IVANHOE
MINES

Dated February 23, 2024

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2023

INTRODUCTION

This management's discussion and analysis (MD&A) should be read in conjunction with the audited consolidated financial statements of Ivanhoe Mines Ltd. ("Ivanhoe", "Ivanhoe Mines" or the "Company"), for the years ended December 31, 2023 and 2022, which has 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 ***February 23, 2024***. 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 54. 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.

FINANCIAL AND OPERATIONAL HIGHLIGHTS

- Ivanhoe Mines recorded a profit of $303 million in 2023, equivalent to $0.26 per share, and normalized profit of $388 million, equivalent to $0.33 per share. The normalized profit excludes an $85 million loss on fair value on the convertible notes following the 20% appreciation in the share price from C$10.70 to C$12.85 during the year.

- Ivanhoe's profit for the year includes Ivanhoe Mines' share of profit and finance income from the Kamoa-Kakula joint venture of $482 million for 2023, up from $405 million in 2022.

- Ivanhoe Mines' Adjusted EBITDA was $604 million in 2023, up from $491 million in 2022, which includes an attributable share of EBITDA from Kamoa-Kakula of $664 million.

- Kamoa-Kakula recognized record revenue of $2.70 billion, operating profit of $1.45 billion and EBITDA of $1.68 billion for 2023.

- Cash cost (C1) per lb. of payable copper produced in 2023 totaled $1.45/lb., compared to $1.39/lb. in 2022. This achieved the mid-point of the guidance range of $1.40/lb. to $1.50/lb.

- Kamoa-Kakula sold 375,779 tonnes of copper (net of payability) in 2023 at a cost of sales per pound (lb.) of payable copper of $1.33/lb., compared with $1.09/lb. in 2022. At year-end, approximately 9,100 tonnes of finished copper in concentrate remained in the warehouse or was in the process of being tolled at a nearby smelter, with a carrying value at cost, for accounting purposes, of $22 million. These 9,100 tonnes of copper have a significantly higher net realizable value based on current copper prices of approximately $8,580 per tonne.

- Since entering Phase 1 commercial production on July 1, 2021, the Kamoa-Kakula joint venture has generated $3.6 billion of EBITDA

- Ivanhoe Mines completed a private placement offering of 47,917,050 Class A common shares for aggregate gross proceeds of C$575 million (approximately $430 million) in December 2023. Ivanhoe has a strong balance sheet with cash and cash equivalents of $574 million on hand as at December 31, 2023.

- Ivanhoe Mines announces Kamoa-Kakula's full-year cash cost (C1) guidance for 2024 of $1.50/lb. to $1.70/lb of payable copper produced.

- Increased cash cost guidance in 2024, relative to 2023, reflects in part the favorable early commissioning of the Phase 3 concentrator late in the second quarter of 2024. The early commissioning of the Phase 3 concentrator will require additional backup power generation for the remainder of 2024, until the Inga II dam hydroelectric dam refurbishment is complete at year-end. Phase 3 and associated backup power generation will temporarily increase cash costs by up to $0.20/lb. for the remainder of this year. Kamoa-Kakula is on a path to full hydroelectric power generation and anticipates lower cash costs after 2024, following the commissioning of the direct-to-blister smelter.

- Ivanhoe Mines continued its excellent record of project execution in 2023, with capital expenditure of $1.52 billion at Kamoa-Kakula on the Phase 2 and 3 expansions, $234 million at Platreef and $226 million at Kipushi. Projects remain on or ahead of schedule and on budget, with any underspending in 2023 expected to be caught up in 2024.

- Ivanhoe Mines executed a $150 million senior debt facility for Platreef Phase 1 mine with its mandated lead arrangers, Société Générale and Nedbank.

- Kamoa-Kakula secured and drew down on unsecured financing facilities of $400 million from DRC financial institutions at an attractive cost of capital to augment cash generated from operations for its continued expansion and working capital.

Photo: Construction of the Kamoa-Kakula Phase 3 concentrator plant remains on budget and is ahead of schedule for first production in Q3 2024. Once complete the production capacity of the Kamoa-Kakula Copper Complex will increase to over 600,000 tonnes of copper per annum.

REVIEW OF OPERATIONS

Ivanhoe Mines is a mining, exploration and development company. At present, the Company's financial performance is primarily affected by ongoing mining operations at its Kamoa-Kakula Copper Complex, and ongoing exploration and development activities being conducted at its three material properties and the highly prospective Western Foreland Exploration Project. These consist of:

- **The Kamoa-Kakula Copper Complex.** A joint venture between Ivanhoe Mines and Zijin Mining Group Co., Ltd., ("Zijin" or "Zijin Mining") within the Central African Copperbelt in the Democratic Republic of Congo's (DRC) southern Lualaba province. Ivanhoe Mines and Zijin Mining each hold an indirect 39.6% interest in the Kamoa-Kakula Copper Complex, Crystal River Global Limited (Crystal River) holds an indirect 0.8% interest and the DRC government holds a direct 20% interest. The Kamoa-Kakula Copper Complex began producing copper in May 2021 and, through phased expansions, is positioned to become one of the world's largest copper producers. (See "*Kamoa-Kakula Copper Complex*")

- **The Platreef Project.** Construction of the planned Platreef Mine on the Company's discovery of palladium, platinum, nickel, rhodium, copper and gold, on the Northern Limb of South Africa's Bushveld Igneous Complex is in progress. Ivanhoe Mines holds a 64% interest in Platreef, the South African beneficiaries of a broad-based, black economic empowerment structure have a combined 26% stake in the Platreef Project and the remaining 10% is owned by a Japanese consortium of ITOCHU Corporation, Japan Oil, Gas and Metals National Corporation; and Japan Gas Corporation. (See "*Platreef Project*")

- **The Kipushi Project.** The existing Kipushi Mine is located on the Central African Copperbelt in the DRC's southern Haut-Katanga province, one of Africa's major mining hubs. The mine, which operated between 1924 and 1993, is approximately 30 kilometres southwest of the provincial capital, Lubumbashi, and less than one kilometre from the DRC-Zambia border. Ivanhoe Mines holds a 68% interest in Kipushi; the state-owned mining company, La Générale des Carrières et des Mines (Gécamines), holds the remaining 32% interest. (See "*Kipushi Project*")

- **The Western Foreland Exploration Project.** A group of licences totalling approximately 2,400 km^2 and located in close proximity to the Kamoa-Kakula Copper Complex, the majority of which are 80%-100%-owned, as well as 247 km^2 of newly acquired joint venture licences. Ivanhoe's DRC exploration group is targeting Kamoa-Kakula-style copper mineralization through a regional exploration and drilling program. (See *"DRC Western Foreland Exploration Project"*)

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.

Kamoa-Kakula summary of operating and financial data

	FY 2023	Q4 2023	Q3 2023	Q2 2023	Q1 2023
Ore tonnes milled (000's tonnes)	**8,543**	**2,133**	2,236	2,244	1,930
Copper ore grade processed (%)	**5.23%**	**4.95%**	5.37%	5.21%	5.42%
Copper recovery (%)	**87.3%**	**87.9%**	87.2%	87.2%	87.1%
Copper in concentrate produced (tonnes)	**393,551**	**92,215**	103,947	103,786	93,603
Payable copper sold (tonnes)	**375,779**	**90,967**	96,509	101,526	86,777
Cost of sales per pound ($ per lb.)	**1.33**	**1.50**	1.34	1.24	1.25
Cash cost (C1) ($ per lb.)	**1.45**	**1.53**	1.46	1.41	1.42
Realized copper price ($ per lb.)	**3.84**	**3.71**	3.84	3.79	4.04
Sales revenue before remeasurement ($'000)	**2,697,257**	**625,983**	681,821	729,924	659,529
Remeasurement of contract receivables ($'000)	**6,701**	**(8,365)**	13,014	(27,542)	29,594
Sales revenue after remeasurement ($'000)	**2,703,958**	**617,618**	694,835	702,382	689,123
EBITDA ($'000)(1)	**1,681,049**	**343,899**	423,211	456,628	457,311
EBITDA margin (% of sales revenue)	**62%**	**56%**	61%	65%	66%

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 cost (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 54.

(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.

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

		FY 2023	Q4 2023	Q3 2023	Q2 2023	Q1 2023
Mining	($ per lb.)	0.40	0.38	0.41	0.39	0.41
Processing	($ per lb.)	0.20	0.24	0.20	0.19	0.19
Logistics charges (delivered to China)	($ per lb.)	0.47	0.50	0.46	0.45	0.46
TC, RC, smelter charges	($ per lb.)	0.24	0.26	0.25	0.25	0.23
General & Administrative	($ per lb.)	0.14	0.15	0.14	0.13	0.13
Cash cost (C1) per pound of payable copper produced	**($ per lb.)**	**1.45**	**1.53**	**1.46**	**1.41**	**1.42**

Cash cost (C1) is 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 cost is 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 cost excludes royalties, 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: Construction of Kamoa-Kakula's Phase 3 concentrator project is 82% complete, including installation of the flotation cells (front) and tailings thickener (rear).

Kamoa-Kakula produced 393,551 tonnes of copper concentrate in 2023, within guidance range

Kamoa-Kakula's Phase 1 and 2 concentrators have consistently operated at a steady-state throughput rate of 9.2 million tonnes per annum (Mtpa) following the ahead-of-schedule completion of the debottlenecking program during the first quarter of 2023. 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.

Kamoa-Kakula produced 393,551 tonnes of copper in concentrate in 2023, achieving its 2023 production guidance range of 390,000 to 430,000 tonnes. This production achievement represents a year-over-year increase of 18%.

During 2023, Kamoa-Kakula Phase 1 and 2 concentrators milled approximately 8.54 million tonnes of ore at an average feed grade of 5.23% copper, producing 824,382 dry metric tonnes of copper concentrate. Copper flotation recoveries for the year averaged 87.3%, above the Phase 1 and 2 concentrator design recovery rate of 86.0%.

The Kamoa-Kakula Phase 1 and Phase 2 concentrators continued to perform strongly in the fourth quarter. Kamoa-Kakula's Phase 1 and 2 concentrators milled 2.1 million tonnes of ore during the fourth quarter at an average feed grade of 4.95% copper.

Production at the Kamoa-Kakula Copper Complex for the fourth quarter of 2023 was 92,215 tonnes of copper in concentrate, compared to 103,947 tonnes in Q3 2023 and 92,761 tonnes in Q4 2022. Quarterly production and head grade were impacted by intermittent grid instability, particularly in November where underground and plant utilization was significantly hampered by unplanned outages.

Ore was drawn down as required from surface stockpiles to maximize copper production. Cash costs in the fourth quarter were impacted by lower production.

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 and assist with delivering long-lasting solutions. Kamoa Copper subsequently identified a series of upgrades and is executing a series of projects with SNEL to deliver the improvements.

In December 2023, SNEL and Ivanhoe Mines Energy DRC, a subsidiary of Kamoa Holding, signed an amendment to the existing financing agreement to fund the identified infrastructure upgrades. The amendment to the financing agreement expands the loan to SNEL up to a total of $450 million.

The original financing agreement, signed in 2014 and subsequently updated in 2021, consisted of a loan of up to $250 million to fund the refurbishment of 78 megawatts (MW) of generation capacity at the Mwadingusha dam and 178 MW of generation capacity from Turbine #5 at the Inga II dam. The refurbishment of the Mwadingusha facility was completed in September 2021, and the refurbishment of Turbine #5 at Inga II is on schedule to be completed in the fourth quarter of 2024.

Up to $200 million of new funding will be assigned to the identified grid infrastructure upgrades, such as an increase in grid capacity between Inga and Kolwezi, a new harmonic filter at the Inga Converter Station, as well as a new static compensator at the Kolwezi Converter Station. As with the existing financing agreement, the $200 million in additional funding by Ivanhoe Mines Energy to SNEL bears interest at the Secured Overnight Financing Rate (SOFR) plus 3% and will be repaid via a 40% discount on the tariff of grid energy consumed by Kamoa-Kakula. Mobilization of resources is underway, with the upgrades expected to be complete during H1 2025.

Installation of on-site backup-power generation capacity to support Kamoa-Kakula operations as a temporary solution until grid infrastructure improvements are complete

Grid instability continues to be experienced into Q1 2024. As a short-term solution while the grid infrastructure upgrades are completed, Kamoa Copper's engineering team is currently expanding its on-site backup generation capacity to ensure there is on-site redundancy to power 100% of its current and future operations.

On-site backup-power generator capacity is set to increase, via a phased roll-out, from the current 58 MW to a total of over 200 MW in time for the completion of the direct-to-blister copper smelter at the end of Q4 2024. The generator farm sites are being built adjacent to the Phase 1 and 2 concentrators, and smelter at Kakula as well as adjacent to the Phase 3 concentrator at Kamoa.

By the end of April 2024, 20 MW of additional generator capacity will be installed. 62 MW of additional generator capacity is expected to installed by end of July 2024, which will be sufficient to power both Phase 1 & 2 on a stand-alone basis if required. By year-end, total on-site backup power generation capacity will have reached over 200 MW, sufficient to run both the mines and the concentrators – including Phase 3 (excluding the smelter).

In addition, negotiations to source additional power from the Zambian grid interconnector are now complete, with the delivery of power expected to commence imminently. Power supplied via the Zambian interconnector is expected to increase up to 100 MW by year end.

Photo: Yannick Banza, Control Room Supervisor, at work in the Phase 1 and Phase 2 Kakula concentrator control room. Kamoa-Kakula milled a record 8.54 million tonnes in 2023 at an average grade of 5.23% copper.

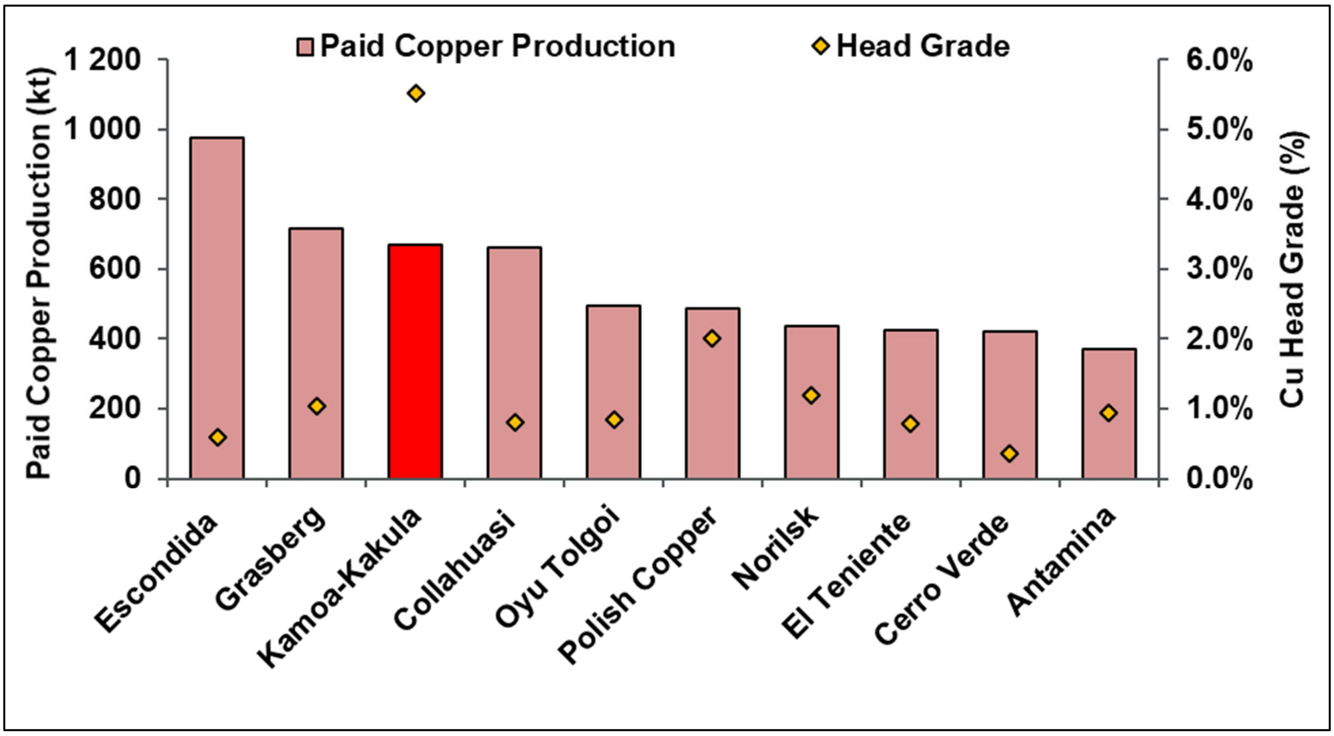
Construction of the Phase 3 concentrator plant and associated infrastructure is 82% complete and ahead of schedule for first production from late Q2 2024

Kamoa-Kakula's ongoing Phase 3 concentrator is expected to be complete in late Q2 2024, significantly ahead of the original schedule. The new 5 Mtpa Phase 3 concentrator is located adjacent to the Kamoa underground mines, approximately 10 kilometres north of the Phase 1 and 2 concentrators located above the Kakula underground mine.

The process design of the Phase 3 concentrator is very similar to that of the Phase 1 and 2 concentrators, however 30% larger in capacity. 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 over 600,000 tonnes per year over the next ten years, positioning Kamoa-Kakula as the world's third-largest copper mining complex, and the largest copper mine on the African continent. See Figure 1.

Figure 1: World's 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, consists of two new underground mines called Kamoa 1 and Kamoa 2, as well as the existing Kansoko mine. The Kamoa 1 and Kamoa 2 mines share a single box cut with a twin service-and-conveyor decline. 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 for third quarter production.

Copper concentrate produced from Phase 3 concentrator will be partially sold to generate cash flow, and partially stockpiled in anticipation of the smelter commissioning scheduled for the end of 2024.

Photo: Aerial view of the box cut for the Kamoa 1 and Kamoa 2 mines, which share a twin service-and-conveyor decline.

The direct-to-blister copper smelter project is 76% complete and on target for commissioning end 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 onsite 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.

The smelter construction project is now 76% complete and on schedule for commissioning at the end of Q4 2024. Detailed engineering and procurement activities for the smelter are essentially complete. More than 15,000 tonnes of the total approximately 24,000 tonnes of structural steel has been delivered to site, with over 8,500 tonnes already installed. Of a total of approximately 73,200 tonnes of equipment packages, 35,400 tonnes has been delivered to site with an additional 22,500 tonnes on route. The remaining equipment will be delivered over the course of the year. Civil construction is nearing completion with structural steel erection and mechanical equipment installation well underway.

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 planned 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 currently account for approximately 150,000 tonnes of copper concentrate annually.

Photo: The Phase 2 smelter construction site with the Phase 1 and Phase 2 concentrators in the background. The smelter complex remains on schedule for commissioning in Q4 2024.

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 a strong demand for sulphuric acid in the DRC, as it is used to leach copper from oxide ores through the SX-EW (solvent extraction and electrowinning) process. In 2023, approximately 6 million tonnes of acid were consumed by mining operations in the DRC. Domestic acid demand is expected to increase to over 7 million tonnes in the short to medium term. The market price for acid in the DRC is comparatively expensive, as most of the high-strength sulphuric acid consumed is imported first as sulphur, with high associated transportation costs, and burned in domestic acid plants to create liquid high-strength sulphuric acid. Offtake contracts for the high-strength sulphuric acid produced by the smelter are well advanced with local purchasers.

The on-site smelter will offer transformative financial benefits for the Kamoa-Kakula Copper Complex, most significantly 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 33% of Kamoa-Kakula's total cash cost (C1) during Q4 2023, and the volume of shipments is expected to more than halve following the smelter start-up as trucks will transport 99+%-pure blister copper anodes instead of concentrate with approximately 50% contained copper. Smelting on-site is expected to drive a decrease in average cash cost (C1) of approximately 20%.

Photo: Construction of the main smelter building for the Phase 3 direct-to-blister flash furnace and electric slag cleaning furnace is well advanced.

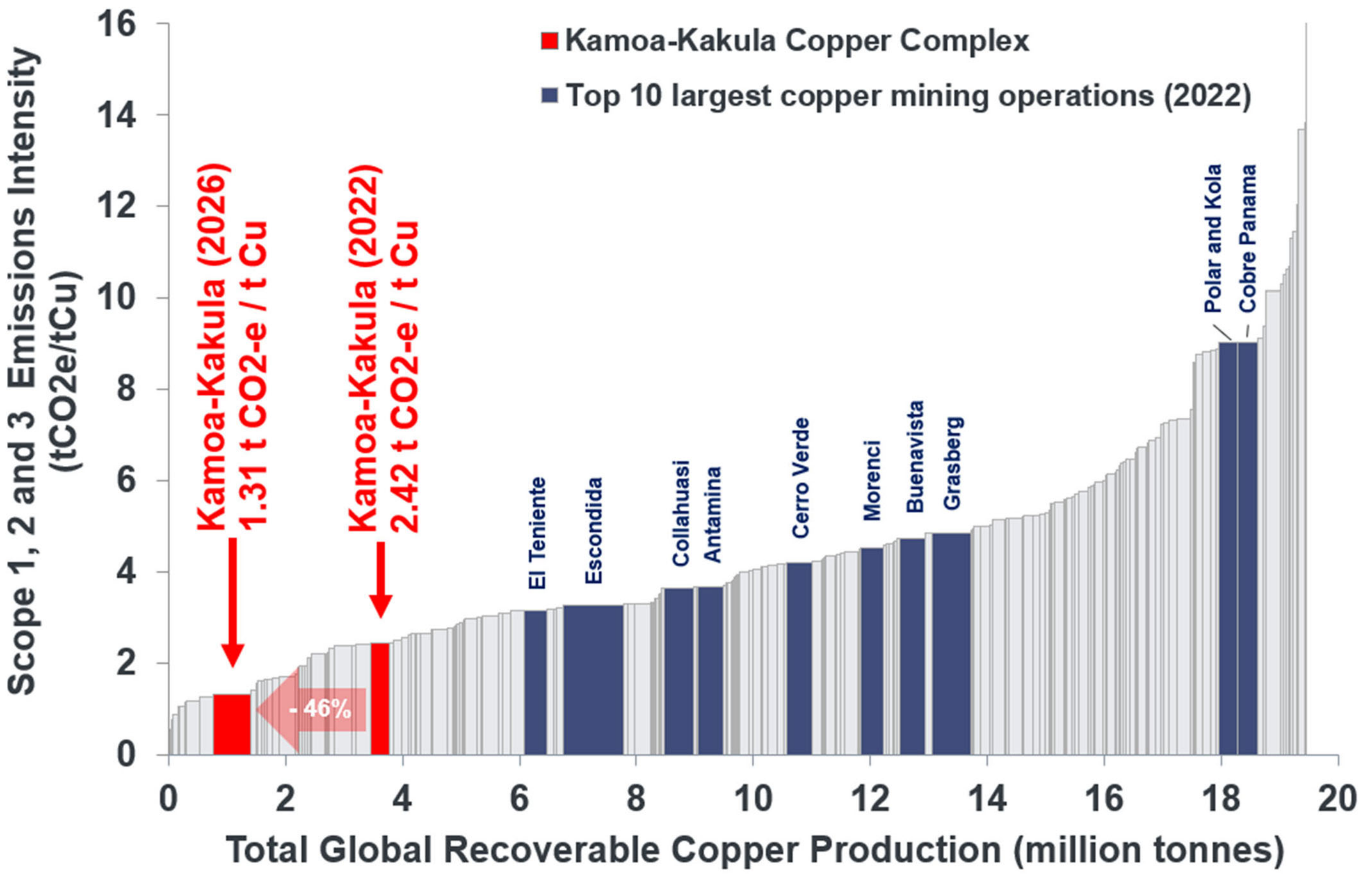
Smelter investment will reduce Kamoa-Kakula carbon emissions per unit of refined copper (Scope 1, 2 and 3) by an additional 46%

Based on Scope 1, 2 and 3 (partial) emissions, including downstream emissions beyond the mine gate to produce LME-grade refined metal, Skarn Associates and WSP Group estimate that Kamoa-Kakula's GHG emissions-intensity in 2022 was 2.42 t CO2-e / t Cu, already the lowest carbon emitting major copper mine.

Following the completion of the Phase 3 expansion and the smelter, the emissions intensity of Kamoa-Kakula on a Scope 1, 2 and 3 basis is estimated to almost halve to 1.31 t CO2-e / t Cu. Industry peer data compiled by Skarn Associates ranks Kamoa-Kakula Copper Complex comfortably within the bottom decile of the GHG emissions intensities on a Scope 1, 2 and 3 basis as shown in Figure 2.

The significant reduction in GHG emissions is due to the improvement in Scope 3 emissions from the on-site smelter. This is partially due to the smelter being inherently lower in GHG emissions-intensity compared with typical smelters due to clean hydropower from the DRC grid and compliance with world-class IFC emissions standards. The most significant impact is in terms of the transportation of a higher-grade copper anode (99.7% contained copper), instead of shipping copper concentrate (50% contained copper).

Figure 2: 2022 Scope 1, 2 & 3 copper GHG emissions intensity curve, highlighting Kamoa-Kakula and top 10 largest copper mining operations. Following the completion of the on-site smelter, as part of the Phase 3 expansion, the GHG emissions intensity is expected to almost halve.



Source: Skarn Associates and WSP Group. For full footnotes reference original news release dated November 3, 2023.

Basic engineering for "Project 95" is underway. Project 95 launched to increase Kamoa-Kakula's copper recoveries to 95% by liberating copper from the tailings stream

Ivanhoe announces Project 95 at Kamoa-Kakula, an initiative targeting to increase overall metallurgical copper recoveries to 95% by liberating copper from the tailings stream at the concentrators, as well as re-treatment of tailings deposited to date.

Ivanhoe previously announced highly promising preliminary test work on liberating additional copper from the tailings stream of the Phase 1 and 2 concentrators. The grade of Kamoa-Kakula's tailings in 2023 averaged approximately 0.8% copper, which is higher than the average head grade of the copper mines globally.

Using conventional fine grinding, the test work results indicated that with a feed grade of less than 1% copper, approximately 65% of the remaining contained copper can be recovered from the tailings stream. Project 95 is intended to boost the overall copper recovery rate of the concentrators to approximately 95%. Basic engineering on the tailings-stream recovery plant is underway and is expected to be completed early in Q2 2024.

For context, in 2023 the Kamoa-Kakula Copper Complex milled approximately 8.54 million tonnes of ore, producing 393,551 tonnes of copper in concentrate at an 87.3% metallurgical recovery rate, in line with design parameters. Over 50,000 tonnes of contained copper were not recovered into concentrate and diverted to the tailings storage facility, or used underground as backfill in 2023.

Refurbishment of hydropower at Inga II approximately 60% complete and on-schedule for Q4 2024 completion

The refurbishment of Turbine #5 at the Inga II hydroelectric facility is approximately 60% complete and advancing on-schedule, and well within budget, to generate 178 MW of hydroelectric power for the DRC grid in Q4 2024.

The old turbine, transformers, alternators, and all associated control equipment were successfully dismantled and removed in 2023.

All the new equipment packages, consisting of the transformers, the turbine, and the alternator were delivered to site by December 31, 2023. All that remains to be delivered are the turbine runner and shaft, the alternator rotor poles and the water intake main gate, which have already been delivered and offloaded at the port of Luanda in Angola.

All contractors are mobilized on-site and ready to commence assembly works. Once the final equipment packages arrive on site and the ongoing refurbishment of the powerhouse gantry crane is complete, assembly works are expected to commence in the coming weeks. Wet commissioning and synchronization to the grid is on schedule for Q4 2024.

Photo: The delivery of Turbine #5's new runner recently arrived at the port of Luanda in Angola. Completion of refurbishment works remains on schedule to provide 178 MW of clean hydropower to the DRC grid in Q4 2024.

Agreement to commence exports of copper products from Kamoa-Kakula via the Lobito Atlantic Rail Corridor

On August 16, 2023, Ivanhoe announced that Kamoa Copper had signed a memorandum of understanding (MOU) with Lobito Atlantic International SARL (LAI) for the transportation of Kamoa-Kakula's copper concentrate by rail to the Atlantic Ocean port of Lobito in Angola.

The rail line linking the DRC Copperbelt to the port of Lobito, Angola, is known as the "Lobito Atlantic Railway Corridor" or "Lobito Corridor". The rail line extends for 1,739 kilometres from Lobito to Kolwezi in the DRC, passing within five kilometres of the Kamoa-Kakula licence boundary and through the Western Forelands exploration licences.

The first shipment of approximately 1,110 tonnes of Kamoa-Kakula's copper concentrate was loaded on rail wagons in Kolwezi and departed west along the Lobito Corridor on December 23, 2023. The shipment arrived at the port of Lobito eight days later on December 31, 2023, taking roughly one third of the time of alternative trucking routes. Information from trial shipments will be gathered on greenhouse gas (GHG) savings, transit times, operating costs and other operational factors.

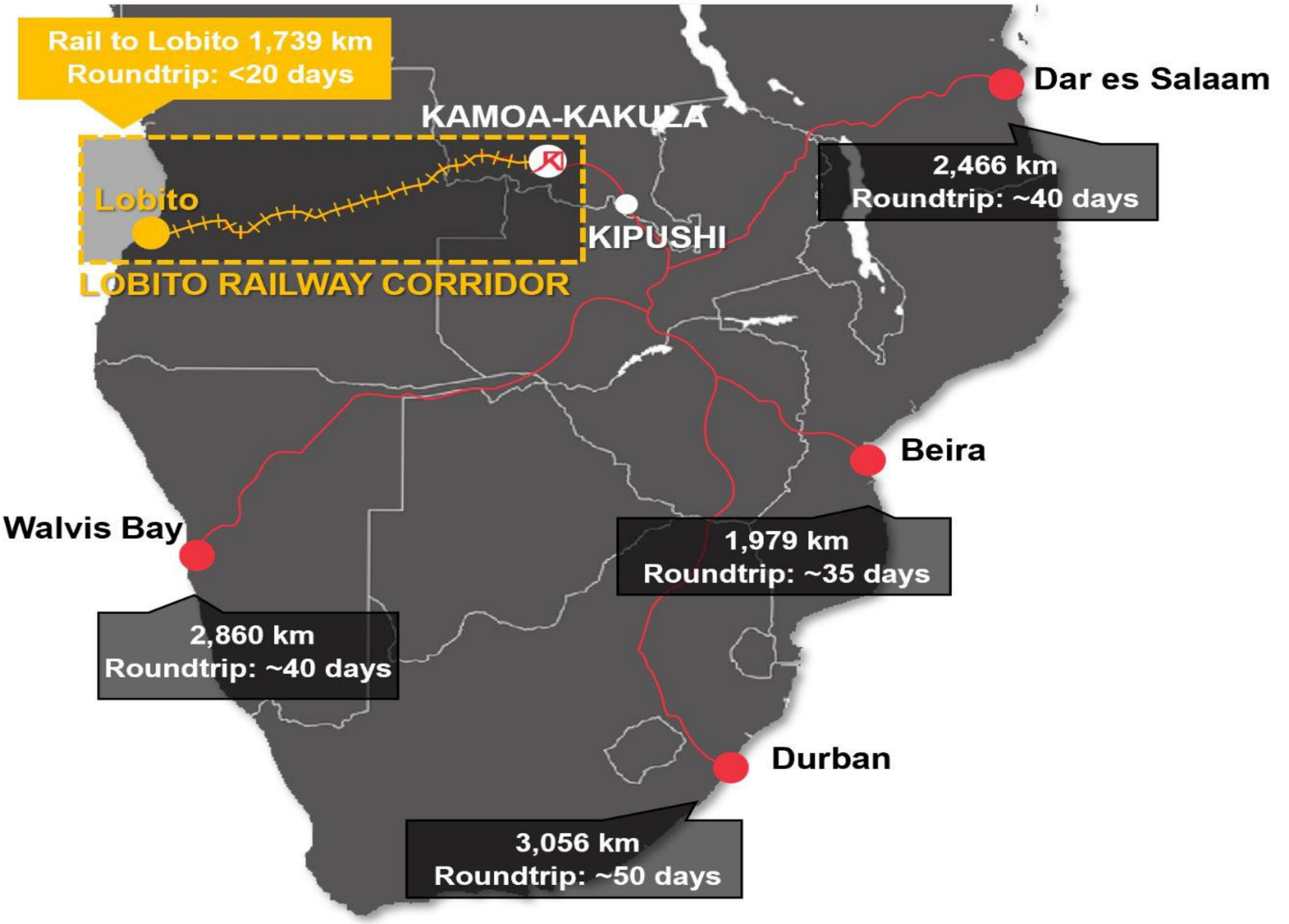
Photo: The first train of the trial shipment of copper concentrate, carrying over 600 tonnes across 16 wagons, arrived at the Atlantic Ocean port of Lobito, Angola on December 31, 2023.

Once fully active, the Lobito Atlantic Railway Corridor is expected to transform regional logistics and reduce the Scope 3 carbon emissions footprint of Kamoa-Kakula’s copper exports. The development of Ivanhoe’s current and future copper discoveries within the Western Forelands basin will also greatly benefit from the Lobito Corridor.

On February 7, 2024, Ivanhoe announced that Kamoa-Kakula had signed a term sheet outlining the key terms for a Reserved Capacity Agreement for transporting mineral products from the Kamoa-Kakula Copper Complex along the Lobito Atlantic Railway Corridor. The agreement will allocate Kamoa-Kakula the right to transport along the Lobito Corridor a minimum of 120,000 tonnes and a maximum of 240,000 tonnes per annum of blister-anode or concentrate.

The term sheet outlines a minimum term for the agreement of five years commencing in 2025, following a ramp-up year in 2024. The costs of exporting mineral products along the Lobito Corridor are expected to be cheaper than the current market price for trucking via the existing export routes, as shown in Figure 3, and the rates are anticipated to reduce further as volumes transported along the line increase.

Figure 3: Map of export routes currently used by Kamoa-Kakula in red, as well as the Lobito Corridor route in orange. Logistics costs currently account for one third of Kamoa-Kakula's total cash cost (C1), due to the long in-land distances travelled by road for exports to reach port.



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 costs.

- 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, $1.15 billion was spent in 2023.

- 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, in addition to the Kamoa-Kakula 2023 PFS. This case includes 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 million tonnes of feed to the Kamoa and Kakula concentrators at an average grade of 3.1% copper, producing an additional 4.8 million tonnes 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 2024

Kamoa-Kakula 2024 Guidance	
Contained copper in concentrate (tonnes)	**440,000 to 490,000**
Cash cost (C1) ($ per pound of payable copper produced)	**1.50 to 1.70**

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 2024 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 for the completion of the Phase 3 concentrator and reliability of DRC grid power supply, among other variables. The Kamoa-Kakula joint venture produced a total of 393,551 tonnes of copper in concentrate for the year ended December 31, 2023, including 92,215 tonnes of copper in concentrate in Q4 2023.

Cash cost (C1) per pound of payable copper amounted to $1.45/lb. for the year ended December 31, 2023, including $1.53/lb. in Q4 2023. Cash cost guidance is based on assumptions including copper ore grade processed, completion of the Phase 3 concentrator, reliability of DRC grid power supply and prevailing logistics rates among other variables.

Cash cost guidance includes a provision for the use of on-site, back up generator capacity during 2024 to support the Phase 1 and 2 operations during periods of intermittent power from the grid, and particularly due to the early commissioning of Phase 3. On-site backup power is approximately 3 to 4 times greater in cost than the grid-supplied power by SNEL on a cents per kilowatt hour basis. Increased reliance on backup power can result in an increase in cash cost of up to approximately $0.20/lb., which is captured in the guidance range.

Cash cost guidance is impacted by the timing of Kamoa-Kakula's Phase 3 concentrator which is well ahead of schedule for first production in late Q2 2024. Copper in concentrate produced by the Phase 3 concentrator is expected to have a higher cash cost when compared to Phase 1 and Phase 2 due to the lower average copper grade expected from the Kamoa 1 and Kamoa 2 mines feeding the Phase 3 concentrator, compared to the Kakula Mine feeding the Phase 1 and Phase 2 concentrators. Completion of the on-site smelter, on schedule for commissioning in Q4 2024, is expected to drive a decrease in average cash cost (C1) over the first five years post-completion (from 2025) by approximately 20%.

Cash cost (C1) 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 cash cost (C1) 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: Sarah Kaind, Data Capture Specialist, standing in front of the Phase 2 concentrator feed conveyors.

Photo: Junior Davis, SMPP Supervisor (left) and Tendayi Manyangedze, Supervisor E&I (right) consult at the new underground pump station at the Kakula North underground.

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 (JOGMEC), 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.

Photo: Looking northeast over the Platreef site, with the Shaft #2 and Shaft #1 headgear centre and the Phase 1 concentrator on the right.

Optimized Platreef development plan to accelerate and re-scope Phase 2 to 4-Mtpa capacity by equipping Shaft #3 for hoisting

Ivanhoe's engineering team recently completed an internal optimization study of the phased expansion of the Platreef Project. Current underground development and operations are dependent on the initial 1 Mtpa Shaft #1 until the 10-metre diameter, 8 Mtpa Shaft #2 is commissioned. Our studies have concluded that accelerating the startup of Phase 2 will create significant project value.

Phase 2 expansion will be accelerated by re-purposing ventilation Shaft #3 for hoisting. Shaft #3 will generate additional hoisting capacity of approximately 3 Mtpa, bringing total hoisting capacity to approximately 4 Mtpa.

The reaming of Shaft #3 commenced in 2023 and is progressing well, with over 500 metres of a total of 950 metres completed. Reaming is the process of boring, or excavating, a vertical shaft from the bottom up and is the quickest and safest method of constructing a shaft. Reaming is expected to be completed in the second quarter of 2024. Once equipped, Shaft #3 is expected to be ready for hoisting in the fourth quarter of 2025, well ahead of the completion of the much larger Shaft #2.

Photo: The raisebore machine, in the foreground, is reaming Shaft #3 to a diameter of 5.1 metres. Adjacent to the raisebore, civil works are progressing well for the auxiliary and stage winders.

The internal study concluded that equipping Shaft #3 for hoisting de-risks Phase 1 underground operations ahead of the completion of Shaft #2 and accelerates the underground development for Phase 2. In addition, the Phase 2 concentrator would have an increased processing capacity of 3.3 Mtpa, up from 2.2 Mtpa as per the first module of Phase 2 defined in the 2022 Platreef Feasibility Study. Therefore, the Phase 1 and Phase 2 concentrators will have total combined processing capacity of approximately 4.0 Mtpa, with ore fed from Shaft #1 and Shaft #3.

Additional underground ventilation will now be provided by a new 5.1-metre diameter shaft, named Shaft #4. The drilling of the pilot hole for Shaft #4 is expected to commence in the coming weeks. Once reaming is complete and the ventilation fans are installed, Shaft #4 is expected to be operational during the third quarter of 2025.

Following the completion of the optimization study, work is well underway on an updated independent Feasibility Study for Phase 1 and the Phase 2 expansion, which will be completed and published in the second half of 2024.

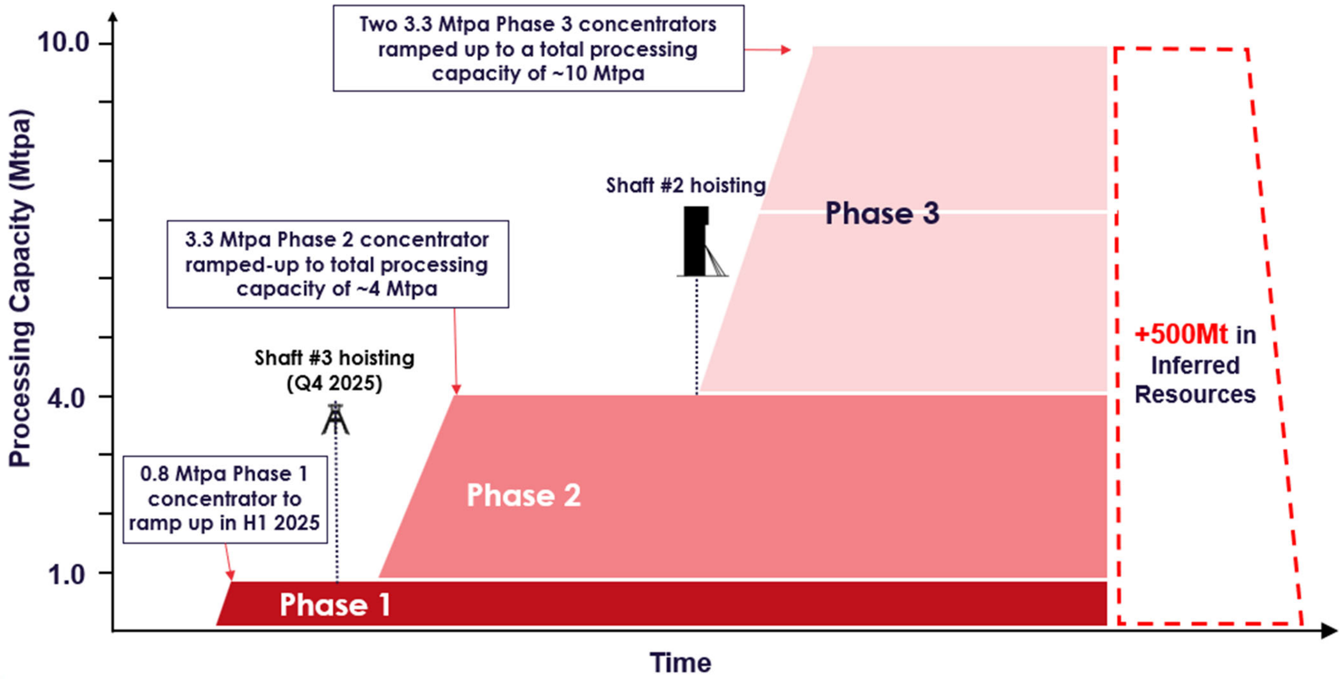
Photo: Site preparation for the reaming of ventilation Shaft #4 is progressing well. The pilot hole for the reamer is expected to commence drilling in the coming weeks. Shaft #4 is expected to be ready in the third quarter of 2025.

Study work in progress for new Phase 3 expansion to 10 Mtpa, expected to rank Platreef as one of the world's largest PGM producers

In parallel with the release of the updated Feasibility Study, Ivanhoe has also commissioned a preliminary economic assessment (PEA) for an additional expansion, Phase 3, taking the total Platreef processing capacity up to approximately 10 Mtpa (as shown in Figure 4). The new Phase 3 expansion is expected to consist of two additional 3.3-Mtpa concentrator modules, to be located adjacent to the Phase 1 and 2 concentrators. Phase 3 is anticipated to rank Platreef as one of the world's largest and lowest cost platinum-group metal, nickel, copper and gold producers. The 10 Mtpa concentrator capacity of the Phase 3 expansion will be 12.5 times greater than that of Phase 1 and 2.5 times greater than the processing capacity of the optimized Phase 2 expansion.

The completion of Shaft #2 will increase the total hoisting capacity for ore and waste development, across all three shafts to over 12 Mtpa.

Figure 4. Platreef's updated phased development strategy following optimization. An updated Feasibility Study and PEA, covering the scope of optimized Phase 2 and the new Phase 3 expansion is expected to be completed and published in the second half of 2024



Construction of Shaft #2 headgear 50% complete

Construction activities are advancing well on the installation of 1,124 tonnes of internal structural steel inside Shaft #2's headgear. In addition, all long-lead order equipment packages for the headgear have now been placed. The installation contract for the sinking winders and related infrastructure was also recently placed, with contractor onboarding planned over the coming month. The production winder, as well as the man and material winder, are expected to be delivered to site early in the third quarter.

The Shaft #2 sinking contract is currently out for tender and planned to be placed later this year, once the reaming of the shaft to an initial diameter of 3.1 metres is complete. Reaming is on schedule to be complete in the third quarter, after which enlargement out to a diameter of 10 metres, by a process known as slashing, will commence.

Photo: Bird's eye view looking down Platreef's Shaft #2 headgear. Following the completion of the outer concrete structure, construction activities are focused on installing 1,124 tonnes of internal structural steel.

Offtake agreement with Sibanye-Stillwater to support Phase 2 expansion of Platreef

Ivanplats has recently signed a Purchase of Concentrate Agreement with Western Platinum Proprietary Limited, a subsidiary of Sibanye-Stillwater Limited, for Phase 2 concentrate production. Sibanye-Stillwater is one of the world's largest primary PGM producers and operates the Marikana complex in North West province, South Africa, which includes a smelter plant with five furnaces, a base metal refinery plant, and a precious-metal refinery plant.

The offtake agreement is for 8 years from first production of Phase 2 and is for an initial volume of 60,000 tonnes of concentrate per annum, which is expected to represent between one-third and one-half of the re-scoped Phase 2 volume. Separately, Ivanplats and Sibanye-Stillwater are exploring the possibility of increasing the annual volume to 100,000 tonnes or more.

As previously disclosed, Platreef's Phase 1 concentrate production, for 10 years, will be purchased by Northam Platinum Limited (Northam). Northam is an independent, fully empowered, integrated PGM producer, with primary operations in South Africa including the wholly-owned Zondereinde Mine and metallurgical complex, and Booysendal Mine. Platreef's Phase 1 is expected to produce approximately 40,000 tonnes per year of concentrate, containing six payable metals, including palladium, nickel, platinum, rhodium, copper and gold.

Ivanhoe Mines signs term sheet with leading industrial partner to explore downstream processing of PGM-nickel-copper concentrate in South Africa

Ivanhoe Mines recently signed a term sheet with a leading industrial partner to jointly explore the viability of a new PGM-nickel-copper smelter in South Africa. The agreement outlines a technical and commercial collaboration to jointly study the construction of a facility to smelt PGM-nickel-copper concentrate produced during Phase 3, as well as third-party concentrates, into a converter matte. Converter matte is an intermediary smelter product that typically consists of approximately 40 to 50% nickel and 20 to 30% copper by content, with up to 750 grams per tonne of PGM content.

Converter matte can be further processed into refined metal in South Africa, as well as at many refineries abroad. In addition, converter matte receives significantly better terms from its purchasers compared with PGM concentrates.

Both parties have committed to undertake a pre-feasibility study on the development of the facility. The facility may be a greenfield site, or alternatively may re-purpose an existing facility in South Africa. The collaboration is designed to draw on the respective skills of both parties. The smelter would be joint-owned, with Ivanhoe owning no less than 50% and with a mechanism to increase its ownership in the future.

Construction activities for the Phase 1 concentrator are advancing on schedule for Q3 2024, with ramp-up deferred to early 2025

Construction of the Phase 1 concentrator is advancing on schedule at over 80% complete and is on track for cold commissioning in the third quarter of 2024. All engineering and procurement activities for the Phase 1 concentrator are essentially complete, with all long lead items delivered to site.

Cold commissioning activities for the Phase 1 concentrator are expected to continue as planned in Q3 2024. However, hot commissioning and ramp-up of production are now planned to be deferred until early 2025. This decision was taken to accommodate increased underground development, including critical-path Shaft #3 and Shaft #2 infrastructure while hoisting capacity is constrained to Shaft #1 only.

Photo: Looking north over the flotation cells of Platreef's 770,000 tonnes per annum Phase 1 concentrator, with the headgear of Shaft #1 (left) and Shaft #2 (right) in the background.

$150 million project financing agreement executed with Nedbank and Société Générale

A $150 million senior debt facility for Platreef Phase 1 has been executed with its mandated lead arrangers, Société Générale and Nedbank. The facility is expected to be drawn down in the coming months. Once the updated Feasibility Study is completed in the second half of 2024, Ivanhoe intends to arrange an enlarged project finance package for the subsequent phases of expansion.

Bulk water for Platreef operations is now supplied by treated local municipal wastewater

Ivanplats has an offtake agreement to receive bulk water for the phased development of the Platreef Project from the Mogalakwena Local Municipality. The 32-year agreement is for 3 million litres per day for Platreef's Phase 1 operations and up to 8 million litres per day for future expansions. The bulk water supply consists of municipal effluent from the surrounding communities, which is treated at the Masodi Wastewater Treatment Works. Ivanplats funded the completion of the Masodi Wastewater Treatment Works on behalf of Mogalakwena Local Municipality. The project was completed in the third quarter of 2023. Subsequently, the first water was received at the Platreef Project on December 1, 2023, and to date, a total of 400 cubic metres of water has been recycled from the wastewater treatment works.

Ivanplats has also signed a Memorandum of Agreement to upgrade the wastewater treatment works infrastructure within Mogalakwena Local Municipality, to increase the capacity of treated water available for offtake to support the additional future expansions of Platreef.

Photo: Aerial view of the Masodi Wastewater Treatment Works, which has been pumping recycled municipal wastewater to the Platreef Project since December 2023.

First solar power plant construction to commence imminently

All major equipment for the solar power plant, such as the inverter and solar panels has now been delivered to site. Construction of Platreef's first 5 MW solar power facility is expected to commence within the coming weeks and be completed in the second half of 2024. The power generated by the plant will support development activities and operations, together with other renewable energy sources that are expected to be introduced over time.

Photo: (L-R) Metsobane Mokoena, Fitter, MRC Engineering and Thabo Makgoba, Foreman, MRC Engineering, conducting maintenance at the 750-metre level workshop on the Ivanplat's Epiroc battery electric 17-tonne Scooptram

KIPUSHI PROJECT

The historic Kipushi zinc-copper-germanium-silver 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 DRC state-owned mining company, Gécamines.

For over 69 years up until 1993 when the mine was placed on care and maintenance, the Kipushi mine 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 in 2011, Ivanhoe's drilling campaigns have upgraded and expanded the mine's zinc-rich Big Zinc and Southern Zinc orebodies to a Measured and Indicated Mineral Resource of 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. 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.

Based on testwork conducted for the Kipushi 2022 Feasibility Study, Kipushi's high-grade zinc concentrate assays 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.

Photo: Aeriel view over the construction site of Kipushi's 800,000-tonne-per-annum concentrator. Bottom left and top right of the picture are the two ore stockpiles containing over 220,000 tonnes of high-grade zinc ore, ready for commissioning the concentrator, which is ahead of schedule for Q2 2024.

Ivanhoe Mines and Gécamines sign new joint venture to restart the ultra-high-grade Kipushi mine, a century since first opening

On January 16, 2024, the Company announced the signing of the new joint venture agreement with Gécamines to restart the Kipushi mine. Under the terms of the agreement, which remained unchanged from the term sheet signed between Kipushi Holding and Gécamines in 2022, an additional 6% of the share capital and voting rights will be transferred to Gécamines upon completion of the conditions precedent.

In recent months, the company has received significant interest in relation to the financing of Kipushi and the off-take of clean zinc concentrate the mine will produce. Negotiations are advancing with numerous parties, including facilities of up to $200 million or higher, and are expected to be concluded in the second quarter of 2024.

Photo: Maxwell Twite, Control Room Foreman, at work inside the new Kipushi control room.

Kipushi concentrator ahead of schedule for first production in Q2 2024, with the overall project approximately 85% complete

Construction of the new 800,000-tonne-per-annum concentrator facility is nearing completion. The concentrator includes dense media separation (DMS) and a milling and flotation circuit and is expected to produce more than 250,000 tonnes of zinc contained in concentrate over the first five years of production. Design recoveries are targeted at 96%, with a concentrate grade averaging 55% contained zinc.

With overall project progress to-date at approximately 85% complete, the Kipushi concentrator is ahead of schedule and is expected to be commissioned in Q2 2024. All equipment purchase orders have been placed with the last two packages placed in December 2023. To date, 77 of the total 79 equipment packages have been delivered to site.

The ball mill, fabricated by CITIC Heavy Industries of Henan Province, China was lifted into position in December. The DMS plant, fabricated by Bond Equipment of Gauteng, South Africa and the flotation cells fabricated by FL Smidth of Copenhagen, Denmark, have been completed and installed on site. All mechanical and electrical equipment packages are in the process of completing onsite installation and testing.

All 2,139 tonnes of steel and all 254 tonnes of platework required for the concentrator structures are either on site or on route to site. Electrical installation is advancing well with some of the substations already energized.

The construction of the tailings storage facility is complete with some minor equipping still outstanding. Commissioning is scheduled for late Q1 2024, ahead of the concentrator commissioning. The tailings storage facility has been designed in accordance with Global Industry Standards on Tailings Management (GISTM).

The erection of the concentrate warehouse structural steel is well advanced with sheeting installation ongoing.

Photo: Construction of Kipushi's concentrator plant is approximately 85% complete and ahead of schedule for first production in Q2 2024.

Underground development ahead of schedule, with over 4,000 metres completed, in 2023.

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.

The underground mining and development are fully mechanized, highly efficient and designed to enable a quick ramp-up to a steady state of 800,000 tonnes per annum. By the end of 2023, four mining crews had been deployed underground. An additional crew will be deployed for the stoping production ramp-up later this quarter. Each mining crew is made up of five miners per shift and equipped with a primary fleet supplied by Epiroc of Stockholm, Sweden, a 282 Twin Boomer, a ST 14 Scooptram (LHD) and two MT42 dump trucks with a Simba long hole stope drill rig in addition for the stoping crew.

Photo: Crews with a remote-operated Simba longhole drill rig, drilling the stope slot holes on the 1,220-metre level in preparation for a blast of the trial mining stope.

Underground development continues to open multiple access levels into the Big Zinc orebody, from the top down, while decline development continues to spiral down parallel to the plunging Big Zinc deposit.

As at December 31, 2023, 4,565 metres of lateral and decline development was completed for the project to date, and a total of 3,957 metres of horizontal development had been completed during 2023, approximately 20% ahead of schedule.

Following the mobilization of the remaining underground equipment fleet and the fourth mining crew, the underground development rate reached an average of 404 metres per month in the fourth quarter.

Stoping of ultra-high grade Big Zinc orebody started ahead of schedule; approximately 220,000 tonnes of developed ore stockpiled on surface

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

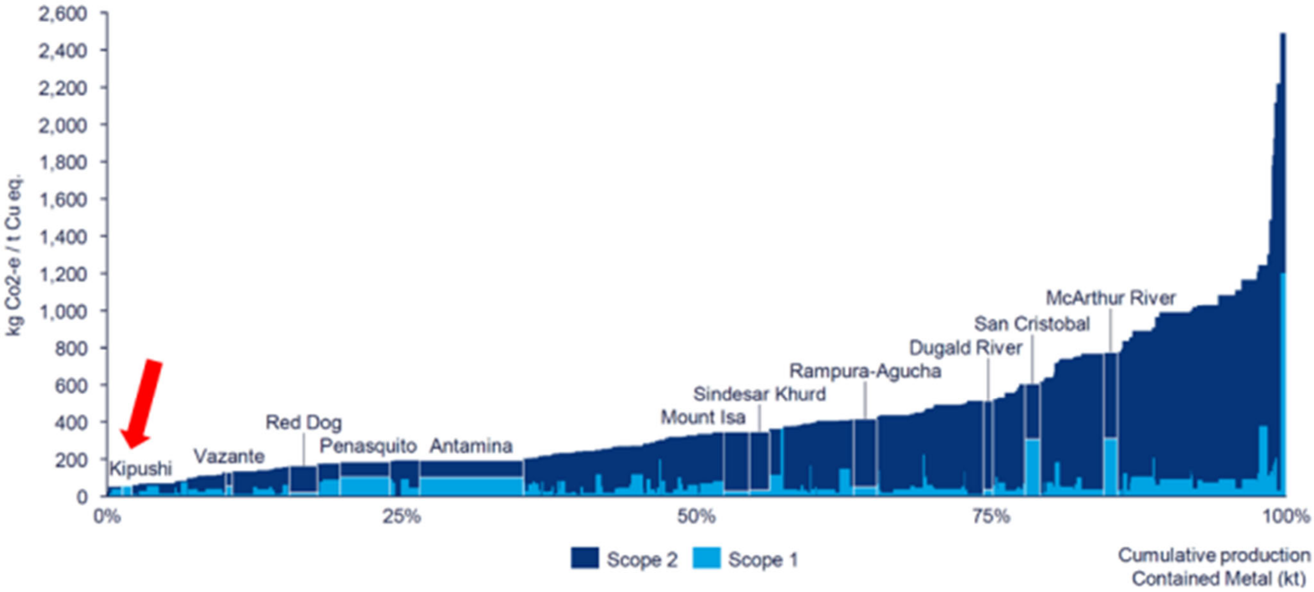
The height of each long-hole stope is approximately 60 metres, comprising an upper 30 metre-high stope and a lower 30-metre-high stope. Stopes will be separated by a 15-metre-high sill pillar. The long-hole stopes will be mined with a bottom-up mining sequence, with the lower stope extracted first followed by the upper stope.

Stoping of Kipushi's ultra-high-grade Big Zinc orebody commenced in December 2023 ahead of schedule. Stoping started on a trial mining basis to complete the training of the underground mining crews in preparation for the commencement of commercial operations in the coming months.

Ore from underground development and trial stoping is being stockpiled on surface ahead of the concentrator commissioning in the second quarter. To date over 200,000 tonnes of ore is stockpiled on surface near the Kipushi concentrator, at an average grade of 22% zinc. This includes 190,000 tonnes of "low-grade" ore at an average grade of 20% zinc, and 30,000 tonnes of "medium-grade" ore at an average grade of 30% zinc.

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 second percentile of the Scope 1 + 2 greenhouse gas emissions curve. A study is underway to update the study to include Scope 3 emissions. See Figure 5 below.

Figure 5: 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 tonnes of carbon dioxide equivalent per tonne of zinc produced (t CO2-e/ t Zn).



WESTERN FORELANDS EXPLORATION PROJECT

Ivanhoe's DRC exploration group is targeting Kamoa-Kakula-style copper mineralization on its Western Forelands exploration licences using exploration 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 17 licences in the Western Forelands cover a combined area of approximately 2,407 square kilometres to the north, south and west of the Kamoa-Kakula Copper Complex. An additional 4 licences under joint venture bring the total exploration area to approximately 2,654 square kilometres.

To date, Ivanhoe's exploration team in the Western Forelands has made discoveries at Makoko, Kiala and, more recently, Kitoko.

A total amount of $23 million was spent on exploration activities in the Western Forelands during 2023. As announced on December 7, 2023, Ivanhoe expects to significantly increase group exploration budget in 2024 to $90 million, with the expenditure primarily focused on the Western Forelands. The increased budget will focus on Makoko and the geologically significant, high-grade Kitoko copper discovery, as announced on November 28, 2023.

Exploration activities continued in Q4 with the target areas of focus shown in Figure 6. Diamond and air core drilling activities as well as ground geophysics continued until early December, when the rainy season commenced. The wet season starts in November and continues until early April, with field access often restricted into May.

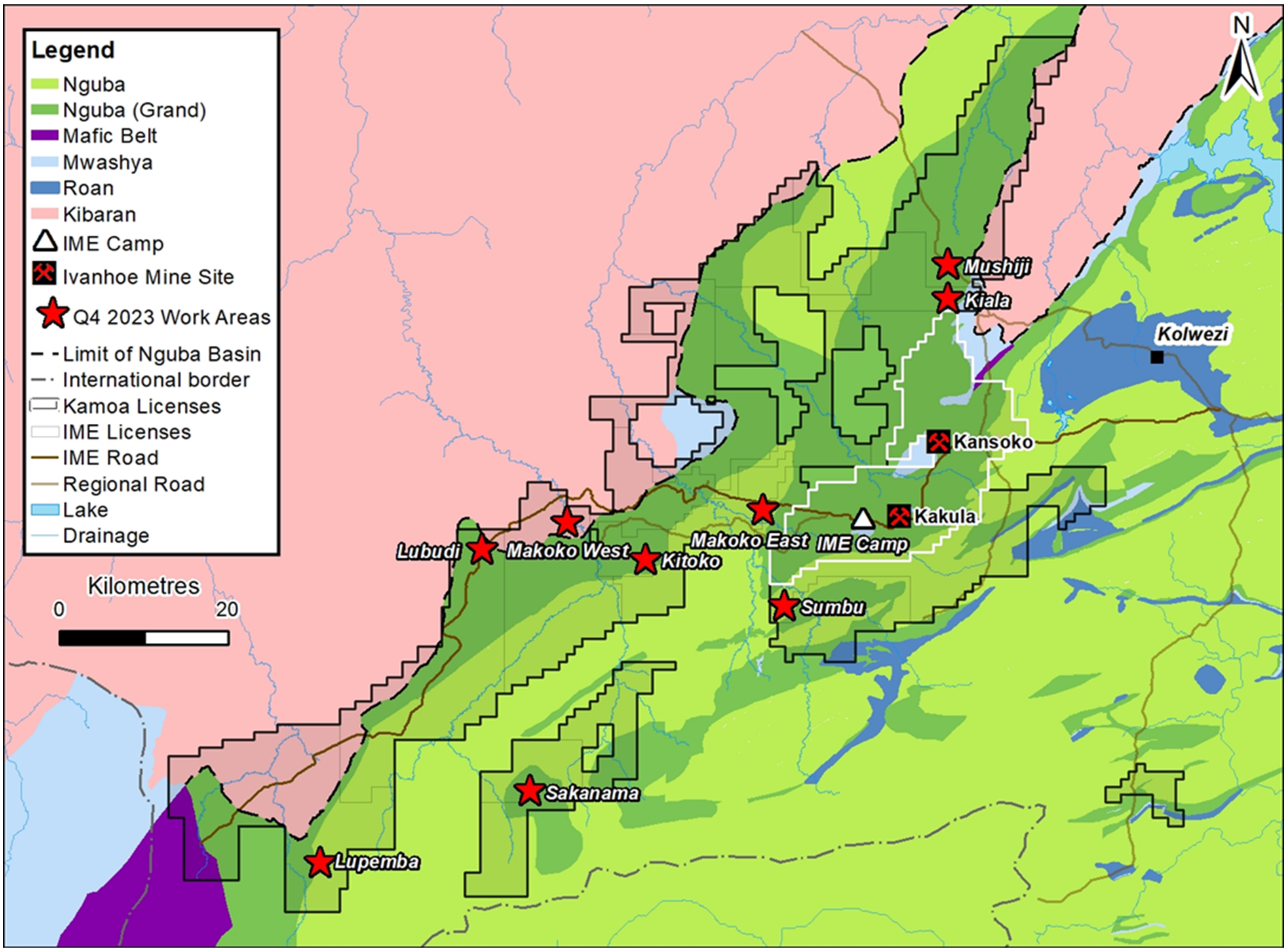
The Ivanhoe exploration team recommenced diamond drilling in January 2024 at Makoko West and Kitoko, where all-weather roads and drill pads were prepared ahead of time to ensure drilling continues throughout the current wet season. Work will recommence on the other prospects across the Western Forelands in the dry season in Q2 2024.

During Q4 2023, seven diamond core drill rigs were deployed across various targets on the Western Forelands consisting of 6 contractor-owned rigs and 1 rig owned by Ivanhoe. A total of 37,857 metres of diamond core were drilled in 2023, with 9,307 metres drilled during Q4 across 21 holes. Two additional diamond core rigs with deeper drilling capability will be deployed for exploration in the Western Forelands later this quarter.

Three air core drill rigs were in operation during Q4 across the Western Forelands. A total of 13,460 metres of air core drilling were completed in 2023, with 4,477 metres completed in Q4 across 155 holes. The air core drill rigs are typically deployed to the more remote extents of the Western Forelands licence package where they are used to map lithology and identify geochemical anomalism under a blanket of 10- to 40-metre-thick Kalahari sand cover. Each air core rig drills between 30 to 50 metres per day and is moved daily. Air core drilling has been curtailed for the wet season due to limited off-road access, and will recommence in Q2 2024.

Additionally, a large amount of ground gravity data was collected in Q4 to improve the ongoing development of Ivanhoe's geophysical model of the Western Forelands. This data was processed in December and is being combined with other data sets to generate new exploration targets through the Company's enhanced geological understanding following the Kitoko discovery.

Figure 6: Map highlighting Ivanhoe Mines' current exploration target areas across the Western Forelands licences.



Kitoko discovery further enhances Ivanhoe's proprietary exploration model

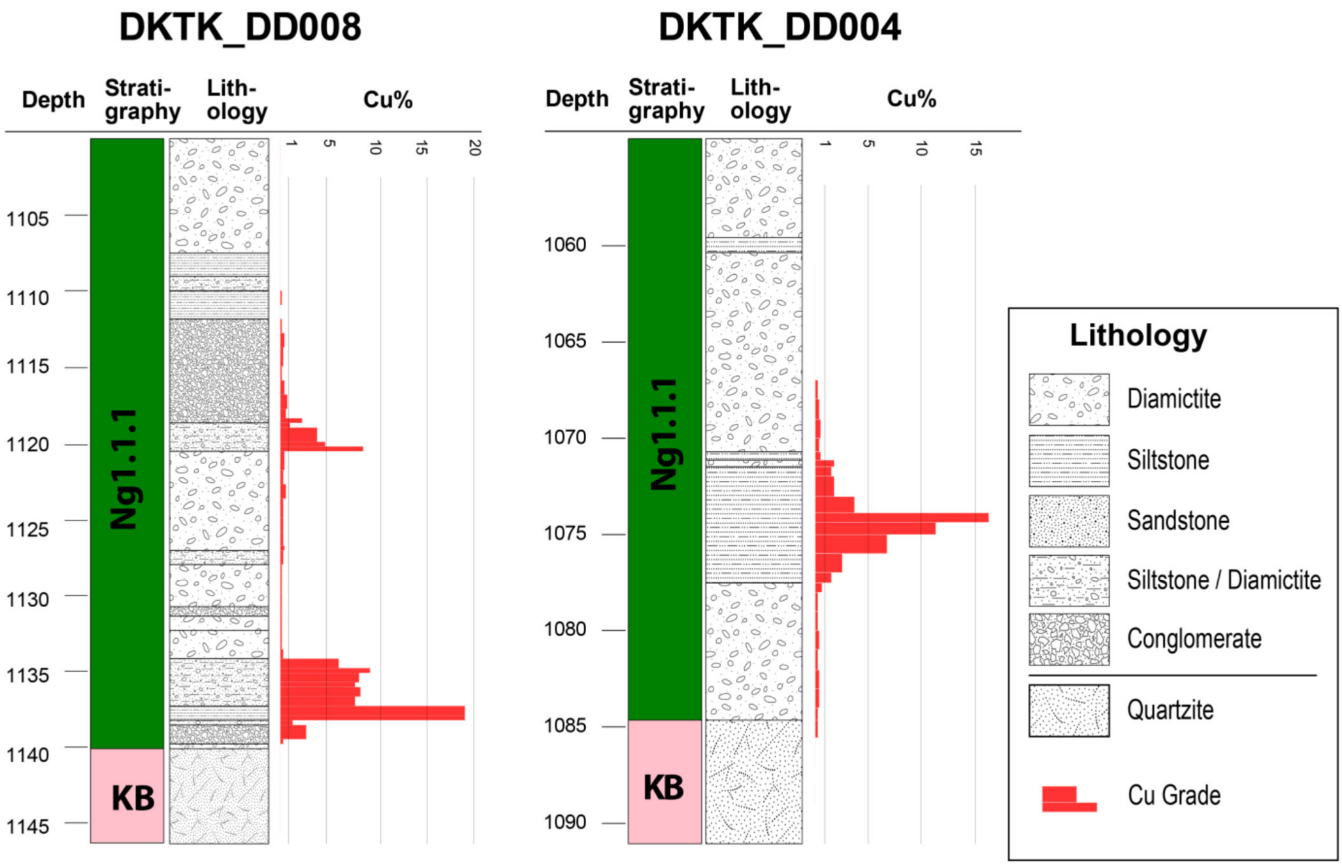
During Q4, Ivanhoe announced a significant high-grade copper discovery on recently acquired joint venture licences in the Western Forelands. The Kitoko discovery is approximately 25 kilometres west of the ultra-high-grade Kakula Mine, and five kilometres south and southeast of the Makoko deposit and is located inside a package of newly acquired joint venture licences in the Western Forelands. The new package of licences increases Ivanhoe's highly prospective Western Forelands land position by 10% to 2,654 square kilometres.

Under the terms of the joint venture that covers the 247 square kilometres of newly acquired licences, Ivanhoe has an initial interest of 10% with an earn-in right to increase its ownership by funding ongoing exploration activities. Ivanhoe expects to make further exploration spending commitments in 2024, to increase Ivanhoe's interest to 60%.

The Kitoko discovery confirms the presence of a significant high-grade copper mineralizing system between 1,000 metres and 1,140 metres below the surface open along strike and down dip. Kitoko fine-grained copper mineralization is hosted in two near flat-lying siltstones of the lower Grand Conglomerate, similar to that observed at the tier-one Kamoa, Kakula, Makoko and Kiala deposits. Also, like these deposits, the Kitoko mineralization is bottom-loaded with the highest copper grades occurring at the base of the mineralized zone.

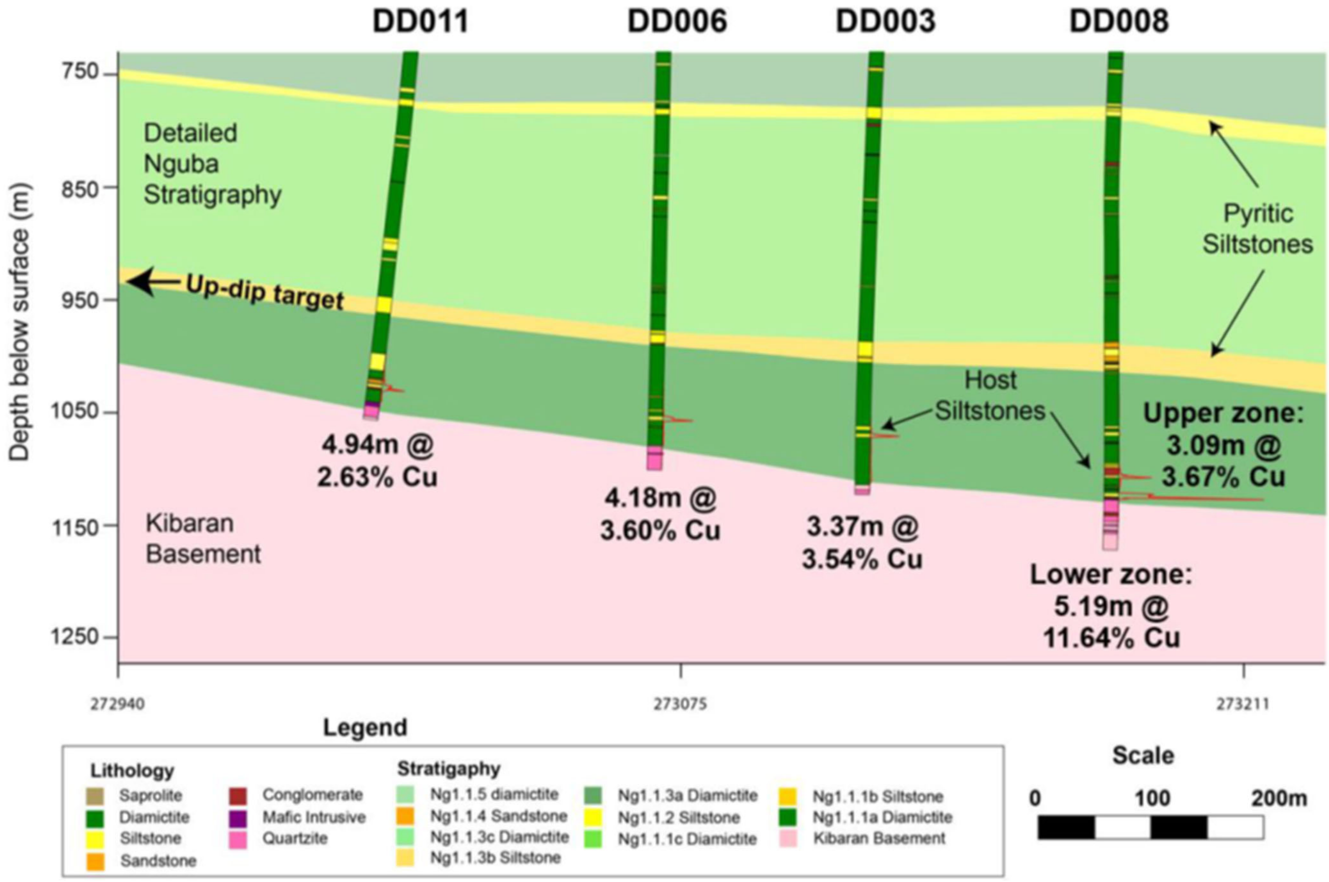
As mineralization occurs at the Kakula orebody, the lower section of the mineralized zone features occurrences of high-grade chalcocite and bornite copper sulphide minerals, with chalcopyrite copper sulphide mineralization more prevalent towards the top (see Figure 7).

Figure 7: Strip logs showing the mineralization and lithological host of the Kitoko discovery. The two holes (DD008 and DD004) are on separate sections 1,400 metres apart.



At year-end, the defined mineralized zone extended approximately 1.6km along strike and 600 metres along dip. (See Figure 8).

Figure 8: Zoomed in dip section, looking east of the Kitoko discovery, showing grade intervals at a 1% cut-off



After year-end, two infill holes (drilled as wedges off KTK08 and KTK10) and a step-out drill hole (KTK12) from the original Kitoko discovery holes each intersected high-grade mineralization, extending the mineralized strike length by 400 metres to approximately 2 kilometres. Over the coming months, further step-out drilling is planned along strike, up dip and down dip to identify the limits of the Kitoko mineralization system. Further infill drill holes are also planned between the two drilled sections to confirm continuity of mineralization.

Makoko emerges as the world's fourth-largest copper discovery over the past decade

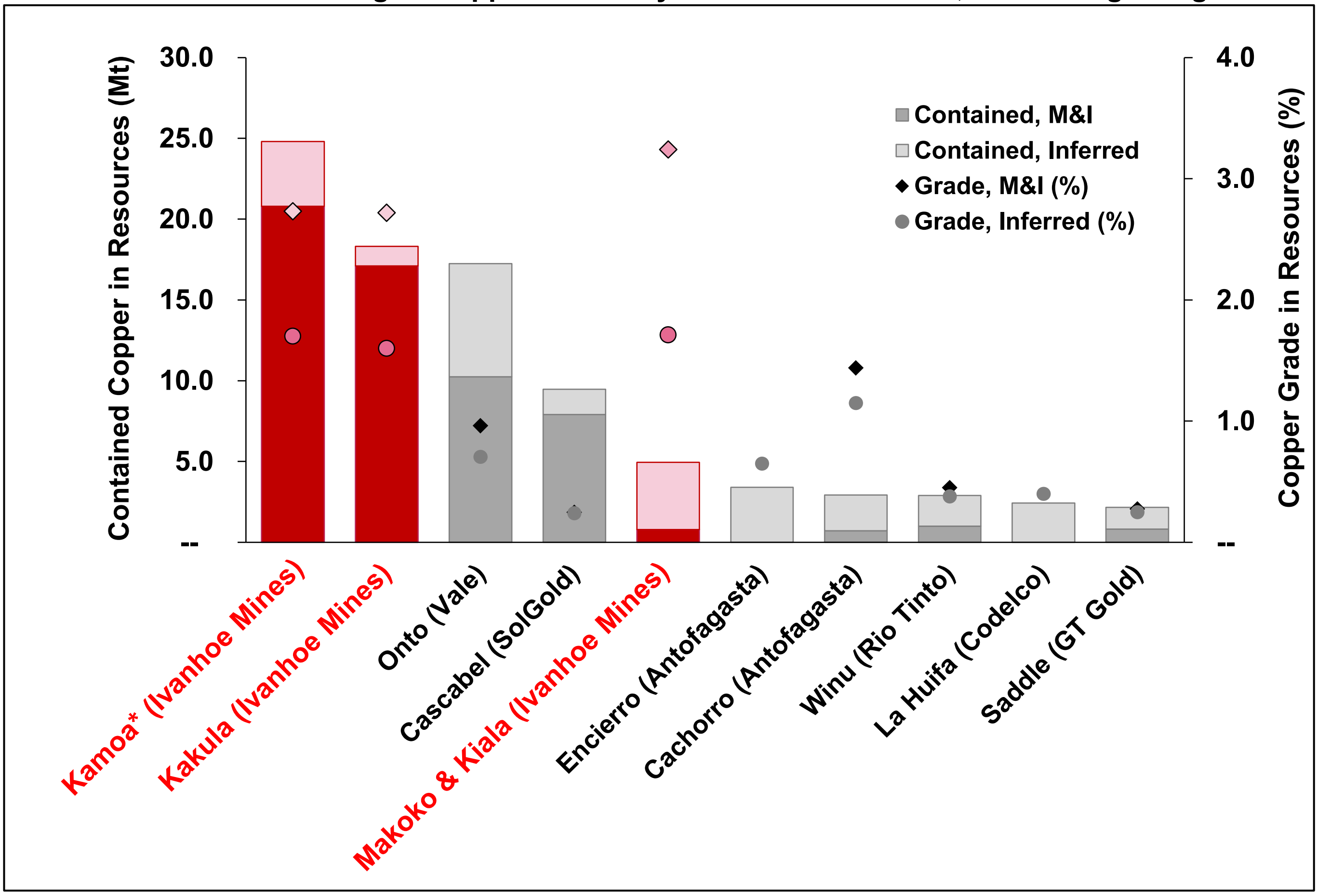
A maiden Mineral Resource estimate for the Makoko and Kiala high-grade copper discoveries in the Western Forelands was announced on November 13, 2023. Makoko now ranks as the world's third-largest and highest-grade copper discovery since Kakula in 2016 (see Figure 9). Ivanhoe's geologists have discovered a total of 38.7 million tonnes of contained copper in Measured & Indicated Resources and a further 9.4 million tonnes in Inferred Resources across the Western Forelands shelf, including the Kamoa and Kakula deposits.

Highlights of the maiden Makoko Mineral Resource estimate, prepared by Ivanhoe Mines under the direction of the MSA Group (MSA), of Johannesburg, South Africa, in accordance with the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves:

- Indicated Resources total 16 million tonnes at a grade of 3.52% copper, containing 1.3 billion pounds of copper at a 1% copper cut-off. At a higher 1.5% copper cut-off, Indicated Resources total 16 million tonnes at a 3.55% copper, containing 1.3 billion pounds of copper.
- Inferred Resources total 243 million tonnes at a grade of 1.71% copper, containing 9.2 billion pounds of copper at a 1% copper cut-off. At a higher 1.5% copper cut-off, Inferred Resources total 154 million tonnes at a 1.97% copper grade, containing 6.7 billion pounds of copper.

- The average vertical thickness of the selective mineralized zone at a 1.0% cut-off is 5.2 metres in the Indicated Resource area and 6.0 metres in the Inferred Resource area. At a higher 1.5% cut-off, the average vertical thickness of the selective mineralized zone is 5.2 metres in the Indicated Resource area and 6.6 metres in the Inferred Resource area.

Figure 9: Top copper discoveries over the past 10 years, plus Kamoa (2008). Makoko and Kiala rank as the world's third-largest copper discovery since Kamoa-Kakula, and the highest-grade.



*The Kamoa discovery, within the larger Kamoa-Kakula Copper Complex, was made in 2008. It has been inserted for reference.
Source: Company filings, S&P Global Market Intelligence. Based on public disclosure as of August 1, 2023. The Makoko and Kiala mineral resources (1.0% cut-off grade) have not been reviewed by S&P Global. The mineral resource at La Huifa (Codelco) is stated in public disclosures as a geological resource, which is assumed to be an Inferred resource in this chart. Notes: Chart ranks the largest copper discoveries made globally in the last ten years (from January 1, 2013) based on contained copper in resources. Measured and indicated resources are inclusive of reserves and are on a 100% basis.

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.

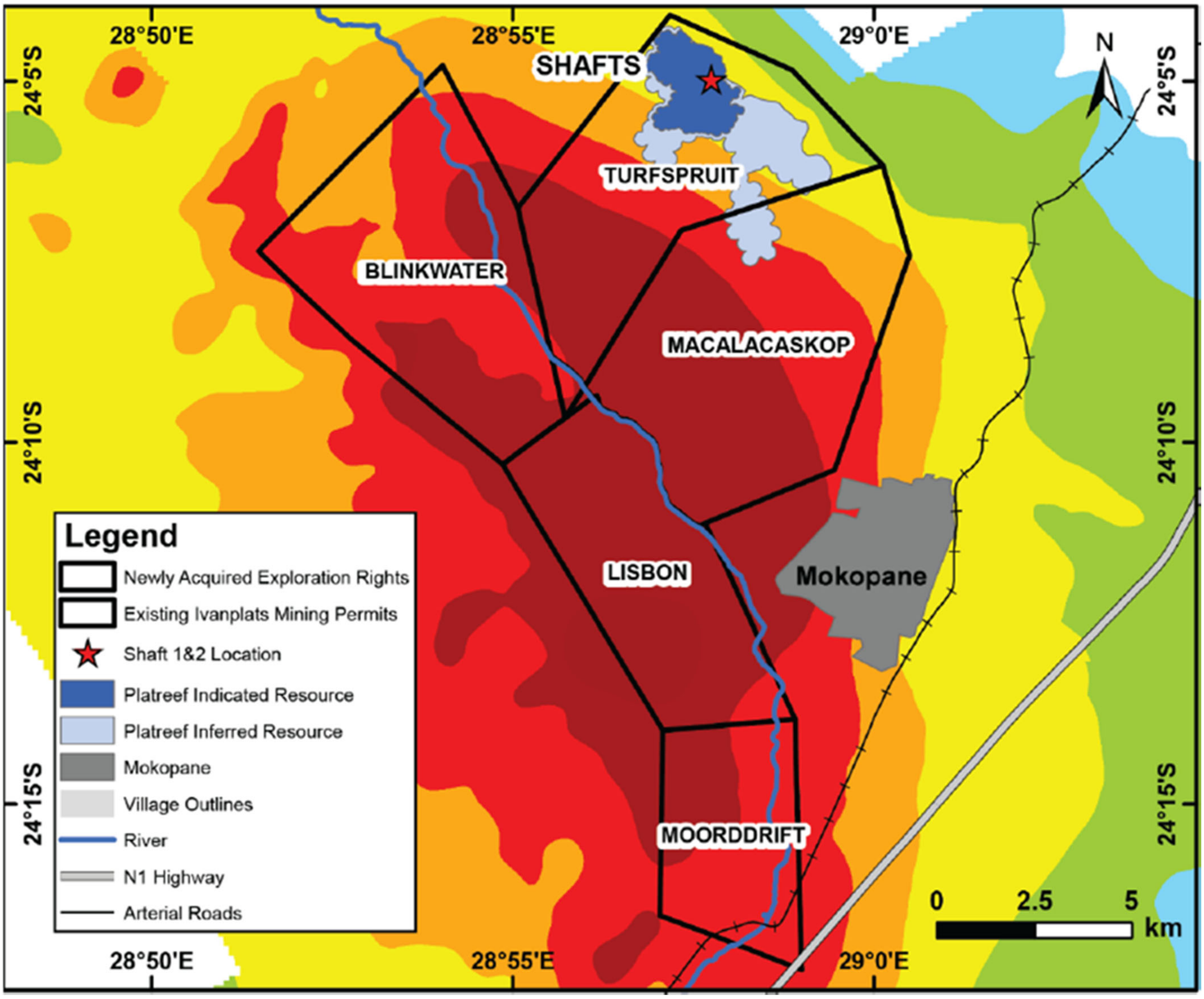
A gravity-high anomaly based on wide spaced historical Council for Geoscience data was interpreted to represent a primary feeder zone to the Rustenburg Layered Suite of the Northern Limb of the Bushveld Complex. The working hypothesis for this large gravity anomaly (the Mokopane Feeder) is that it represents a significant thickening of the Rustenburg Layered Suite, particularly of the denser Lower Zone units associated with regional scale crustal faults, with significant potential for nickel, copper and platinum-group metals mineralization.

Magnetic and gravity surveys completed in 2023, with drilling of the Mokopane Feeder exploration project to commence this quarter

Detailed high-resolution fixed-wing airborne magnetic and Falcon airborne gravity gradiometer geophysical surveys were completed during Q2 and Q3 respectively to map the subsurface petrophysical characteristics of the anomaly. Detailed inversion modeling and interpretation of the two high-resolution datasets was completed in December and has been used to refine target generation and follow-up diamond drillhole planning.

A geological project team has been established, with community engagement and environmental compliance for land access being carried out by Ivanhoe's environmental team ahead of drilling. Site mobilization of a drilling contractor will commence later in the coming months once the consultation phase has been completed and drillhole locations are finalized. The initial program consists of 4,000 metres of diamond core drilling.

Figure 10: High-resolution Bouguer Gravity results from the Falcon survey completed in Q3 2023 across the Platreef and Mokopane Feeder licence areas. The image shows one of the largest gravity-high anomalies recorded in South Africa, indicating underlying high-density rock.



SELECTED ANNUAL FINANCIAL INFORMATION

The selected financial information is in accordance with IFRS as presented in the annual consolidated financial statements. Ivanhoe had no operating revenue in any financial reporting period. All operating 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.

	For the year ended December 31,		
	2023	**2022**	**2021**
	$'000	**$'000**	**$'000**
Share of profit from joint venture	274,826	254,180	105,742
Finance income	239,563	175,298	102,290
Deferred tax recovery	8,304	113,250	75,041
(Loss) gain on fair valuation of embedded derivative	(85,261)	22,900	(93,700)
General administrative expenditure	(43,833)	(36,264)	(38,473)
Finance costs	(31,497)	(38,084)	(32,891)
Share-based payments	(29,269)	(27,216)	(20,002)
Exploration and project evaluation expenditure	(22,657)	(33,912)	(52,171)
Profit (loss) attributable to:			
Owners of the Company	318,928	410,864	55,242
Non-controlling interest	(15,984)	23,242	(9,930)
Total comprehensive (profit) loss attributable to:			
Owners of the Company	307,578	409,542	29,790
Non-controlling interest	(17,116)	23,338	(12,648)
Basic profit per share	0.26	0.34	0.05
Diluted profit per share	0.26	0.33	0.05
Total assets	5,000,261	3,969,285	3,218,206
Non-current liabilities	1,221,532	1,060,913	809,253

DISCUSSION OF RESULTS OF OPERATIONS

Review of the year ended December 31, 2023 vs. December 31, 2022

The Company recorded a profit for the year of $303 million and total comprehensive income of $290 million compared to a profit of $434 million and total comprehensive income of $433 million for the same period in 2022. The main contributor to the profit for 2023 was the Company's share of the profit from the Kamoa Holding joint venture. The profit for the year ended December 31, 2022 included a gain on fair valuation of embedded derivative liability of $23 million, compared to a loss on fair valuation of embedded derivative liability of $85 million for the same period in 2023. The profit for the year ended December 31, 2022, also included the recognition of the deferred tax asset relating to the Kipushi Project of $113 million.

The Kamoa-Kakula Copper Complex sold 375,779 tonnes of payable copper in 2023 realizing revenue of $2,704 million for the Kamoa Holding joint venture, compared to 323,733 tonnes of payable copper sold for revenue of $2,148 million in 2022. The Company recognized income in aggregate of $482 million from the joint venture in 2023, which can be summarized as follows:

	Year ended December 31, 2023	2022
	$'000	$'000
Company's share of profit from joint venture	274,826	254,180
Interest on loan to joint venture	207,608	151,066
Company's income recognized from joint venture	**482,434**	**405,246**

The Company’s share of profit from the Kamoa Holding joint venture was $275 million for the year ended December 31, 2023, compared to a profit of $254 million for the same period in 2022, the breakdown of which is summarized in the following table:

	Year ended December 31, 2023	2022
	$'000	$'000
Revenue from contract receivables	2,697,257	2,357,335
Remeasurement of contract receivables	6,701	(209,664)
Revenue	**2,703,958**	**2,147,671**
Cost of sales	(1,103,110)	(775,424)
Gross profit	**1,600,848**	**1,372,247**
General and administrative costs	(142,707)	(86,043)
Amortization of mineral property	(11,465)	(12,134)
Profit from operations	**1,446,676**	**1,274,070**
Finance costs	(352,700)	(295,303)
Foreign exchange loss	(59,898)	(247)
Finance income and other	34,306	13,439
Profit before taxes	**1,068,384**	**991,959**
Current tax expense	(292,303)	(46,055)
Deferred tax expense	(65,569)	(291,838)
Profit after taxes	**710,512**	**654,066**
Non-controlling interest of Kamoa Holding	(155,308)	(140,572)
Total comprehensive income for the year	555,204	513,494
Company's share of profit from joint venture (49.5%)	**274,826**	**254,180**

The realized and provisional copper prices used for the remeasurement (mark-to-market) of contract receivables for the year ended December 31, 2023, can be summarized as follows:

	FY 2023	Q4 2023	Q3 2023	Q2 2023	Q1 2023
	$'000	**$'000**	**$'000**	**$'000**	**$'000**
Realized during the period - open at the start of the period					
Opening forward price ($/lb.)[1]	3.72	3.79	3.78	4.05	3.79
Realized price ($/lb.)[1]	4.05	3.68	3.86	3.79	4.07
Payable copper tonnes sold	73,285	105,206	92,501	37,092	51,178
Remeasurement of contract receivables ($'000)	52,071	(24,086)	16,881	(21,356)	32,625
Realized during the period - new copper sold in the current period					
Provisional price ($/lb.)[1]	3.85	3.66	3.83	4.00	4.08
Realized price ($/lb.)[1]	3.78	3.76	3.78	3.80	4.01
Payable copper tonnes sold	339,542	55,470	26,271	30,792	56,121
Remeasurement of contract receivables ($'000)	(48,674)	12,417	(3,040)	(13,006)	(8,551)
Open at the end of the period - open at the start of the period					
Opening forward price ($/lb.)[1]	–	–	–	–	3.79
Closing forward price ($/lb.)[1]	–	–	–	–	4.05
Payable copper tonnes sold	–	–	–	–	6,625
Remeasurement of contract receivables ($'000)	–	–	–	–	3,748
Open at the end of the period - new copper sold in current period					
Provisional price ($/lb.)[1]	3.82	3.82	3.76	3.77	4.02
Closing forward price ($/lb.)[1]	3.86	3.86	3.76	3.81	4.05
Payable copper tonnes sold	36,038	36,038	70,534	69,935	30,307
Remeasurement of contract receivables ($'000)	3,304	3,304	(827)	6,820	1,772
Total remeasurement of contract receivables ($'000)	**6,701**	**(8,365)**	**13,014**	**(27,542)**	**29,594**

[1] Calculated on a weighted average basis

Of the $353 million (2022: $295 million) finance costs recognized in the Kamoa Holding joint venture for the year ended December 31, 2023, $274 million (2022: $254 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, $57 million (2022: $34 million) relates to the provisional payment facility available under Kamoa-Kakula's offtake agreements, $10 million (2022: $7 million) relates to the equipment financing facilities, $7 million relates to bank overdrafts (2022: $nil) and $4 million relates to interest on the lease liability (2022: $nil).

Ivanhoe's exploration and project evaluation expenditure amounted to $23 million for the year ended December 31, 2023, and was $11 million less than for the same period in 2022 ($34 million). Exploration and project evaluation expenditure for 2023 related mainly to exploration at Ivanhoe's Western Forelands 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 $240 million for the year ended December 31, 2023, and $175 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 $208 million for the year ended December 31, 2023, and $151 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 interest rates and due to the higher accumulated loan balance. The Company earned interest on the loan at USD 12-month LIBOR +7% until June 30, 2023. Following the cessation of publication of LIBOR rates, interest was calculated at a rate of 12-month Term SOFR plus 7.71% from July 1, 2023.

As explained in the accounting for the convertible notes section on page 47, the Company recognized a loss on fair valuation of the embedded derivative financial liability of $85 million for the year ended December 31, 2023 (2022: gain of $23 million).

The total comprehensive income for the year ended December 31, 2023, included an exchange loss on translation of foreign operations of $12 million, compared to an exchange loss on translation of foreign operations recognized for the same period in 2022 of $1 million, resulting mainly from the weakening of the South African Rand by 8% from December 31, 2022, to December 31, 2023.

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

The Company's total assets increased by $1,031 million, from $3,969 million as at December 31, 2022, to $5,000 million as at December 31, 2023. The increase in total assets was mainly attributable to the increase in the Company's investment in the Kamoa Holding joint venture by $471 million, the increase in property, plant and equipment of $516 million as project development continued at the Platreef and Kipushi projects, as well as the increase in deferred tax assets by $15 million, offset by the decrease in cash and cash equivalents of $23 million.

The Company's investment in the Kamoa Holding joint venture increased by $471 million from $2,047 million as at December 31, 2022, to $2,518 million as at December 31, 2023. The Company's investment in the Kamoa Holding joint venture can be broken down as follows:

	December 31, 2023	**December 31, 2022**
	$'000	**$'000**
Company's share of net assets in joint venture	785,265	510,439
Loan advanced to joint venture	1,732,286	1,536,601
Total investment in joint venture	**2,517,551**	**2,047,040**

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

	December 31, 2023		December 31, 2022	
	100%	**49.5%**	**100%**	**49.5%**
	$'000	**$'000**	**$'000**	**$'000**
Assets				
Property, plant and equipment	4,195,216	2,076,632	2,733,176	1,352,922
Mineral property	778,423	385,319	789,888	390,995
Indirect taxes receivable	419,779	207,791	279,385	138,296
Consumable stores	357,324	176,875	257,434	127,430
Other receivables	320,143	158,471	212,221	105,049
Long-term loan receivable	306,594	151,764	252,523	124,999
Non-current inventory	304,261	150,609	246,424	121,980
Trade receivables	241,944	119,762	63,196	31,282
Prepaid expenses	81,802	40,492	9,216	4,562
Current inventory	77,888	38,555	27,011	13,370
Cash and cash equivalents	72,486	35,881	365,633	180,988
Right-of-use asset	56,966	28,198	11,549	5,717
Non-current deposits	1,872	927	2,272	1,125
Deferred tax asset	606	300	710	351
Liabilities				
Shareholder loans	(3,500,105)	(1,732,552)	(3,103,381)	(1,536,174)
Trade and other payables	(471,377)	(233,332)	(309,710)	(153,306)
Deferred tax liability	(322,194)	(159,486)	(273,841)	(135,551)
Income taxes payable	(217,028)	(107,429)	(14,600)	(7,227)
Overdraft facility	(177,775)	(87,999)	–	–
Advance payment facility	(150,449)	(74,472)	–	–
Equipment finance facility	(111,193)	(55,041)	(102,890)	(50,931)
Rehabilitation provision	(95,081)	(47,065)	(45,231)	(22,389)
Lease liability	(51,913)	(25,697)	(13,243)	(6,555)
Provisional payment facility	(51,501)	(25,493)	(38,866)	(19,239)
Other provisions	(33,344)	(16,505)	(26,675)	(13,204)
Non-controlling interest	(446,950)	(221,240)	(291,012)	(144,051)
Net assets of the joint venture	**1,586,394**	**785,265**	**1,031,189**	**510,439**

Before commencing commercial production in July 2021, the Kamoa Holding joint venture principally used loans from its shareholders to develop 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 Kamoa-Kakula's Phase 1 and 2 operations are anticipated to generate significant operating cash flow and are expected to, together with joint venture level financing facilities, be sufficient to fund Phase 3 capital cost requirements at current copper prices. Overdraft facilities represents drawn unsecured financing facilities from DRC financial institutions at an attractive cost of capital, utilised to augment cash generated from operations for Kamoa-Kakula's continued expansion and working capital. Further facilities were secured after year end, bringing the total drawn unsecured financing facilities of $400 million.

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

	Year ended December 31,	
	2023	2022
	$'000	$'000
Net cash generated from operating activities	1,448,888	1,449,200
Change in working capital items	(485,043)	(223,056)
Net cash used in investing activities	(1,523,874)	(847,042)
Net cash generated from financing activities	87,646	(28,138)
Effect of foreign exchange rates on cash	1,461	(7,362)
Net cash (outflow) inflow	**(470,922)**	**343,602**
Cash and cash equivalents - beginning of the year	365,633	22,031
Cash and cash equivalents - end of the year	**(105,289)**	**365,633**

The Kamoa Holding joint venture's net increase in property, plant and equipment from December 31, 2022, to December 31, 2023, amounted to $1,462 million and can be further broken down as follows:

	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
	$'000	$'000	$'000	$'000
Kamoa Holding joint venture				
Expansion capital	442,498	165,076	1,302,873	654,164
Sustaining capital	73,644	119,937	213,897	145,646
Initial capital	–	39,488	–	48,497
	516,142	324,501	1,516,770	848,307
Depreciation capitalized	10,379	10,020	39,792	19,338
Total capital expenditure	526,521	334,521	1,556,562	867,645
Borrowing costs capitalized	53,153	15,998	144,796	50,925
Total additions to property, plant and equipment for Kamoa Holding	579,674	350,519	1,701,358	918,570
Less depreciation, disposals and foreign exchange translation	(110,980)	(94,381)	(239,318)	(186,212)
Net increase in property, plant and equipment of Kamoa Holding	**468,694**	**256,138**	**1,462,040**	**732,358**

Ivanhoe's cash and cash equivalents decreased by $23 million, from $597 million as at December 31, 2022, to $574 million as at December 31, 2023. The Company spent $473 million on project development and acquiring other property, plant and equipment and used $32 million in its operating activities.

The net increase in property, plant and equipment amounted to $516 million, with additions of $505 million to project development and other property, plant and equipment. Of this total, $241 million pertained to development costs and other acquisitions of property, plant and equipment at the Platreef Project, while $234 million pertained to development costs and other acquisitions of property, plant and equipment at the Kipushi Project as set out on page 46.

The main components of the additions to property, plant and equipment – including capitalized development costs – at the Platreef and Kipushi projects for the year ended December 31, 2023, and for the same period in 2022, are set out in the following table:

	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
	$'000	$'000	$'000	$'000
Platreef Project				
Phase 1 construction	34,438	22,662	130,720	62,792
Phase 2 construction	15,244	14,101	56,649	24,209
Salaries and benefits	5,710	4,885	15,253	14,385
Administrative and other expenditure	3,046	2,734	8,560	7,170
Depreciation	2,574	2,824	6,985	3,511
Social and environmental	1,354	589	2,785	1,576
Site costs	1,097	969	4,195	3,452
Studies and contracting work	(1,972)	2,510	1,419	5,969
Total development costs	61,491	51,274	226,566	123,064
Other additions to property, plant and equipment	7,547	231	14,124	2,495
Total additions to property, plant and equipment for Platreef	69,038	51,505	240,690	125,559

	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
	$'000	$'000	$'000	$'000
Kipushi Project				
Mine construction costs	62,032	6,813	158,061	8,986
Other expenditure	7,089	2,351	15,516	6,281
Salaries and benefits	5,691	8,127	17,953	17,121
Administration and overheads	4,381	2,802	16,451	9,429
Studies and contracting work	4,353	1,565	10,150	5,061
Depreciation - development	1,984	2,692	8,224	4,525
Electricity	1,674	872	6,967	3,267
Other additions to property, plant and	351	7,306	802	7,807
Depreciation - exploration and project	–	1	–	3,759
Reversal of VAT write-off previously capitalized	–	–	–	(7,377)
Total project expenditure	87,555	32,529	234,124	58,859
Accounted for as follows:				
Additions to property, plant and equipment	62,383	14,119	158,863	16,793
Development costs capitalized to property, plant and equipment	25,172	18,074	75,261	23,378
Exploration and project evaluation expenditure in the loss from operating activities	–	336	–	18,688
Total project expenditure	87,555	32,529	234,124	58,859

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 shares 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 $291 million to $1,419 million as at December 31, 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 $85 million and the Kipushi Project loan facility of $80 million.

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 Democratic Republic of the Congo. 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, and the second tranche was drawn down on September 11, 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 Mines Ltd. has guaranteed all amounts due by Kipushi to Rawbank under this loan agreement.

On August 4, 2023, the Company entered into an $18 million loan agreement with Investec Bank Limited, a South African financial institution, in respect of its acquisition of an aircraft. Interest on the loan is incurred at SOFR + a margin of 3.65% per annum and is payable monthly in arrears. The principal amount is repayable monthly in 60 equal installments. The Company repaid $1.2 million of the principal amount and $0.7 million in interest during the year ended December 31, 2023.

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 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 $45 million in 2023, before capitalization of borrowing costs on the notes of $15 million. Repayments of coupon interest during 2023 amounted to $14 million. The carrying value of the host liability was $496 million as at December 31, 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 $307 million as at December 31, 2023. The change in the fair value of the embedded derivative liability is mainly 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 December 31, 2023.

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

	March 17, 2021	**December 31, 2021**	**December 31, 2022**	**December 31, 2023**
Share price	C$7.00	C$10.32	C$10.70	C$12.85
Credit spread (basis points)	630	356	419	400
Volatility	42%	40%	40%	43%
Borrowing costs (basis points)	50	25	25	25
Fair value of embedded derivative liability ($'million)	$150.5	$244.2	$221.3	$306.6

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.

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 and did not declare or pay any dividend or distribution in any financial reporting period.

	Three months ended			
	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	$'000	$'000	$'000	$'000
Finance income	63,110	56,671	61,956	57,826
Share of profit from joint venture	49,272	69,829	73,066	82,659
Deferred tax recovery (expense)	4,201	1,212	1,965	926
(Loss) gain on fair valuation of embedded derivative liability	(39,961)	12,218	(26,618)	(30,900)
General administrative expenditure	(14,947)	(9,841)	(10,474)	(8,571)
Exploration and project evaluation expenditure	(8,637)	(6,264)	(4,375)	(3,381)
Share-based payments	(7,715)	(6,732)	(7,120)	(7,702)
Finance costs	(6,741)	(8,752)	(5,539)	(10,465)
Profit (loss) attributable to:				
Owners of the Company	27,739	112,510	92,042	86,637
Non-controlling interests	(1,980)	(4,988)	(4,859)	(4,157)
Total comprehensive income (loss) attributable to:				
Owners of the Company	37,155	109,681	86,588	74,154
Non-controlling interest	(1,003)	(5,250)	(5,443)	(5,420)
Basic profit per share	0.02	0.09	0.08	0.07
Diluted profit per share	0.02	0.08	0.07	0.07

	Three months ended			
	December 31, 2022	September 30, 2022	June 30, 2022	March 31, 2022
	$'000	$'000	$'000	$'000
Finance income	58,477	46,720	38,596	31,505
Share of profit from joint venture	83,324	34,057	49,690	87,109
Deferred tax recovery (expense)	(3,839)	4,252	114,184	(1,347)
(Loss) gain on fair valuation of embedded derivative liability	(66,600)	(27,700)	183,600	(66,400)
Finance costs	(10,457)	(10,223)	(10,013)	(7,391)
General administrative expenditure	(11,870)	(9,199)	(8,957)	(6,238)
Share-based payments	(7,809)	(7,381)	(4,637)	(7,389)
Exploration and project evaluation expenditure	(3,887)	(4,312)	(13,470)	(12,243)
Profit (loss) attributable to:				
Owners of the Company	41,884	26,344	316,242	26,394
Non-controlling interests	(4,705)	(2,477)	35,278	(4,854)
Total comprehensive income (loss) attributable to:				
Owners of the Company	53,078	4,588	306,381	45,495
Non-controlling interest	(3,621)	(4,678)	34,495	(2,858)
Basic profit per share	0.03	0.02	0.26	0.02
Diluted profit per share	0.03	0.02	0.11	0.02

Review of the three months ended December 31, 2023 vs. December 31, 2022

The Company recorded a profit for Q4 2023 of $26 million compared to a profit of $37 million for the same period in 2022. The profit for Q4 2023 included a loss on the fair valuation of the embedded derivative financial liability of $40 million, compared to a loss on the fair valuation of the embedded derivative financial liability of $67 million in Q4 2022. The total comprehensive income for Q4 2023 was $36 million compared to $49 million for the same period in 2022.

The Kamoa-Kakula Copper Complex sold 90,967 tonnes of payable copper in Q4 2023 realizing revenue of $618 million for the Kamoa Holding joint venture, compared to 92,208 tonnes of payable copper sold for revenue of $673 million for the same period in 2022. The Company recognized income in aggregate of $108 million from the joint venture in Q4 2023, which can be summarized as follows:

	Three months ended December 31,	
	2023	**2022**
	$'000	**$'000**
Company's share of profit from joint venture	49,272	83,324
Interest on loan to joint venture	58,618	47,071
Company's income recognized from joint venture	**107,890**	**130,395**

The Company's share of profit from the Kamoa Holding joint venture was $49 million for Q4 2023 compared to a profit of $83 million for the same period in 2022, the breakdown of which is summarized in the following table:

	Three months ended December 31,	
	2023	**2022**
	$'000	**$'000**
Revenue from contract receivables	625,983	619,997
Remeasurement of contract receivables	(8,365)	53,473
Revenue	**617,618**	**673,470**
Cost of sales	(299,857)	(218,709)
Gross profit	**317,761**	**454,761**
General and administrative costs	(51,635)	(24,834)
Amortization of mineral property	(2,862)	(12,134)
Profit from operations	**263,264**	**417,793**
Finance costs	(88,229)	(92,727)
Foreign exchange (loss) gain	(10,431)	(5,520)
Finance income and other	18,795	5,666
Profit before taxes	**183,399**	**325,212**
Current tax expense	(52,434)	(19,143)
Deferred tax expense	(1,018)	(89,252)
Profit after taxes	**129,947**	**216,817**
Non-controlling interest of Kamoa Holding	(30,408)	(48,486)
Total comprehensive income for the year	**99,539**	**168,331**
Company's share of profit from joint venture (49.5%)	**49,272**	**83,324**

Kamoa-Kakula's operating data is summarized under the review of operations section on page 5.

Of the $88 million (Q4 2022: $93 million) finance costs recognized in the Kamoa Holding joint venture for Q4 2023, $15 million (Q4 2022: $12 million) relates to the provisional payment facility available under Kamoa-Kakula's offtake agreements, while $3 million (Q4 2022: $2 million) relates to the equipment financing facilities, $3 million relates to bank over-drafts (Q4 2022: $0.2 million) and $2 million relates to the interest on the lease liability (Q4 2022: $nil).

Ivanhoe's exploration and project evaluation expenditure amounted to $9 million in Q4 2023 and $4 million for the same period in 2022. Exploration and project evaluation expenditure for Q4 2023 related mainly to exploration and Ivanhoe's Western Forelands exploration licences.

Finance income for Q4 2023 amounted to $63 million and was $5 million more than for the same period in 2022 ($58 million). Included in finance income is the interest earned on loans to the Kamoa Holding joint venture to fund past development which amounted to $59 million for Q4 2023, and $47 million for the same period in 2022, and increased due to the higher interest rates and accumulated loan balance. The Company earned interest on the loan at USD 12-month LIBOR +7% until June 30, 2023. Following the cessation of publication of LIBOR rates, interest was calculated at a rate of 12-month Term SOFR plus 7% from July 1, 2023.

The Company recognized a loss on the fair valuation of the embedded derivative financial liability of $40 million for Q4 2023, compared to a loss on the fair valuation of the embedded derivative financial liability of $67 million for Q4 2022, which is further explained in the accounting for the convertible notes section on page 47.

LIQUIDITY AND CAPITAL RESOURCES

The Company had $574 million in cash and cash equivalents as at December 31, 2023. At this date, the Company had consolidated working capital of approximately $451 million, compared to $595 million at December 31, 2022.

On December 18, 2023, the Company completed a private placement offering of 47,917,050 Class A common shares at a price of C$12.00 per share for aggregate gross proceeds of C$575 million (approximately $430 million).

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

Capital Expenditure	Initial 2023 Guidance	2023 Actuals	2024 Guidance	2025 Guidance
	($' million)	**($' million)**	**($' million)**	**($' million)**
Kamoa-Kakula				
Phase 3 expansion	1,400 – 1,800	1,148	1,300 – 1,700	700 – 300
Phase 2 and other expansion capital	120	155	–	–
Sustaining capital	180	214	240	265
	1,700 – 2,100	**1,517**	**1,540 – 1,940**	**965 – 565**
Platreef				
Phase 1 initial capital	190 – 240	177	170 – 200	40 – 10
Phase 2 capital	60	57	130 – 180	320 – 270
	250 – 300	**234**	**300 – 380**	**360 – 280**
Kipushi				
Initial capital	200 – 250	226	160	–
Sustaining capital	–	–	35	40
	200 – 250	**226**	**195**	**40**

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 and Platreef Phase 2 capital between calendar years 2024 and 2025.

The Phase 3 expansion at the Kamoa-Kakula Mining Complex is ahead of schedule for production in late Q2 2024 and in line with budget, with the underspending in 2023 expected to be caught up in 2024. The Kamoa-Kakula's Phase 1 and 2 operations are anticipated to generate significant operating cash flow and are expected to, together with joint venture level financing facilities, be sufficient to fund Phase 3 capital cost requirements at current copper prices.

Construction of Platreef's Phase 1 concentrator is advancing on schedule at over 80% complete and is on track for cold commissioning in the third quarter of 2024. Hot commissioning and ramp-up of production are now planned to be deferred to early 2025. Total planned expenditure on Phase 1 remains on budget. The Phase 2 expansion is being accelerated by re-purposing ventilation Shaft #3 for hoisting, while construction of the 10-metre-diametre Shaft #2 continues. Platreef's 2025 guidance is provisional only, and will be updated on the completion of the Feasibility Study with the updated project development strategy, which will be completed in the second half of 2024.

Construction of the Kipushi Mine is progressing well, with the processing plant ahead of schedule for first production in Q2 2024. Negotiations are advancing with numerous parties for facilities of up to $200 million or higher, and are expected to be concluded in the second quarter of 2024.

On August 4, 2023, the Company entered into an $18 million loan agreement with Investec Bank Limited, a South African financial institution, in respect of its aircraft. Interest on the loan is incurred at SOFR + a margin of 3.65% per annum and is payable monthly in arrears. The principal amount is repayable monthly in 60 equal installments. The Company repaid $1.2 million of the principal amount and $0.7 million in interest during the year ended December 31, 2023.

Ivanhoe's exploration budget for 2024 has been set to approximately $90 million, with exploration activities primarily focused on the 2,654-square-kilometre Western Forelands Project.

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 $496 million and the fair value of the embedded derivative liability was $307 million as at December 31, 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 one-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 $38 million as at December 31, 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 term SOFR applicable to United States Dollars on a 3-month deposit plus 2.26%. Interest is not compounded.

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 December 31, 2023	**Total $'000**	**Less than 1 year $'000**	**1-3 years $'000**	**4-5 years $'000**	**After 5 years $'000**
Convertible notes	578,033	3,033	575,000	–	–
Debt	140,012	83,671	11,261	45,080	–
Lease commitments	1,551	368	1,183	–	–
Total contractual obligations	**719,596**	**87,072**	**587,444**	**45,080**	**–**

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

NON-GAAP FINANCIAL PERFORMANCE MEASURES

Kamoa-Kakula's cash cost (C1) per pound is a non-GAAP financial measure. 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.

Cash cost (C1) is 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 cost is used by management to evaluate operating performance and includes 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 cost and C1 cash cost per pound excludes 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 cost, including on a per pound basis:

	Three months ended December 31,		**Year ended December 31,**	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Cost of sales	**299,857**	**218,709**	**1,103,110**	**775,424**
Logistics, treatment and refining charges	117,307	123,432	475,097	433,624
General and administrative expenditure	51,634	24,834	142,705	86,043
Royalties and production taxes	(59,446)	(53,113)	(233,702)	(195,500)
Depreciation	(57,812)	(25,942)	(193,714)	(104,658)
Power rebate	(4,564)	(2,778)	(18,490)	(9,332)
Non-cash adjustments to inventory	(20,082)	(2,780)	(20,411)	5,220
General and administrative expenditure of other group entities	(2,452)	(707)	(11,562)	(1,785)
Extraordinary taxes	(21,026)	-	(21,026)	-
Cash cost (C1)	**303,416**	**281,655**	**1,222,007**	**989,036**
Cost of sales per pound of payable copper sold ($ per lb.)	1.50	1.08	1.33	1.09
Cash cost (C1) per pound of payable copper produced ($ per lb.)	1.53	1.42	1.45	1.39
Payable copper produced in concentrate (tonnes)	90,146	89,746	381,689	322,659

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

EBITDA, Adjusted EBITDA and EBITDA margin, normalized profit after tax and normalized profit per share

EBITDA and Adjusted EBITDA 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 exclude the impact of cash cost 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 December 31,		**Year ended December 31,**	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Profit after taxes	**129,947**	216,817	**710,512**	654,066
Finance costs	**88,229**	92,727	**352,700**	295,303
Current and deferred tax expense	**53,452**	108,395	**357,872**	337,893
Depreciation	**60,674**	38,056	**205,179**	116,772
Other taxes	**21,026**	-	**21,026**	-
Unrealized foreign exchange loss (gain)(1)	**9,300**	718	**68,157**	(8,631)
Derecognition loss(2)	**(13,506)**	-	**(13,506)**	-
Finance income	**(5,223)**	(4,625)	**(20,891)**	(12,537)
EBITDA	**343,899**	452,088	**1,681,049**	1,382,866

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 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.

(2) Derecognition losses arising from IBOR reform have been excluded from EBITDA as the Company believes that including these derecognition losses do 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 December 31,		Year ended December 31,	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Profit after taxes	**25,759**	37,179	**302,944**	434,106
Finance income	**(63,110)**	(58,477)	**(239,563)**	(175,298)
Current and deferred tax (recovery) expense	**(3,901)**	3,839	**(7,658)**	(113,369)
Unrealized foreign exchange (gain) loss [(1)]	**(2,100)**	(230)	**2,111**	2,328
Finance costs	**6,741**	10,457	**31,497**	38,084
Depreciation	**507**	476	**2,295**	5,588
EBITDA	**(36,104)**	(6,756)	**91,626**	191,439
Share of profit from joint venture net of tax	**(49,272)**	(83,324)	**(274,826)**	(254,180)
Company's share of EBITDA from Kamoa-Kakula joint venture[(2)]	**135,787**	178,798	**664,272**	550,931
Derecognition loss[(3)]	**11,924**	-	**11,924**	-
Loss (gain) on fair valuation of embedded derivative liability	**39,961**	66,600	**85,261**	(22,900)
Non-cash share based payments	**6,509**	6,461	**26,197**	25,729
Adjusted EBITDA	**108,805**	**161,779**	**604,454**	491,019

	Q4 2023	**Q3 2023**	**Q2 2023**	**Q1 2023**
	$'000	**$'000**	**$'000**	**$'000**
Profit after taxes	25,759	107,522	87,183	82,480
Finance income	(63,110)	(56,671)	(61,956)	(57,826)
Current and deferred tax recovery (expense)	(3,901)	(1,107)	(1,769)	(881)
Finance costs	6,741	8,752	5,539	10,465
Unrealized foreign exchange (gain) loss[(1)]	(2,100)	986	1,934	1,291
Depreciation	507	703	609	476
EBITDA	**(36,104)**	**60,185**	**31,540**	**36,005**
Share of profit from joint venture net of tax	(49,272)	(69,829)	(73,066)	(82,659)
Company's share of EBITDA from Kamoa-Kakula joint venture[(2)]	135,787	167,200	180,489	180,796
Derecognition loss [(3)]	11,924	-	-	-
(Gain) loss on fair valuation of embedded derivative liability	39,961	(12,218)	26,618	30,900
Non-cash share-based payments	6,509	6,561	6,589	6,538
Adjusted EBITDA	**108,805**	**151,899**	**172,170**	**171,580**

(1) Unrealized foreign exchange (gains) losses have been excluded from EBITDA as the Company believes that including the unrealized foreign exchange gains and losses does not give a useful indication of the Company's overall health and profitability.

(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%).

(3) Derecognition losses arising from IBOR reform have been excluded from EBITDA as the Company believes that including these derecognition losses do not give a useful indication of the Company's overall health and profitability.

Normalized profit after tax and normalized profit per share are non-GAAP financial measures. Normalized profit after tax and normalized profit per share 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. Other companies may calculate normalized profit after tax and normalized profit per share differently.

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 initial recognition of Kipushi's deferred tax in 2022.

	Three months ended December 31,		Year ended December 31,	
	2023	**2022**	**2023**	**2022**
	$'000	**$'000**	**$'000**	**$'000**
Profit after taxes	25,759	37,179	302,944	434,106
Loss (gain) on fair valuation of embedded derivative liability	39,961	66,600	85,261	(22,900)
Recognition of deferred tax - Kipushi	–	–	–	(113,250)
Normalized profit after taxes	**65,720**	**103,779**	**388,205**	**297,956**

Below is a table reconciling the Company's basic profit per share to the company's normalized profit per share. Normalized profit per share excludes the loss (gain) on fair valuation of the embedded derivative liability and the initial recognition of Kipushi's deferred tax in 2022.

	Year ended December 31,	
	2023	**2022**
	$'000	**$'000**
Profit attributable to the owners of the Company	318,928	410,864
Recognition of deferred tax - Kipushi	–	(113,250)
Non-controlling interests on deferred tax of Kipushi	–	36,240
Loss (gain) on fair valuation of embedded derivative liability	85,261	(22,900)
Normalized profit attributable to owners of the Company	**404,189**	**310,954**
Weighted average number of basic shares outstanding	1,220,711,543	1,212,387,222
Basic profit per share	**0.26**	**0.34**
Normalized profit per share	**0.33**	**0.26**

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.

	December 31, 2023	December 31, 2022
	$'000	$'000
Kamoa Holding Limited (a)	207,608	151,066
High Power Exploration Inc. (b)	7,792	7,731
Kamoa Services (Pty) Ltd. (c)	5,131	4,359
Kamoa Copper SA (d)	1,151	1,424
Ivanhoe Mines Energy DRC SARL (e)	242	146
Ivanhoe Electric Inc. (f)	30	186
I-Pulse Inc. (g)	18	–
Ivanhoe Capital Aviation Ltd. (h)	(4,500)	(4,500)
Ivanhoe Capital Services Ltd. (i)	(394)	(503)
Global Mining Management Corporation (j)	(196)	(228)
Citic Metal Africa Investments Limited (k)	(240)	(240)
Ivanhoe Capital Pte Ltd. (l)	–	(3)
	216,642	159,438

Finance income	215,402	158,800
Intergroup recharges and cost recovery	6,533	5,927
Travel	(4,490)	(4,428)
Salaries and benefits	(443)	(635)
Directors fees	(240)	(240)
Office and administration	(62)	19
Consulting	(58)	(5)
	216,642	159,438

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 December 31, 2023, trade and other payables included $0.4 million (December 31, 2022: $0.3 million) with regard to amounts due to parties related by way of directors, officers or shareholders in common. These amounts are unsecured and non-interest-bearing.

Amounts included in other receivables due from parties related by way of directors, officers or shareholders in common as at December 31, 2023, amounted to $10 million (December 31, 2022: $7 million). Of this, $9.8 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.

(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) 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.

(g) 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.

(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) 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.

(k) 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 on the Company’s Board of Directors.

(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, 2023. 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 in 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 their 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.

Determination of functional currency

The Company has used its judgment to determine the functional currency that most faithfully represents the economic effects of the underlying transactions, events and conditions and determined that the Company's functional currency is the U.S. dollar. The Company's subsidiaries have a variety of functional currencies that include, but are not limited to, U.S. dollar ("USD"), South African Rand ("ZAR") and Canadian dollar ("C$").

Technical feasibility and commercial viability of projects

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.

Classification of Kamoa Holding Limited as a joint venture

Kamoa Holding Limited ("Kamoa Holding") is a limited liability company whose legal form confers separation between the parties to the joint arrangement and the company itself. Furthermore, there is no contractual arrangement or any other facts and circumstances that indicate that the parties to the joint arrangement have rights to the assets and obligations for the liabilities of the joint arrangement. Accordingly, Kamoa Holding Limited is classified as a joint venture of the Company.

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).

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 is 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.

Bill-and-hold arrangements

During the year ended December 31, 2023, the Kamoa Holding Limited joint venture had multiple bill-and-hold arrangements with its customers for copper concentrate sales, as described in IFRS 15. The control of the copper concentrate had passed to the customers, however physical possession was retained by Kamoa-Kakula for one of the customers as at December 31, 2023. Revenue from the copper concentrate sales was recognized by the joint venture when control of the goods transferred to the customer through fulfilment of the contractual performance obligations, which was to deliver the concentrate to the customer.

Delivery of the concentrate was on a freecarrier basis as per INCOTERMS 2020, with the point of delivery being on the floor of the Kamoa-Kakula concentrate warehouse. Upon delivery as per the contract, Kamoa-Kakula had a present right to payment for the concentrate and revenue was therefore recognized.

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 the inception of the contracts, it has been determined that the contracts contain a significant financing component under IFRS 15. The current portion of deferred revenue is determined to be the cashflow owed to the buyer expected within the next twelve months following the end of the current financial year.

Deferred tax

Significant judgment is required in determining 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 considers the recoverability of the deferred tax asset annually and has deemed the balance to be recoverable at the end of the current financial year. With the agreement of the development plan for the Kipushi Project by its shareholders and the approval of the development budget consistent with the feasibility study, the Company considers it probable that future taxable profit will be available, against which the unused tax losses and unused tax credits can be utilized. As a result, the Company recognized the previously unrecognized deferred tax asset of the Kipushi Project in June 2022.

Provisions for tax claims

From time to time, the Company becomes subject to claims 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 multijurisdictional nature of the Company's business, such claims may arise in several jurisdictions and may involve complex legal, tax or accounting matters. 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. The joint venture is currently subject to several such claims, all of which have been determined by management, with the benefit of legal advice, to be without merit and justification and therefore not probable that a liability would arise therefrom. Where these estimated liabilities are determined as probable, management has determined that such liability would not have a material effect on the consolidated financial statements of the Company. Such determinations are based on current information and advice, which is subject to change based on changed facts or circumstances. Accordingly, management may re-assess any prior determination regarding the likelihood of a probable liability at any time.

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 consolidated financial statements.

- Amendments to IFRS 17 – Insurance Contracts. This standard replaced IFRS 4, which permitted a wide variety of practices in accounting for insurance contracts.

- 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.

- Amendments to IAS 12 – Income Taxes: In December 2021, the Organization for Economic Co-operation and Development (OECD) issued model rules for a new global minimum tax framework (Pillar Two), and various governments around the world, have issued or are in the process of issuing legislation on this. This framework has not yet been substantively enacted. The Company is in the process of assessing the full impact of this framework.

- 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)

- Amendment to IAS 21 - Lack of Exchangeability. An entity is impacted by the amendments when it has a transaction or an operation in a foreign currency that is not exchangeable into another currency at a measurement date for a specified purpose. A currency is exchangeable when there is an ability to obtain the other currency (with a normal administrative delay), and the transaction would take place through a market or exchange mechanism that creates enforceable rights and obligations. (ii)

  (i) Effective for annual periods beginning on or after January 1, 2024
  (ii) Effective for annual periods beginning on or after January 1, 2025

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

Fair value of financial instruments

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

	Level	December 31, 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	**4,173**	7,947
Investment in unlisted entity	Level 1	**655**	655
Investment in other listed entities	Level 3	**277**	1,050
Amortized cost			
Loan advanced to joint venture	Level 3	**1,732,286**	1,536,601
Cash and cash equivalents		**574,294**	597,451
Loans receivable	Level 3	**46,017**	112,104
Promissory note receivable	Level 3	**26,800**	26,756
Other receivables		**16,574**	9,983
Financial liabilities			
Financial liabilities at fair value through profit or loss			
Convertible notes - embedded derivative liability	Level 3	**306,561**	221,300
Amortized cost			
Convertible notes - host liability	Level 3	**495,970**	465,323
Borrowings	Level 3	**140,011**	40,823
Trade and other payables		**103,076**	57,984
Advances payable	Level 3	**–**	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:

	Year ended December 31, 2023	Year ended December 31, 2022
	$'000	$'000
Interest from loan to joint venture	207,608	151,066
Interest on bank balances	21,624	14,565
Interest on loan receivable - HPX	7,795	7,734
Interest on long term loan receivable - Gecamines	2,514	1,908
Other	22	25
	239,563	175,298

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. The Company's key exposure to foreign exchange risk arises from the deferred revenue, which is denominated in Rand and the convertible notes, which is impacted by the Canadian Dollar when the prevailing share price is converted into Dollars. 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:

	December 31, 2023	December 31, 2022
	$'000	$'000
Assets		
South African rand	**106,202**	227,987
Canadian dollar	**223,621**	8,875
British pounds	**7,548**	2,909
Australian dollar	**248**	958
Liabilities		
South African rand	**(41,913)**	(29,718)
British pounds	**(7,807)**	(2,945)
Canadian dollar	**(541)**	(5,911)
Australian dollar	**(84)**	–

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 when the foreign currencies strengthen against the U.S. dollar. The opposite number will result if the foreign currencies depreciate against the U.S. dollar.

	Year ended December 31,	
	2023	**2022**
	$'000	**$'000**
Canadian dollar	**10,854**	148
Australian dollar	**8**	48
South African rand	**(439)**	(227)
British pounds	**(23)**	(16)

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 its financial assets at each statement of financial position date to ensure that adequate provision is made for expected credit losses on a timely basis. Current and future macroeconomic factors, as well as relevant interest rates are considered as inputs into the provision calculation.

The Company classifies its financial assets at amortized cost in categories that reflect their credit risk as follows:

- Performing financial assets – Financial assets with a low risk of counterparty default. A 12-month expected credit losses are calculated for these financial assets.
- Underperforming financial assets – Financial assets with a significant increase in credit risk. Lifetime expected credit losses are calculated for these financial assets.
- Non-performing financial assets – Financial assets that are in default. Lifetime expected credit losses are calculated for these financial assets.
- Written off financial assets – Financial assets where the principal and/or interest will not be recovered, based on observable data. These financial assets are written off through profit or loss to the extent of the expected credit loss.

All of the Company's financial assets are deemed to be performing financial assets based on the above categorization. As such the general approach was applied to the calculate the 12-month expected credit losses. There were no movements between the categorization during the current and comparative reporting periods as there has not been an increase in credit risk associated with these financial assets.

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.

None of the Company's financial assets are deemed to be in default, which is defined as the structural failure of a counterparty to perform under an agreement with the Company.

For all financial assets measured at amortized cost, the Company calculates the expected credit loss based on contractual payment terms of the asset. The exposure to credit risk if influenced by the individual characteristics and the long and short term nature of the counterparty.

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 expected credit loss is considered not material to the Company.

The promissory note receivable will be repaid using proceeds from the sale of Crystal River's 1% stake in Kamoa Holding. The expected credit loss is considered not material to the Company.

Repayment of the long-term loan receivable from Gécamines 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. Credit risk is managed through the application of funding approvals, liquidity analysis and monitoring procedures. The Company's treasury function provides credit risk management for the group-wide exposure in respect of a diversified banking portfolio. These are evaluated regularly for financial robustness especially within the context of the current global economic environment as well as the jurisdictions within which the Company operates.

The majority of the Group's cash balance is held in Canadian and South African bank accounts.

The Company continues to monitor its credit risk and assess expected credit losses. The identified impairment loss in 2023 is considered not material to the Company.

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, the 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 December 31, 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 $134 million instead of the loss of $85 million. If the Company's share price had been C$1.00 lower than it was on December 31, 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 $39 million instead of the loss of $85 million.

Interest rate risk

The Company's interest rate risk arises mainly from long-term borrowings, the long-term loan receivable, 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 Term SOFR. If interest rates (including applicable Term SOFR rates) had been 50 basis points higher or lower and all other variables were held constant the Company's profit for the period ended December 31, 2023, would have increased or decreased by $11 million (December 31, 2022: $10 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, including its commitments.

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 year	1 to 3 years	3 to 5 years	More than 5 years	**Total undiscounted cash flows**
	$'000	$'000	$'000	$'000	**$'000**
As at December 31, 2023					
Convertible notes	14,383	596,535	–	–	**610,918**
Trade and other payables	96,936	–	–	–	**96,936**
Rawbank loan facility	80,552	–	–	–	**80,552**
ITC loan	–	–	38,405	–	**38,405**
Aircraft financing facility	4,534	13,604	2,645	–	**20,783**
Lease liability	664	2,460	1,814	6,473	**11,411**
As at December 31, 2022					
Trade and other payables	14,375	610,918	–	–	**625,293**
Trade payables (a)	57,356	–	–	–	**57,356**
ITC loan	–	–	36,937	–	**36,937**

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

DESCRIPTION OF CAPITAL STOCK

As at February 23, 2024, 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 1,269,318,932 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 1,292,265 options in 2023 and 1,093,192 options in 2024 to date. As at February 23, 2024, 14,161,859 options were outstanding issued in terms of the Equity Incentive Plan exercisable into 14,161,859 Class A Shares.

The Company granted 895,963 restricted share units (RSUs) in 2024 to date and 658,031 RSUs in 2023 per the Company's Share Unit Award Plan. As at February 23, 2024, there were 3,345,069 RSUs which may vest into 3,345,069 Class A shares.

The Company granted 451,117 performance share units (PSUs) in 2024 to date and 438,163 PSUs in 2022 per the Company's Share Unit Award Plan. As at February 23, 2024, there were 1,254,951 PSUs which may vest into 1,254,951 Class A shares.

The Company granted 137,808 deferred share units (DSUs) in 2024 to date and 221,764 DSUs in 2023 per the Company's Deferred Share Unit Plan. As at February 23, 2024, there were 628,095 DSUs which may vest into 628,095 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 December 31, 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 is recorded, processed, summarized and reported within the time period specified in those rules.

As at December 31, 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 December 31, 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 December 31, 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 year ended December 31, 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, 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 Western Foreland Exploration Project in this MD&A have been reviewed and approved by Tim Williams, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Williams is not considered independent under NI 43-101 as he is the Vice President, Geosciences, at Ivanhoe Mines. Mr. Williams 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's Phase 3 concentrator plant remains on budget and is ahead of schedule for first production in Q3 2024, which when completed will position Kamoa-Kakula as the world's third-largest copper mining complex; (ii) statements that Kamoa Copper has identified a series of upgrades and has outlined a project plan to deliver the improvements needed to assist with delivering long-lasting solutions to the grid instability across the southern DRC's electrical infrastructure; (iii) statements that up to $200 million of new funding will be assigned to the identified grid infrastructure upgrades, such as an increase in grid capacity between Inga and Kolwezi, a new harmonic filter at the Inga Converter Station, as well as a new static compensator at the Kolwezi Converter Station, which are expected to be completed during H1 2025; (iv) statements that Kamoa Copper's engineering team is currently expanding the on-site backup generation capacity to ensure there is on-site redundancy to power 100% of its current and future operations; (v) statements that on-site backup-power generation capacity is set to increase, via a phased roll-out from the current 60 MW to a total of over 200 MW in time for the completion of the Phase 3 smelter at the end of Q4 2024; (vi) statements that by April 30, 2024, a further 18 MW of backup generation capacity is expected to be installed, sufficient to power Kamoa-Kakula's entire Phase 1 and 2 operations and that by July 21, 2024, a further 50 MW is expected to be installed, taking the total onsite power generation capacity to 128 MW, sufficient for Phase 3 operations; (vii) statements that by year-end, the total onsite power generation capacity will have reached over 200 MW, sufficient to power Kamoa-Kakula's Phase 1, 2 and new Phase 3 operations, as well as the direct-to-blister copper smelter; (viii) statements that in the longer term, power supplied via the Zambian interconnector is expected to increase up to 100 MW; (ix) statements that Kamoa-Kakula's ongoing Phase 3 concentrator now is expected to be complete in Q2 2024, one quarter ahead of schedule; (x) statements that the process design of the Phase 3 concentrator is very similar to that of the Phase 1 and 2 concentrators, however 30% larger; (xi) statements that the front end of the Phase 3 concentrator is being built to a capacity of 10 Mtpa, double the required capacity for Phase 3, in anticipation of the future Phase 4 expansion; (xii) statements that following the commissioning of Phase 3, Kamoa-Kakula will have a total design processing capacity of 14.2 Mtpa; (xiii) statements that the completion of Phase 3 is expected to increase annualized copper production to over 600,000 tonnes per year over the next ten years, positioning Kamoa-Kakula as the world's third-largest copper mining complex in 2027, and the largest copper mine on the African continent; (xiv) statements that Kamoa-Kakula's Phase 3 expansion, consisting of two new underground mines called Kamoa 1 and Kamoa 2 share a single box cut with a twin service-and-conveyor decline and that 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 for third quarter production; (xv) statements that copper in concentrate produced during the ramp-up period from Q3 2024 onwards will mainly be sold to generate additional cash flow, some concentrate will be stockpiled in anticipation of the smelter commissioning scheduled for the end of 2024; (xvi) statements that the smelter project is on target for commissioning in the fourth quarter of 2024; (xvii) statements that 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 copper anodes per annum; (xviii) 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; (xix) 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 planned Phase 4) concentrators; (xx) 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; (xxi) statements that Kamoa-Kakula will continue 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; (xxii) 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, and that domestic acid demand is expected to increase to over 7 million tonnes in the short to medium term; (xxiii) 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; (xxiv) 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 cost (C1) over the first five years post-completion (from 2025) by approximately 20%; (xxv) statements that the Phase 3 direct-to-blister flash copper smelter will be one of the world's largest copper smelters and also one of the greenest; (xxvi) statements that smelter investment will reduce Kamoa-Kakula carbon emissions per unit of refined copper (Scope 1, 2 and 3) by almost half to 1.3 carbon dioxide equivalent tonnes per tonne of copper produced; (xxvii) statements that following the completion of the Kamoa-Kakula copper smelter, copper will be transported to port in the form of 99.7% pure copper anodes and that transporting anode with over double the contained copper content, compared with concentrate, requires under half the number of trucks per unit of copper; (xxviii) statements regarding highly promising preliminary test work to further improve copper recoveries at Kamoa-Kakula, with initial preliminary results indicating that with a feed grade of less than 1% copper, approximately 65% of the contained copper can be recovered from the tailings stream, which would increase overall metallurgical recoveries to well over 90% and that based on these results, Kamoa-Kakula can increase production, revenues and cash flow; (xxix) statements that capital and operating costs estimates from an internal study indicate a positive return on investment; (xxx) statements that basic engineering for the tailings-stream treatment plant is expected to be completed in the second quarter; (xxxi) statements that minor adjustments to the existing Phase 1 and Phase 2 circuits is underway; (xxxii) statements that the refurbishment of Turbine #5 at the Inga II hydroelectric facility is approximately 60% complete and advancing on schedule, and well within budget, for completion in Q4 2024; (xxxiii) statements that following wet commissioning and synchronization to the grid in Q4 2024, the fully refurbished Turbine #5 is expected to generate 178 MW of hydroelectric power for the DRC grid in Q4 2024; (xxxiv) statements regarding transportation of Kamoa-Kakula's copper concentrate by rail to the Atlantic Ocean port of Lobito in Angola; (xxxv) statements that once fully active, the Lobito Atlantic Railway Corridor is expected to transform regional logistics and reduce the Scope 3 carbon emissions footprint of Kamoa-Kakula's copper exports and that the development of Ivanhoe's current and future copper discoveries within the Western Foreland basin will also greatly benefit from the Lobito Corridor; (xxxvi) statements about the Reserve Capacity Agreement and related term sheet and that the agreement will allocate Kamoa-Kakula the right to transport along the Lobito Corridor a minimum of 120,000 tonnes and a maximum of 240,000 tonnes per annum of blister-anode or concentrate; (xxxvii) statements that the costs of exporting mineral products along the Lobito Corridor are expected to be cheaper than the current market price for trucking via the existing export routes and that the rates are anticipated to reduce further as volumes transported along the line increase; (xxxviii) statements regarding Kamoa-Kakula's 2024 guidance including contained copper in concentrate of 440,000 to 490,000 tonnes and cash cost (C1) of $1.50 to $1.70 per lb; (xxxix) statements regarding the Company focusing on construction activities to bring Phase 1 of Platreef into production by Q3 2024 and that Platreef's Phase 1 concentrator is on schedule for first production in Q3 2024; (xl) statements that construction of the Phase 1 concentrator is tracking for completion in the third quarter of 2024; (xli) statements that once the crusher and loading feeder installation on the 950-metre level is completed, the rate of lateral underground development is expected to continue to increase to approximately 400 metres per month through the end of the year; (xlii) 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; (xliii) statements that Shaft 2's overall height will be approximately 100 metres above ground, including the steel structure housing the main winders; (xliv) statements that the sinking winders and related infrastructure will be delivered during Q3 2024 with actual installation to commence in Q2 2024; (xlv) statements that the first phase of reaming Shaft 2 is expected to be complete in Q3 2024; (xlii) statements that construction of Platreef's first 5-MW solar-power plant is expected to be completed in H2 2024; (xlvi) statements that the power generated by the solar plant will support development activities and operations, together with other renewable energy sources to be introduced over time; (xlvii) statements that reconfiguring the 5.1-metre diameter Shaft #3, which was originally intended as a ventilation shaft, will provide an additional hoisting capacity of more than 3 Mtpa; (xlviii) statements that reaming of Shaft 3 is expected to be completed in the second quarter and that following equipping, Shaft #3 is expected to be ready for hoisting in the fourth quarter of 2025; (xlix) statements that underground ventilation will now be provided by a new 5.1 metre diameter shaft, called Shaft #4 and that the drilling of the pilot hole for the shaft is expected to commence within the next month and that the shaft is expected to be commissioned in the third quarter of 2025; (l) statements that equipping Shaft #3 for hoisting will de-risk Phase 1 underground operations ahead of Shaft #2 completion, as well as accelerate the underground development for Phase 2; (li) statements that following the optimization study, the Phase 2 concentrator will have a processing capacity of 3.3 Mtpa, increased from 2.2 Mtpa as per the first module of Phase 2 defined in the 2022 Platreef Feasibility Study and that Phase 2 now will have a total processing capacity of 4.0 Mtpa, with ore fed from Shaft #1 and Shaft #3; (lii) statements that Ivanhoe is working on an updated Feasibility Study, covering the scope of the reconfigured Phase 2 expansion, which is expected to be completed in the second half of 2024; (liii) statements that the completion of Shaft #2, with a hoisting capacity of up to 8 Mtpa, and that hoisting capacity will be up to 12 Mtpa available across all three shafts for ore and waste development; (liv) statements that in parallel with the updated Feasibility Study, Ivanhoe has commissioned a PEA to evaluate Phase 3 expansion, which is expected to consist of two additional 3.3-Mtpa concentrator modules, bringing total throughput capacity to over 10 Mtpa and that at this point, Platreef is anticipated to be one of the world's largest PGM producers as well as a major producer of nickel from sulphide ore; (lv) statements that under current agreements, 100% of Platreef's Phase 1 concentrate production, for 10 years, will be purchased by Northam; (lvi) statements that Platreef's Phase 1 is expected to produce approximately 40,000 tonnes per year of concentrate, containing six payable metals, including palladium, nickel, platinum, rhodium, copper and gold; (lvii) statements that Ivanplats has recently signed an additional offtake agreement for an additional 60,000 tonnes per annum of PGM concentrate, produced from Platreef's Phase 2 operations; (lviii) statements that Ivanhoe recently signed a Heads of Terms with an industry partner to jointly explore the viability of a downstream processing facility, based in South Africa, to beneficiate concentrate production from the Phase 3 expansion of Platreef and that both parties have committed to undertake a Pre-Feasibility and Feasibility Study on the development of the facility and that this collaboration is designed to draw on the respective skills of both parties and for the smelter to be joint-owned, with Ivanhoe owning no less than 50% and with a mechanism to increase ownership in future; (lvix) statements that an updated Feasibility Study is planned for the second half of 2024, and once it is completed, Ivanhoe intends to arrange an enlarged project finance package for the Phase 2 expansion; (lx) statements that following the signing of a tri-partite offtake and financing term sheet between Kipushi Corporation SA, Gécamines and Glencore, the company has received significant additional interest in relation to the financing of the Kipushi Project and the off-take of zinc concentrate and that negotiations are advancing with numerous parties, including facilities of up to $200 million or higher, and are expected to be concluded in the second quarter of 2024; (lxi) statements that construction of the new 800,000-tonne-per-annum concentrator facility at Kipushi is approximately 85% complete and that it is expected to produce more than 250,000 tonnes of zinc contained in concentrate over the first five years of production; (lxii) statements that the Kipushi concentrator is ahead of schedule and now is expected to be commissioned in Q2 2024; (lxiii) statements that in line with the 2022 Kipushi Feasibility Study, mining will focus on the zinc-rich Big Zinc and Southern Zinc zones; (lxiv) statements that the underground mining operation is fully mechanized, highly efficient and designed to enable a quick ramp-up to a steady state; (lxv) statements that the mining method for the Big Zinc orebody 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; (lxvi) statements with respect to the Company's capital expenditure guidance and planned expenditures for 2024 and 2025; (lxvii) statements regarding the company working proactively to address power intermittency and expects this to be a short-term issue, with Kamoa-Kakula expected to have full back-up generator redundancy for the Phase 1 and Phase 2 operations by April 2024, and that the company is well advanced in discussions with its partners in the DRC, as well as the government of Zambia, to address the situation permanently, as it brings Phase 3 operations and the smelter complex online; (lxviii) statements that Kamoa-Kakula will be fully powered by green hydroelectricity over its generationally long life, and that early commissioning of the Phase 3 concentrator will require additional backup power generation for the remainder of 2024, until the Inga II dam hydroelectric dam refurbishment is complete at year end, that Phase 3 will temporarily increase cash costs by up to $0.20/lb. for the remainder of this year to cover the cost of additional backup power generation and that Kamoa-Kakula is on a path to full hydroelectric power generation and anticipates lower cash costs after 2024; (lxix) statements that the optimized development plan at Platreef will accelerate the development of Phase 2 at a 4 Mtpa total processing capacity by equipping Shaft #3 for hoisting; (lxx) statements that the $150 million senior debt facility for Platreef Phase 1 is expected to be drawn down in the coming months; (lxxi) statements that Kipushi's operations will be supplied with hydroelectric power from DRC's state-owned electricity company, SNEL; (lxxii) statements that 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; (lxxiii) statements that the company expects to make further exploration spending commitments in 2024, to increase Ivanhoe's interest in the Western Forelands joint venture properties to 60% this year; (lxxiv) statements that the initial drilling program at Mokopane will consists of 4,000 metres of diamond core drilling; and (lxxv) statements that the Kamoa-Kakula's Phase 1 and 2 operations are anticipated to generate significant operating cash flow and are expected to, together with joint venture level financing facilities, be sufficient to fund Phase 3 capital cost requirements at current copper prices.

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 Forelands 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 however 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, however 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 71 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.