&A, as well as information regarding data verification, exploration procedures and other matters relevant to the scientific and technical disclosure contained in this MD&A in respect of the Platreef Project, Kipushi Project and Kamoa-Kakula Copper Complex.

FORWARD-LOOKING STATEMENTS

Certain statements in this MD&A 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 using 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 MD&A.

Such statements include without limitation, the timing and results of: (i) statements that Kamoa-Kakula expects Phase 1 and Phase 2 cash flow to be sufficient to fund the Phase 3 expansion capital cost requirements at current copper prices; (ii) statements regarding highly promising preliminary testwork to further improve copper recoveries at Kamoa-Kakula, with results indicating that recoveries well over 90% can be achieved by liberating copper from the tailings stream and that based on these results, Kamoa-Kakula can further increase production, revenues and cash flow; (iii) statements that Kamoa Copper has been working alongside DRC's state-owned power company, SNEL, to identify the causes of instability across the southern DRC's grid infrastructure to assist with delivering long-lasting solutions and that Kamoa Copper has identified a series of upgrades and has outlined a project plan to deliver the improvements; (iv) statements that Kamoa Copper's engineering team are working towards insulating

Kamoa-Kakula from future instability by expanding on-site backup generation capacity, as well as sourcing additional power imported from the Zambian grid; (v) statements that over the next 12-18 months, on-site backup-power generation capacity at Kamoa-Kakula will increase via a phased roll-out; (vi) statements that delivery of a further 30 MW in backup generation capacity, sufficient to power Kamoa-Kakula's entire Phase 1 and 2 operations in the event of grid disruptions, will commence later this year and is expected to be operational by Q2 2024; (vii) statements that over 130 MW of further backup generation capacity has been ordered and is expected to be installed in 2024, in time for the completion of the Phase 3 concentrator and smelter that are currently under construction; (viii) statements that discussions are advancing to secure up to 100 MW of additional power via the Zambian grid interconnector, with the initial phase expected to be ready in the third quarter; (ix) statements that following the commissioning of Phase 3, Kamoa-Kakula will have a total design processing capacity of 14.2 Mtpa; (x) statements that the completion of Phase 3 is expected to increase annualized copper production to an average of approximately 620,000 tonnes per year over the next ten years, which will position Kamoa Copper as the world's third-largest copper mining complex in 2027, and the largest copper mine on the African continent; (xi) statements that underground mining activities are expected to commence at Kamoa 1 in late 2023 and Kamoa 2 in 2025, which will both involve the same mechanized drift-and-fill mining methods used at the Kakula Mine; (xii) statements that the smelter at Kamoa-Kakula will incorporate leading-edge technology supplied by Metso Outotec of Espoo, Finland and will meet the world-leading IFC emissions standards; (xiii) statements that the number of workers at the smelter site is expected to peak at 3,000 in December 2023; (xiv) statements that the 99.7% pure blister anode copper produced from Kamoa-Kakula's smelter is expected to be among the lowest carbon-dioxide emitters in the world per tonne of copper produced; (xv) statements that the smelter will have a processing capacity of approximately 1.2 Mtpa of dry concentrate feed and is designed to run on a blend of concentrate produced from the Kakula (Phase 1 and 2) and Kamoa (Phase 3 and future Phase 4) concentrators; (xvi) statements that under the Kamoa-Kakula 2023 Integrated Development Plan, the smelter is projected to accommodate approximately 80% of Kamoa-Kakula's total concentrate production; (xvii) statements regarding Kamoa-Kakula continuing to toll-treat concentrates under a 10-year agreement with the LCS, located approximately 50 kilometres from Kamoa-Kakula, near the town of Kolwezi and that deliveries to LCS are expected to account for approximately 150,000 tonnes of copper concentrate annually; xviii) statements that Kamoa-Kakula's Phase 3 mine and concentrator expansion and 500,000-tonne-per annum on-site, direct-to-blister copper smelter, which is expected to be Africa's largest direct-to-blister flash smelter, are advancing on schedule and are expected to be completed in late 2024, and that meanwhile ore will be drawn from the stockpiles to maximize copper production; (xix) statements that as a by-product, the smelter at Kamoa-Kakula will also produce in the region of 650,000 to 800,000 tonnes per year of high-strength sulphuric acid; (xx) statements that the on-site smelter will offer transformative financial benefits for the Kamoa-Kakula Copper Complex, most notable being a material reduction in logistics costs, and to a lesser extent reduced concentrate treatment charges and local taxes, as well as revenue from acid sales; (xxi) statements that the volume of shipments is expected to halve following the Phase 3 expansion as trucks will transport 99+%-pure blister copper anodes instead of concentrate with approximately 50% contained copper and that according to the Kamoa-Kakula 2023 Prefeasibility Study, smelter commissioning is expected to drive a decrease in average cash costs (C1) over the first five years (from 2025) to approximately $1.15/lb. of copper; (xxii) statements that the rehabilitation of Turbine #5 at the Inga II hydroelectric power station, will supply an additional 178 MW of clean hydroelectric power to the national grid and provide power for Phase 3 concentrator, the flash smelter, as well as provide spare capacity for future expansion; (xxiii) statements regarding Kamoa-Kakula's 2023 guidance including contained copper in concentrate of 390,000 to 430,000 tonnes and cash cost (C1) of $1.40 to $1.50 per lb; (xxiv) statements regarding the Company focusing on construction activities to bring Phase 1 of Platreef into production by Q3 2024; (xxv) statements that once the crusher and loading feeder installation on the 950-metre level is completed at the end of August, the rate of lateral underground development is expected to continue to increase to approximately 300 metres per month through the remainder of the year and that from January 2024, the advancement rate is expected to increase to approximately 500 metres per month; (xxvi) statements that the 10-metre diameter Shaft 2 currently under construction will have a hoisting capacity of 8 Mtpa and that Shaft 2 will be utilized in subsequent development phases and will be among the largest hoisting shafts in the world; (xxvii) statements that the kibble and stage winder civil construction is nearing completion with the winder deliveries planned for December 2023; (xxviii) statements that commissioning of Platreef's first 5-MW solar-power plant is expected later this year and that power generated by this plant will support development activities and operations, together with other renewable energy sources to be introduced over time; (xxix) statements that Shaft 3, originally planned as a ventilation and secondary escape shaft, is currently under construction and is now planned to be equipped for hoisting, which will provide additional hoisting capacity to remove ore and waste from the underground mine and that this has the benefit of de-risking the development and ramp-up of the Phase 1 mine and may be used to accelerate the ramp-up of underground mining activities for Phase 2, in advance of the completion of Shaft 2, which is expected in 2027; (xxx) statements that Shaft 3 is currently being reamed to a diameter of 5.1 metres with planned completion in Q4 2023; (xxxi) statements that Platreef's water requirement for the Phase 1 operation is projected to peak at approximately three million litres per day, which will then increase to nine million litres per day once the Phase 2 expansion is complete; (xxxii) statements that Masodi Wastewater Treatment Works is progressing well towards completion in Q3 2023; (xxxiii) statements that the concentrate produced by Kipushi is expected to contain approximately 55% zinc and low levels of impurities; (xxxiv) statements that the buyer will purchase the concentrate at the Kipushi Mine on a free-carrier basis, meaning the buyer will be responsible for arranging freight and shipment to the destination, with such costs reimbursed by Kipushi; (xxxv) statements that Kipushi concentrator is on schedule for commissioning and first production in Q3 2024; (xxxvi) statements that the Kipushi concentrator includes DMS and a milling and flotation circuit and is expected to produce more than 270,000 tonnes of zinc contained in concentrate over the first five years of operations; (xxxvii) statements that the Kipushi concentrator's design recoveries are targeted at 96%, with a concentrate grade of 55% contained zinc; (xxxviii) statements that stoping of the ultra-high-grade Big Zinc orebody is expected to begin in January 2024; (xxxix) statements that over half of the Kipushi primary fleet and secondary support equipment has been mobilized, with the remainder expected to be delivered at the end of the third quarter; (xl) statements that concurrent training of new underground miners is ongoing at Kipushi, targeting a full complement of four crews by the end of the third quarter; (xli) statements that the year-to-date underground development rate averages approximately 250 metres per month and that following the mobilization of the remaining underground equipment fleet and the fourth mining crew, the underground development rate is expected to increase to approximately 450 metres per month by year-end; (xlii) statements that underground development at Kipushi throughout the remainder of the year will increasingly be in ore, grading between 20-25% zinc and that the ore will be hauled to surface and stored on the stockpile ahead of concentrator commissioning; (xliii) statements that the new commercial DRC-Zambia border crossing at Kipushi will not only benefit the Kipushi Mine but also Kamoa-Kakula as an additional route for exporting concentrate, and that such border crossing will provide socio-economic benefits to the community of Kipushi and the city of Lubumbashi; (xliv) statements that the mining method of the Big Zinc orebody at Kipushi will be transverse sublevel open stoping in a primary and secondary sequence and that the void of the mined-out stopes will be filled with cemented aggregate to maximize the extraction of the ultra-high-grade ore; (xlv) statements that at Kipushi the total mining height of long-hole stopes is 60 metres (comprising of an upper 30-metre-high stope and lower 30-metre-high stope), which will be separated by 15-metre-high sill pillars, that the long-hole stopes will be mined with a bottom-up mining sequence, with the lower stope extracted first followed by the upper stope and that the stopes will be extracted using a primary and secondary long-hole stoping sequence; (xlvi) statements that the vendor appointment by the Haut-Katanga province for the 11-kilometre, by-pass road from Kipushi is expected to be made imminently, with the mobilization of construction contractors to be made in the coming month and that the project award for the border infrastructure is expected to be made towards the end of 2023; (xlvii) statements that employees and contractors working at the Kipushi site will peak at approximately 2,000 in the fourth quarter of 2023 and that once operations have ramped up to steady-state, total on-site labour, including mining and support contractors, is expected to be approximately 1,200; (xlviii) statements that follow-up drilling is planned along sections of the four holes that were completed down dip of Makoko West to enhance the 3D geological interpretation of the area; (xlix) statements that the gravity survey to be flown at the Mokopane Feeder Project, will be completed during Q3 2023 due to equipment breakdown delays and that deep diamond drilling is now planned to commence in Q4 2023 to test targets identified from the results of the magnetic survey and the gravity survey to be completed; (l) statements that the remaining capital cost for the total Phase 3 expansion is estimated at $3.0 billion, including the mine, concentrator, smelter, infrastructure and investment in off-site hydropower infrastructure; (li) statements that the offtake and financing term sheet between Ivanhoe and joint-venture partner Gécamines, supported by Glencore International AG, is subject to the execution of final, binding agreements, which are expected to be concluded in conjunction with the new Kipushi Corporation joint-venture agreement in the coming months, and the particulars of such offtake and financing, including the fact that the company's ownership in the Kipushi Project will reduce to 62%; (lii) statements that Phase 1 and Phase 2 operations at Kamoa-Kakula are anticipated to generate significant operating cash flows in 2023 and 2024, and are expected to fund capital cost requirements of approximately $2.1 billion at current copper prices, and that the joint venture is arranging short-term financing facilities should a shortfall occur due to a significant decrease in copper prices; (liii) statements with respect to the Company's capital expenditure guidance and planned expenditures for 2023 and 2024; and (liv) statements that 2023 exploration activities have an initial budget of $31 million, including $19 million for Western Foreland; (lv) statements that the company intends to enter into a collaboration agreement with I-ROX, an I-Pulse subsidiary, to investigate and develop applications for pulsed-power technology in the mining sector; (lvi) statements that the company is on schedule to publish a maiden Mineral Resource estimate for its Makoko and Kiala high-grade copper discoveries in the Western Foreland in Q3 2023; and (lvii) statements that a second air core rig is planned to start drilling at Western Forelands in early Q3 2023.

As well, all of the results of the feasibility study for the Kakula copper mine, the Kamoa-Kakula 2023 IDP, the Platreef 2022 feasibility study, and the Kipushi 2022 feasibility study 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, concerning this specific forward-looking information concerning the operation and development of the Kamoa-Kakula Copper Complex, Platreef and Kipushi projects, and the exploration of the Western Foreland Exploration Project and the Mokopane Feeder Exploration 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, nickel, zinc, platinum, palladium, rhodium and gold; (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.

This MD&A also contains references to estimates of Mineral Resources and Mineral Reserves. The estimation of Mineral Resources is inherently uncertain and involves subjective judgments about many relevant factors. Estimates of Mineral Reserves provide more certainty but still involve similar subjective judgments. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation (including estimated future production from the Company's projects, the anticipated tonnages and grades that will be mined and the estimated level of recovery that will be realized), which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that ultimately may prove to be inaccurate. Mineral Resource or Mineral Reserve estimates may have to be re-estimated based on: (i) fluctuations in copper, nickel, zinc, platinum group elements (PGE), gold or other mineral prices; (ii) results of drilling; (iii) metallurgical testing and other studies; (iv) proposed mining operations, including dilution; (v) the evaluation of mine plans after the date of any estimates and/or changes in mine plans; (vi) the possible failure to receive required permits, approvals and licences; and (vii) changes in law or regulation.

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", and elsewhere in this MD&A, 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 MD&A 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 MD&A 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 MD&A.

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 beginning on page 60 and elsewhere in this MD&A.

ADDITIONAL INFORMATION

Additional information regarding the Company, including the Company's Annual Information Form, is available on SEDAR+ at www.sedarplus.ca.