

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020

DATED: NOVEMBER 6, 2020

### INTRODUCTION

This management's discussion and analysis (MD&A) should be read in conjunction with the unaudited condensed consolidated interim financial statements of Ivanhoe Mines Ltd. ("Ivanhoe", "Ivanhoe Mines" or the "Company"), for the three and nine months ended September 30, 2020, which have been prepared in accordance with International Accounting Standard 34 - Interim Financial Reporting (IAS 34) and the audited consolidated financial statements of Ivanhoe for the years ended December 31, 2019 and 2018, which have been prepared in accordance with International Financial Reporting Standards (IFRS). All dollar figures stated herein are in U.S. dollars, unless otherwise specified. References to "C\$" mean Canadian dollars and references to "R" mean South African Rands.

The effective date of this MD&A is **November 6, 2020**. Additional information relating to the Company is available on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. Certain statements contained in the MD&A are forward-looking statements that involve risks and uncertainties. See "Forward-Looking Statements" and "Risk Factors".

## 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 by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the Company's current expectations regarding future events, performance and results and speak only as of the date of this MD&A.

Such statements include without limitation, the timing and results of: (i) statements that the concentrator plant is expected to be mechanically complete in Q2 2021 and that first copper concentrate production at the Kakula Mine now is expected in July 2021; (ii) statements regarding the pace of underground development at the Kakula Mine is expected to continue to accelerate as additional mining crews are mobilized; (iii) statements regarding Kakula's high-grade stockpile is projected to significantly expand in the coming months as the majority of Kakula's underground development will be in mining zones grading +5% copper; (iv) statements regarding refurbishment of six turbines at the Mwadingusha hydro-electric power plant and associated 220-kilovolt infrastructure is progressing and that the refurbished plant is projected to deliver approximately 72 megawatts of power to the national grid in the first quarter of 2021; (v) statements that Kakula is expected to produce an extremely high grade and clean copper concentrate (containing over 55% copper) that will be highly coveted by copper smelters around the world; (vi) statements regarding accelerating expansion plans for the second, 3.8 Mtpa concentrator module at the Kakula Mine, which will double the mine's processing capacity from 3.8 Mtpa to 7.6 Mtpa and the plans to bring forward the completion of the Phase 2 mill expansion from Q1 2023 to Q2 2022; (vii) statements that the holing at Kakula will significantly increase ventilation to the centre of the orebody, allowing for additional mining crews to begin highly-productive mining operations in Kakula's high-grade ore zones; (viii) statements regarding a phased development plan for the Platreef Project that targets significantly lower initial capital, to accelerate first production by using Shaft 1 as the mine's initial production shaft, followed by expansions to the production rate as outlined in the 2017 definitive feasibility study (DFS); (ix) statements regarding the timing of the results of the Platreef Project's phased development plan and updated definitive feasibility study expected to be released in mid-November 2020; (x) statements that the Kamoa-Kakula joint venture had an estimated \$570 million of capital costs remaining until initial production; (xi) statements regarding the planned mining methods at Platreef will use highly productive, mechanized methods, including long-hole stoping and drift-and-fill mining, and that each method will utilize cemented backfill for maximum ore extraction; (xii) statements regarding Ivanhoe's expectation

that it will continue to have sufficient cash resources or project-related financing options available to cover its share of the initial capital costs at the Kakula Mine; (xiii) statements regarding timing and duration of reduced activities at the Platreef and Kipushi projects; and (xiv) statements regarding the expected expenditure for the remainder of 2020 of \$8 million on further development at the Platreef Project; \$8 million at the Kipushi Project; \$3 million on regional exploration in the DRC; and \$5 million on corporate overheads – as well as its proportionate funding of the Kamoa-Kakula Project, expected to be \$127 million for the remainder of 2020.

As well, all of the results of the feasibility study for the Kakula copper mine, the Kakula-Kansoko 2020 pre-feasibility study and the updated and expanded Kamoa-Kakula Project preliminary economic assessment, the feasibility study of the Platreef Project and the pre-feasibility study of the Kipushi Project, constitute forward-looking statements or information, and include future estimates of internal rates of return, net present value, future production, estimates of cash cost, proposed mining plans and methods, mine life estimates, cash flow forecasts, metal recoveries, estimates of capital and operating costs and the size and timing of phased development of the projects. Furthermore, with respect to this specific forward-looking information concerning the development of the Kamoa-Kakula, Platreef and Kipushi projects, 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; (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; (xiv) changes in project scope or design, and (xv) political factors.

This MD&A also contains references to estimates of Mineral Resources and Mineral Reserves. The estimation of Mineral Resources is inherently uncertain and involves subjective judgments about many relevant factors. Estimates of Mineral Reserves provide more certainty but still involve similar subjective judgments. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation (including estimated future production from the Company's projects, the anticipated tonnages and grades that will be mined and the estimated level of recovery that will be realized), which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that ultimately may prove to be inaccurate. Mineral Resource or Mineral Reserve estimates may have to be re-estimated based on: (i) fluctuations in copper, nickel, zinc, platinum group elements (PGE), gold or other mineral prices; (ii) results of drilling; (iii) metallurgical testing and other studies; (iv) proposed mining operations, including dilution; (v) the evaluation of mine plans subsequent to 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 or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements or information, including, but not limited to, the factors discussed below and under "Risk Factors", and elsewhere in this 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 set forth below in the "Risk Factors" section beginning on page 52 and elsewhere in this MD&A.

### **REVIEW OF OPERATIONS**

Ivanhoe Mines is a mineral exploration and development company. The Company's financial performance is primarily affected by ongoing exploration and development activities being conducted at its three material properties. The Company has no producing properties and does not have operating revenues. The Company expects to fund all of its exploration and development activities through debt and equity financing until operating revenues are generated. The Company's material properties consist of:

- The Kamoa-Kakula Project. 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. Following the signing of an agreement with the DRC government in November 2016 to transfer an additional 15% interest in the Kamoa-Kakula Project to the government of the DRC, Ivanhoe Mines and Zijin Mining each hold an indirect 39.6% interest in the Kamoa-Kakula Project, Crystal River Global Limited (Crystal River) holds an indirect 0.8% interest and the DRC government holds a direct 20% interest. The Kamoa-Kakula Project is independently ranked as the world's fourth largest copper deposit by international mining consultant Wood Mackenzie. (See "Kamoa-Kakula Project")
- The Platreef Project. Construction of the planned Platreef Mine on the Company's discovery of platinum, palladium, nickel, copper, gold and rhodium on the Northern Limb of South Africa's Bushveld Igneous Complex. 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 100%-owned exploration licences totalling approximately 2,550 km<sup>2</sup>, much of it located in close proximity to the Kamoa-Kakula Project. 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 PROJECT

The Kamoa-Kakula Project, a joint venture between Ivanhoe Mines and Zijin Mining, has been independently ranked as the world's fourth-largest copper deposit by international mining consultant Wood Mackenzie. The project is approximately 25 kilometres west of the town of Kolwezi and about 270 kilometres west of Lubumbashi.

Ivanhoe sold a 49.5% share interest in Kamoa Holding Limited (Kamoa Holding) to Zijin Mining in December 2015 for an aggregate consideration of \$412 million. In addition, Ivanhoe sold a 1% share interest in Kamoa Holding to privately-owned Crystal River for \$8.32 million - which Crystal River will pay through a non-interest-bearing, 10-year promissory note. Since the conclusion of the Zijin transaction in December 2015, each shareholder has been required to fund expenditures at the Kamoa-Kakula Project in an amount equivalent to its proportionate shareholding interest in Kamoa Holding.

A 5%, non-dilutable interest in the Kamoa-Kakula Project was transferred to the DRC government on September 11, 2012, for no consideration, pursuant to the 2002 DRC mining code. Following the signing of an agreement with the DRC government in November 2016, in which an additional 15% interest in the Kamoa-Kakula Project was transferred to the DRC government, Ivanhoe and Zijin Mining now each hold an indirect 39.6% interest in the Kamoa-Kakula Project, Crystal River holds an indirect 0.8% interest and the DRC government holds a direct 20% interest. Kamoa Holding holds an 80% interest in the project.

### Health and safety at Kamoa-Kakula

Ivanhoe Mines regrets to report that a fatal accident occurred at the Kamoa-Kakula Project on August 16, 2020. The accident occurred underground at the Kakula North workings when a contractor's employee collided with the side wall of an access drive while attempting to move a drilling rig which he was not trained or authorized to do.

At the end of September 2020, the Kamoa-Kakula Project reached 1,640,584 work hours free of a lost-time injury. The project continues to strive toward its workplace objective of zero harm to all employees and contractors.

In accordance with health guidelines from the DRC government, and in line with the country's lifting of restrictions, Kamoa-Kakula's Congolese workforce has gone back to normal work rotations. Rigorous testing, physical distancing, wearing face masks, frequent hand washing and contact-tracing measures still are in place to protect the safety and health of the workforce and community members.

The project has established a COVID-19 isolation facility at the Kamoa camp. Potential symptomatic patients are moved to this facility, where they will be isolated, tested and treated. Once patients have recovered and are deemed no longer infectious, they can return to work only after an additional quarantine period which is determined by the project's medical staff.

As the pandemic evolves, the medical team at Kamoa-Kakula continues to review and update its risk mitigation protocols. The project's preventative measures are at the highest international standards and, if there was a case internally, the risk of spreading or cross-contamination is considered to be very low.

Dr. Patrick Kasongo, Occupational Health Coordinator (left); Brett Watson, Managerial Leader, Health, Safety & Environment (middle); and Greg Hillen, Advanced Life Support Paramedic (right) — three key members of Kamoa-Kakula's first-rate medical team that have been instrumental in the project successfully navigating the COVID-19 pandemic.



## Outstanding economic results of the Kamoa-Kakula Integrated Development Plan 2020

On September 8, 2020, Ivanhoe Mines announced the results of an independent Integrated Development Plan (IDP) for the Kamoa-Kakula Project. The Kamoa-Kakula Integrated Development Plan 2020 encompasses three development scenarios:

- The definitive feasibility study (DFS) for the stage one Kakula Mine development. The Kakula 2020
  DFS evaluates the development of a stage one, 6-Mtpa underground mine and surface processing
  complex at the Kakula Deposit with a capacity of 7.6 Mtpa, built in two modules of 3.8 Mtpa, with the
  first already under advanced construction.
- The pre-feasibility study (PFS) including Kansoko Mine development. The Kakula-Kansoko 2020
  PFS evaluates the development of mining activities at the Kansoko Deposit in addition to the Kakula
  Mine, initially at a rate of 1.6 Mtpa to fill the concentrator at Kakula, eventually ramping up to 6 Mtpa
  as the reserves at Kakula are depleted.
- The expanded, subsequent development to four producing mines. The Kamoa-Kakula 2020 preliminary economic assessment (PEA) includes an analysis of the potential for an integrated, 19-Mtpa, multi-stage development, beginning with initial production from the Kakula Mine, to be followed by subsequent, separate underground mining operations at the nearby Kansoko, Kakula West and Kamoa North mines, along with the construction of a direct-to-blister smelter. The Kamoa North area comprises five separate mines that would be developed as resources are mined out elsewhere, to maintain the production rate at up to 19 Mtpa, with an overall life in excess of 40 years.

The Kamoa-Kakula IDP 2020 was independently prepared on a 100%-basis 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; KGHM Cuprum R&D Centre Ltd. of Wroclaw, Poland; Outotec Oyj of Helsinki, Finland; Paterson and Cooke of Cape Town, South Africa; Stantec Consulting International LLC of Phoenix, USA; SRK Consulting Inc. of Johannesburg, South Africa; and Wood plc of Reno, USA.

Highlights of the Kakula 2020 DFS, initial 6 Mtpa mine at Kakula, include:

- The Kakula 2020 DFS evaluates the development of a stage one, 6-Mtpa underground mine with a surface processing complex at the Kakula Deposit with a capacity of 7.6 Mtpa, built in two modules of 3.8 Mtpa, with the first already under advanced construction. For this option, the DFS envisages an average annual production rate of 284,000 tonnes of copper at a mine-site cash cost of \$0.52 per pound (lb.) copper and total cash cost of \$1.16/lb. copper for the first 10 years of operations, and annual copper production of up to 366,000 tonnes by year four.
- Remaining initial capital cost of \$0.65 billion for this option would result in an after-tax net present value at an 8% discount rate (NPV8%) of \$5.5 billion.
- The internal rate of return of 77.0% and project payback period of 2.3 years confirm the compelling economics for the Kamoa-Kakula Project's stage one of production.
- Kakula benefits from an ultra-high, feed grade averaging 6.6% copper over the first five years of operations, and 5.2% copper on average over a 21-year mine life.

Highlights of the Kakula-Kansoko 2020 PFS, that incorporates Kansoko mine development, include:

- The Kakula-Kansoko 2020 PFS evaluates the development of mining activities at the Kansoko Deposit in addition to Kakula, initially at a rate of 1.6 Mtpa to fill the 7.6-Mtpa concentrator at Kakula, eventually ramping up to 6 Mtpa as the reserves at Kakula are depleted. For this option, the PFS envisages an average annual production rate of 331,000 tonnes of copper at a mine-site cash cost of \$0.55/lb. copper and total cash cost of \$1.23/lb. copper for the first 10 years of operations, and annual copper production of up to 427,000 tonnes by year four.
- Remaining initial capital cost of \$0.69 billion for this option would result in an after-tax net present value at an 8% discount rate (NPV8%) of \$6.6 billion. The internal rate of return of 69.0% and project payback period of 2.5 years confirm the compelling economics of Kakula and Kansoko.
- The combined Kakula-Kansoko production benefits from an ultra-high, feed grade averaging 6.2% copper over the first five years of operations, and 4.5% copper on average over a 37- year mine life.

Highlights of the modular, integrated, expanded development option potential for the Kakula and Kamoa deposits, mining a total of 19 Mtpa, with construction of a direct-to-blister smelter, include:

- The Kamoa-Kakula 2020 PEA presents an additional development option of a multi-stage, sequential operation on Kamoa-Kakula's high-grade copper deposits.
- Initial production from the Kakula Mine at a rate of 6 Mtpa, followed by subsequent, separate underground mining operations at the nearby Kansoko, Kakula West and Kamoa North mines, along with the construction of a direct-to- blister smelter. The Kamoa North Area comprises five separate mines that will be developed as resources are mined out elsewhere, to maintain the production rate at up to 19 Mtpa, with an overall life in excess of 40 years.
- For the integrated, 19-Mtpa, multi-stage development, the PEA envisages \$0.7 billion in remaining initial capital costs. Future expansion at the Kansoko Mine, Kakula West Mine and Kamoa North mines would be funded by cash flows from the Kakula Mine, resulting in an after-tax net present value at an 8% discount rate (NPV8%) of \$11.1 billion, an internal rate of return of 56.2%, and a payback period of 3.6 years.

- Under this approach, the PEA also contemplates the construction of a direct-to-blister copper smelter
  at the Kakula plant site with a capacity to process one million tonnes of copper concentrate per
  annum to be funded from internal cash flows. This would be completed in year five of operations,
  achieving significant savings in treatment charges and transportation costs.
- The 19-Mtpa scenario shows the potential for average annual production of 501,000 tonnes of copper at a total cash cost of \$1.07/lb. copper during the first 10 years of operations and production of 805,000 tonnes of copper by year eight.
- At this future production rate, Kamoa-Kakula would rank as the world's second largest copper mine.

The capital costs incurred by the Kamoa-Kakula joint venture in 2019 amounted to \$309.1 million, of which \$125.2 million was spent on the Kakula declines and mine development. A further capital cost of \$403 million, that includes the costs allocated to the pre-production ore stockpiles, has been incurred in the nine months ended September 30, 2020. Ivanhoe's share of the capital costs incurred in the nine months ended September 30, 2020, was \$200 million, representing its share of approximately 40% of the initial capital costs, plus its share of capital associated with the 20% carried interest owned by the Government of the DRC, which will be repaid through future cash flows from the project. Ivanhoe has budgeted \$127 million for its proportionate funding of approximately 50% for the Kamoa-Kakula Project for the remainder of 2020. As of September 30, 2020, the joint venture had an estimated \$570 million of capital costs remaining until initial production.

Ivanhoe expects that it will continue to have sufficient cash resources or financing options available to cover its proportionate share of the remaining initial capital costs.

Figure 1. Kamoa-Kakula 19-Mtpa PEA long-term development plan, which would position Kamoa-Kakula as the world's second largest copper mining complex, with peak annual copper production of more than 800,000 tonnes.

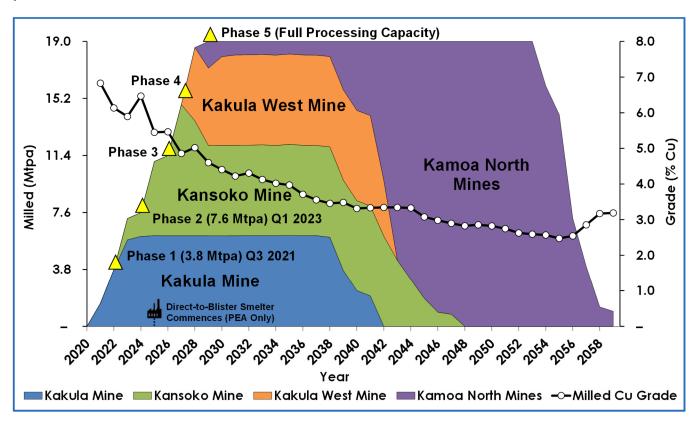
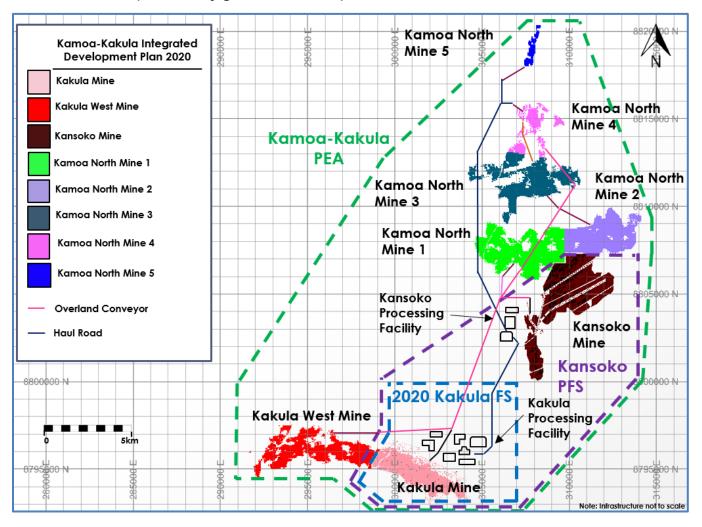


Figure by OreWin 2020

Figure 2: Overview of deposits included within the Kakula 2020 DFS (6 Mtpa — outlined by blue dotted line), Kakula-Kansoko 2020 PFS (7.6 Mtpa — outlined by purple dotted line) and Kamoa-Kakula 2020 PEA (outlined by green dotted line).



#### Kamoa-Kakula Mineral Resources

Ivanhoe announced the completion of an independently-verified, updated Mineral Resource estimate for the Kamoa-Kakula Project on February 5, 2020. The new Mineral Resource estimate has an effective date of January 30, 2020, and is the culmination of an infill drilling program designed to better define higher-grade copper zones within the existing Kamoa Deposit. The cut-off date for drill data is January 20, 2020.

At a 1% cut-off, Kamoa's Indicated Mineral Resources now total 760 million tonnes grading 2.73% copper, containing 45.8 billion pounds of copper. At the same 1% cut-off, Kamoa's Inferred Mineral Resources now total 235 million tonnes grading 1.70% copper, containing 8.8 billion pounds of copper. At a 3% cut-off, the new Mineral Resource estimate boosts the Kamoa Deposit's Indicated Mineral Resource tonnages by 15% and contained copper by 15.5%, to a total of 256 million tonnes at a grade of 4.15% copper. At the same 3% cut-off, Kamoa's Inferred Mineral Resources now total 13 million tonnes at a grade of 3.51% copper.

The entire Kamoa Deposit was updated in the January 30, 2020 Mineral Resource estimate. The majority of recent drilling, however, targeted the ultra-high-grade Bonanza Zone at Kamoa North, and an

approximated north-south corridor of elevated copper grades in the far north of the mining licence area (the Far North Zone).

The January 30, 2020 Kamoa Mineral Resource estimate covers approximately 600 metres of strike length in the deeper western portions of the Bonanza Zone (west of the West Scarp Fault), and 1,500 metres of strike length in the shallower eastern portions of the Bonanza Zone; defined by drill sections spaced 50 metres apart on strike in the central section, and 100 metres apart on strike elsewhere.

At a 1% cut-off, the current, combined Indicated Mineral Resources for the Kamoa-Kakula Project now totals 1.387 billion tonnes grading 2.74% copper, containing 83.7 billion pounds of copper. At the same 1% cut-off, Kamoa-Kakula's combined Inferred Mineral Resources now totals 339 million tonnes grading 1.68% copper, containing 12.5 billion pounds of copper.

At a higher 3% cut-off, the current, combined Indicated Mineral Resources for the Kamoa-Kakula Project now totals 423 million tonnes grading 4.68% copper, containing 43.7 billion pounds of copper. At the same 3% cut-off, Kamoa-Kakula's combined Inferred Mineral Resources now totals 17 million tonnes grading 3.51% copper, containing 1.3 billion pounds of copper.

The January 30, 2020 Kamoa Indicated and Inferred Mineral Resource estimate was prepared by George Gilchrist, Ivanhoe Mines' Vice President, Resources, under the direction of Gordon Seibel, RM SME, of the Wood Group (formerly Amec Foster Wheeler E&C Services Inc.) of Reno, USA, and is reported in accordance with the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. Mr. Seibel is the Qualified Person for the estimate. There has been no change to the Mineral Reserve estimate at Kamoa-Kakula.

# Excellent construction progress being made on Kakula's concentrator plant; first production now expected in July 2021

Construction of the project's first-phase 3.8-Mtpa concentrator plant is advancing rapidly and at the end of September 2020 was approximately 28% complete. The concentrator plant is expected to be mechanically complete in Q2 2021, with first copper concentrate production scheduled for July 2021. The project and construction teams have consistently achieved the milestone dates despite the challenges presented by the COVID-19 pandemic, and have placed Kamoa-Kakula in a position to commission earlier than initially planned in 2021.

Civil works for the initial concentrator plant are nearing completion, with approximately 26,000 cubic metres of concrete poured to date. All major construction areas will be handed over to the steel, mechanical, piping and platework (SMPP) contractor imminently.

The final major pieces of equipment – two 80-MVA/220kV electrical transformers – are scheduled to arrive on site in early November 2020. Construction of the various electrical substations is progressing well.

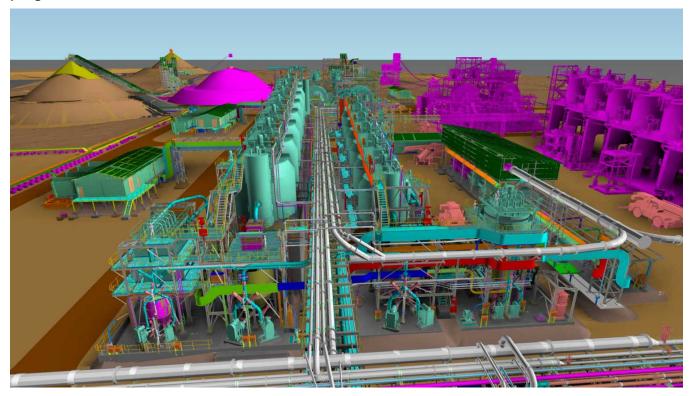
Structural steel and platework fabrication for the concentrator plant is complete, with the bulk of the material already delivered to site. Piping is progressing according to schedule, with more than 60 kilometres (of a total of 83 kilometres) of piping already delivered at the end of October 2020. Limited electrical, controls and instrumentation (EC&I) work has started with the installation of cable racking.

At the end of October 2020, over 2,000 tonnes of steel (of a total of 5,700 tonnes) had been installed. The main focus areas are the conveyor gantries, mill building, reagent storage area, flotation area, and concentrate storage building. Construction has commenced for the plant stores, workshop and water services.

The two ball mills for the initial 3.8-Mtpa concentrator plant; with one of the 7-megawatt, variable-speed-drive motors (blue), manufactured by WEG Industries in Brazil, and the high-pressure grinding rolls stockpile under construction in the background.



A 3D illustration of the first 3.8-Mtpa concentrator plant flotation area, with the recently-initiated second 3.8-Mtpa concentrator plant shown in magenta. A comparison picture below shows progress to date.





A 3D illustration of the finished ball mills (in light green), with the next two ball mills for the recently-initiated second concentrator plant shown in magenta. A comparison picture below shows progress to date. The first-phase (dark green) and second-phase (magenta) high-pressure grinding rolls buildings are shown in the red circle.





## Engineering, procurement and construction of other surface infrastructure rapidly progressing

Overall progress of Kamoa-Kakula's first-phase, 3.8-Mtpa mining and milling operation (covering mine infrastructure, concentrator plant and surface infrastructure) was approximately 58% complete at the end of September 2020.

Beijing-based CITIC Construction is building Kakula's first phase, backfill paste plant. The backfill plant will be used to mix tailings from the concentrator plant with cement to produce paste backfill. The backfill will be pumped back into the mine and used to help support mined-out areas. Approximately one half of the mine's tailings will be sent back underground, significantly reducing the surface tailings storage. Construction of the backfill plant civil works is well advanced and steel erection has started.

Construction of the tailings dam is progressing well, with the aim to complete most of the earthworks before the rainy season is expected to begin later in November 2020. Installation is well advanced for the three tailings lines and the tailings return water line.

All long-lead mechanical items now have been delivered to site with the exception of the main 220kV transformers which have been off-loaded at port and currently are being transported to site by road.

The gabion wall for the surface bulk reclaim tip system that is located near Kakula's main northern decline has been constructed and preparation has started for the civil works required at the top of the wall. The bulk reclaim tip system will be used to feed ore from Kakula's surface stockpiles (and ore from the Kansoko Mine when second-phase operations begin) to the processing circuit.

High-grade copper ore being delivered to surface by the underground conveyor system in front of the gabion wall for the bulk reclaim tip system.



# Underground development is approximately seven kilometres ahead of plan at the end of September 2020

A total of 22.6 kilometres of underground development was completed by the end of September 2020, which was approximately 7 kilometres ahead of plan. A record of 2.172 kilometres of development was subsequently achieved in October 2020, further increasing the underground development to more than 24.7 kilometres which is 7.9 kilometres ahead of plan.

There currently are 10 mining crews (three owner crews and seven contractor crews) at Kakula and one mining crew at Kansoko. The project will continue to add additional crews to further accelerate development.

In the Kakula southern access drives, minor offsets across growth faults have been encountered, but adjustments to the mining has allowed the drives to follow the steeper dips of the mineralization across the faults. In the Kakula northern access drive, a larger growth fault was encountered where the mineralization of the south side of the fault was faulted down (with variable offsets). A spiral decline was developed to accommodate the offsets, and re-established mining on the mineralization.

At Kakula, both main access tunnels (drives) being advanced from the southern decline, and the spiral access drive being advanced from the northern decline, recently have accessed the high-grade zone near the centre of the deposit grading approximately +8% copper. Kakula's main access drives between the northern and southern declines have less than 100 metres remaining before they are connected (holed) in the high-grade centre of the deposit. The holing will significantly increase ventilation to the centre of the orebody, allowing for additional mining crews to begin highly-productive mining operations in Kakula's high-grade ore zones.

Chamec Kasatuka Mpungwe operating a piece of semi-autonomous mining equipment at the Kansoko Mine. Kamoa-Kakula is training a new generation of young Congolese women and men to safely operate modern, mechanized equipment in the world-scale underground copper mines being built at Kamoa-Kakula.



Miner Freddy Muba holds a piece of ultra-high-grade, chalcocite-rich ore at the Kakula Mine. Kakula's high concentration of chalcocite ore – which is almost 80% copper by weight – accounts for the mine's average feed grade of 6.6% copper over the first five years of operations, and 5.2% copper on average over a 21-year life.



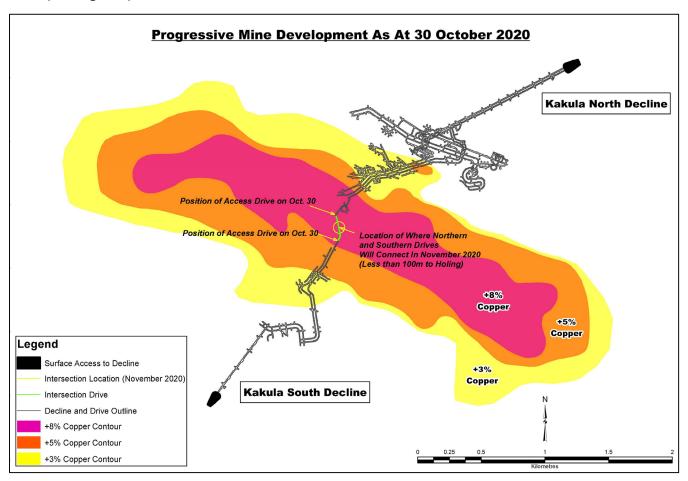
In addition to advancing the main connecting access drives, underground mining crews at Kakula are focused on preparation work for developing the high grade, drift-and-fill mining blocks in the centre of the orebody. Opening up of the mining footprint for these high grade, drift-and-fill mining areas entails development work in areas of low-, medium- and high-grade ore, and is designed to coincide with the start-up of the concentrator plant next year. This will allow mining crews to deliver significant tonnage of high-grade ore directly from Kakula's underground workings to the concentrator plant.

Kakula's second underground ore bin (the west tip bin) is undergoing commissioning. Installation of Kakula's ventilation shaft #2 also is progressing well, with the first of three high-capacity surface fans installed by the contractor.

Underground development at the Kansoko Mine currently is in low-to-medium-grade ore zones, grading approximately 3% copper. In October, mine development work intersected the first exposure of siltstone, marking the transition to higher copper grades at Kansoko. Siltstone is a rock type with a strong influence on copper mineralization at Kamoa-Kakula.

A recent, independent audit of Kamoa-Kakula's greenhouse gas intensity metrics performed by Hatch Ltd. of Mississauga, Canada, confirmed that the project will be among the world's lowest greenhouse gas emitters per unit of copper produced.

Figure 3: Underground development completed at the Kakula Mine to the end of October (in black), and the location where the northern and southern access drives will be joined. Majority of development in November will be in the initial drift-and-fill mining area within the +8% copper zone (in magenta).



# Pre-production ore stockpiles now contain approximately one million tonnes grading 3.47% copper

At the end of September 2020, Kakula North's combined medium- and high- grade, pre-production ore stockpile contained approximately 540,000 tonnes grading 3.73% copper, the medium- and high- grade ore stockpile at Kakula South contained approximately 168,000 tonnes grading 2.73% copper, and stockpiles at Kansoko, contained approximately 95,000 tonnes grading 2.34% copper.

In October, crews at Kakula and Kansoko mined and transported to surface approximately 194,000 tonnes of ore grading 4.01% copper. This brings the project's total pre-production high- and medium-grade ore stockpiles to approximately 1,000,000 tonnes at an estimated grade of 3.47% copper. An additional 622,000 tonnes of low-grade development ore also has been stockpiled on surface.

The ore being mined from the northern portion of the Kakula Mine is transported to surface via the conveyor system and placed on a blended surface stockpile that contained approximately 639,000 tonnes grading an estimated 3.71% copper at the end of October 2020.

Additional, pre-production ore stockpiles are located at the Kakula southern decline (approximately 67,000 tonnes of high-grade ore grading 5.05% copper, and 171,000 tonnes of medium-grade ore grading 2.62% copper) and the Kansoko decline (approximately 120,000 tonnes grading 2.53% copper).

The project is positioned for a significant acceleration in the tonnage, as well as a marked increase in the grade of ore added to the surface stockpiles, as more mining crews soon will begin working in the higher-grade areas of the Kakula and Kansoko mines.

# Kakula's high-grade copper ore being transported to surface on the underground conveyor system.



Chart 1: Cumulative tonnes and grade of pre-production ore stockpiles at the Kakula and Kansoko mines from May 2020 to October 2020.

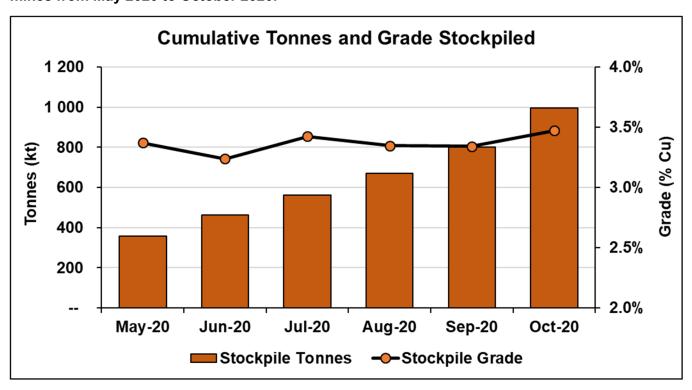
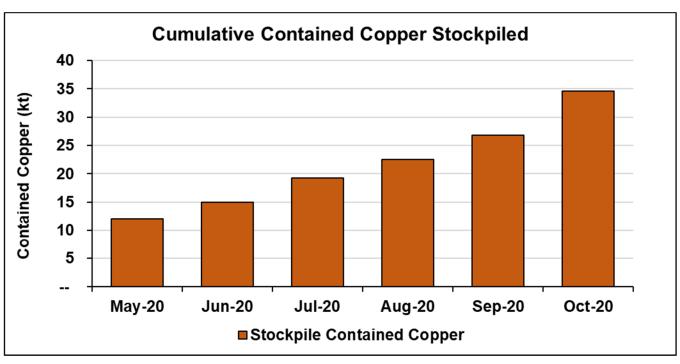


Chart 2: Growth in contained copper in pre-production ore stockpiles at the Kakula and Kansoko mines from May 2020 to October 2020.



## Discussions underway for the marketing of Kakula's copper concentrates

Kamoa-Kakula is in detailed discussions with a number of parties with respect to the marketing and smelting of its copper concentrates. Kakula is expected to produce an extremely high grade and clean copper concentrate (containing over 55% copper) that will be highly coveted by copper smelters around the world. Metallurgical test work indicates that the Kakula concentrates contain extremely low arsenic levels by world standards – approximately 0.01%.

# Kamoa-Kakula expected to be connected to the national power grid in December, providing clean, renewable 220-kV hydropower

The mine is receiving hydro-electric power for the Kamoa 120-kilovolt (kV) overhead line via the 18-megawatt mobile substation, which is connected to the national grid. The mobile substation was recently relocated to the Kakula Mine from the Kansoko Mine to increase transmission capacity to Kakula. Construction of the permanent 220-kV overhead power line, the electrical switching substation (NRO substation) and the Kamoa consumer substation are underway. In December 2020, Kamoa-Kakula is expected to tie in the 35-kilometre, 220-kV power line connecting the Western Dispatch substation in Kolwezi to Kamoa-Kakula, and supply the project with reliable and clean hydro-generated electricity from the national grid.

Tresor Kalenga Musoya (top), Liang Yang (middle) and Chanzhong Yang (bottom) installing the high-tension conductors for the new 35-kilometre powerline that will carry high-voltage (220-kV) hydro-electricity from the national grid to Kamoa-Kakula.

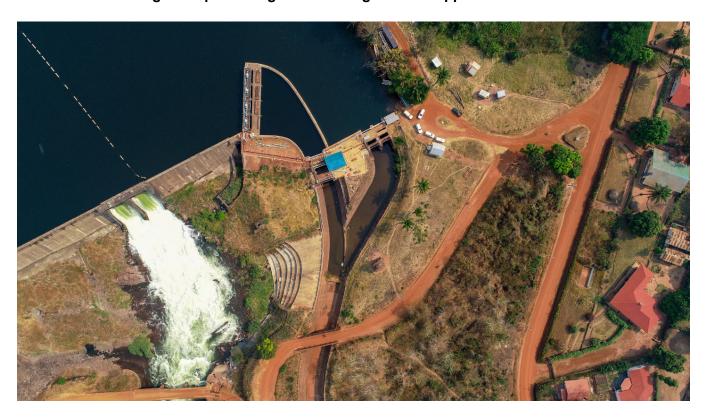


# Ongoing upgrading work enables Mwadingusha hydropower station to supply clean, sustainable electricity

The upgrading work at the 72-megawatt Mwadingusha hydropower plant is nearing completion and electricity from all of Mwadingusha's six turbines is expected to be integrated into the national power grid in the first quarter of 2021. The two main activities remaining are the final installation of the turbines and the completion of the penstock replacement.

The work is being conducted by engineering firm Stucky of Lausanne, Switzerland, under the direction of Ivanhoe Mines and Zijin Mining, in conjunction with the DRC's state-owned power company, La Société Nationale d'Electricité (SNEL).

Aerial view of the Mwadingusha dam and spillway. The upgrading of the Mwadingusha hydrogeneration facility, in conjunction with Société Nationale d'Electricité (SNEL), is an important step in Kamoa-Kakula's goal of producing the world's greenest copper.



# Exploration success leads to discovery of shallow, thick, ultra-high grade Kamoa North Bonanza Zone

Exploration drilling in Q1 2020 totalled 5,195 metres and was focused on further definition of known high-grade copper trends in the typical mineralized horizon (Ki1.1.1) at Kamoa North. No further drilling has been done in the Bonanza Zone.

Exploration activities, including both drilling and further geophysical surveys, have been suspended at Kamoa-Kakula since March 30, 2020 in response to the preventative measures implemented by the Company to protect its employees and drilling contractors from COVID-19.

# Development options at Kamoa North being considered

All geotechnical and hydrogeological drilling to provide support for future mining studies has been completed and a final resource model has been prepared. Metallurgical flotation test work has yielded positive results in line with expected performance. A number of different mine development scenarios and mining methods are being reviewed and optimized.

## Kamoa-Kakula partners accelerate expansion plans and bring Phase 2 copper production forward

In September 2020, Kamoa-Kakula proceeded with orders for the long-lead equipment for the second, 3.8 Mtpa concentrator module at the Kakula Mine, which will double the mine's processing capacity from 3.8 Mtpa to 7.6 Mtpa. The earlier than planned placement of the orders for the concentrator's long-lead equipment is expected to accelerate the completion of the Phase 2 mill expansion from Q1 2023 to Q2 2022.

In order to bring forward the expansion of the Kakula concentrator plant, the Kamoa-Kakula joint venture will order long-lead items with a total commitment value of approximately \$100 million in 2020, of which an estimated \$25 million is expected to be spent this year. Requests for tenders for the second-phase earthworks and civil works also have been issued.

## Enriching communities through sustainable development

The Sustainable Livelihoods Program started in 2010 in an effort to strengthen food security and farming capacity in the host communities near Kamoa-Kakula by establishing an agricultural training garden and support for farmers at the community level. Today, approximately 350 community farmers are benefiting from the Sustainable Livelihoods Program, producing high-quality food for their families and selling the surplus for additional income. As Kamoa gears up to take the Livelihood Program to the next level, an agronomy school, which will offer training programs to local farmers and serve as a research facility, is currently under construction.

Additional non-farming related activities for 2020 include education and literacy programs, the continuation of a community brick-making program and the supply of fresh water to a number of local communities using solar powered boreholes. During 2020, 18 additional boreholes were drilled in communities, making use of local contractors. A clinic, school and facility for a sewing program are also currently under construction.

Kamoa-Kakula conducted a number of interventions in respect of COVID-19 awareness and prevention. These include the donation of rapid test kits, masks and hand-washing equipment to local communities.

Construction of resettlement houses for the second phase of the relocation program continued throughout the year with 19 families having been relocated. Relocation also took place for the third phase of the relocation program with 14 families relocated during the year. The survey for Kakula North and all crop compensation has been completed, with only six temporary structures being identified. The entire Kakula Mine area, including the tailings dam area, will be secured once these relocation phases are complete.

Nickson Nyundo, a member of Kamoa Copper's landscaping team, planting grass at Kakula Mine office.



Members of the Kakula kitchen staff preparing fresh fruits and vegetables; all of which were grown locally in community-run gardens, then sold to the Kamoa-Kakula Project. Another example of the Kamoa-Kakula Sustainable Livelihoods Program supporting economic diversification in surrounding communities.



### 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. Ivanplats reached Level 4 contributor status in its most recent verification assessment on the B-BBEE scorecard. A Japanese consortium of ITOCHU Corporation, Japan Oil, Gas and Metals National Corporation, and Japan Gas Corporation, owns a 10% interest in Ivanplats, which it acquired in two tranches for a total investment of \$290 million.

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

On the Northern Limb, platinum-group metals mineralization is primarily hosted within the Platreef, a mineralized sequence that is traced more than 30 kilometres along 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. The Flatreef area lies entirely on the Turfspruit and Macalacaskop properties, which form part of the Company's mining right.

# Health and safety at Platreef

Ivanhoe Mines regrets to report that a fatal accident occurred at the Platreef Project on September 14, 2020. The accident occurred in Shaft 1 when the cable holding a kibble bucket was sheared in the headgear of the shaft and the kibble bucket subsequently fell down Shaft 1 and struck the northern side of the working platform (stage), where four employees were conducting routine water-pumping activities.

One of the employees was rescued from underground and airlifted to a hospital in Johannesburg. He has subsequently been discharged and is expected to make a full recovery. Sadly, the three other miners succumbed to their injuries.

The formal enquiry by the Department of Mineral Resources and Energy is still ongoing, but the preliminary finding is that this tragic accident was caused by an electronic device failure.

Leading industry specialists also are assisting the Ivanplats team in determining the possible causes resulting in the accident. The Ivanplats team is in the process of assessing the extent of the damage and the work required to ensure that the shaft can resume normal operations in a safe manner.

# Positive independent 2017 definitive feasibility study; Platreef projected to be Africa's lowest-cost producer of platinum-group metals

In July 2017, Ivanhoe Mines announced the results of an independent, definitive feasibility study (DFS) for the then planned first phase of the Platreef Project's palladium-platinum-nickel-copper-gold-rhodium mine in South Africa.

The Platreef DFS covered a 4-Mtpa, first phase of development that would include construction of a state-of-the-art underground mine, concentrator and other associated infrastructure to support initial production

of concentrate. As Phase 1 is being developed and commissioned, there would be opportunities to refine the timing and scope of subsequent phases of expanded production.

The 2017 DFS highlights include:

- Indicated Mineral Resources containing an estimated 41.9 million ounces of platinum, palladium, rhodium and gold, with an additional 52.8 million ounces of platinum, palladium, rhodium and gold in Inferred Resources.
- Mineral Reserves containing 17.6 million ounces of platinum, palladium, rhodium and gold following stope optimization and mine sequencing work.
- Development of a large, safe, mechanized, underground mine, with an initial four-Mtpa concentrator and associated infrastructure.
- Planned initial average annual production rate of 476,000 ounces of platinum, palladium, rhodium and gold (3PE+Au), plus 21 million pounds of nickel and 13 million pounds of copper.
- Estimated pre-production capital requirement of approximately \$1.5 billion, at a ZAR:USD exchange rate of 13 to 1.
- Platreef would rank at the bottom of the cash-cost curve, at an estimated \$351 per ounce of 3PE+Au produced, net of by-products and including sustaining capital costs, and \$326 per ounce before sustaining capital costs.
- After-tax net present value (NPV) of \$916 million, at an 8% discount rate.
- After-tax internal rate of return (IRR) of 14.2%.

All figures are on a 100%-project basis unless otherwise stated. The DFS was prepared for Ivanhoe Mines by principal consultant DRA Global of Johannesburg, South Africa; with economic analysis led by OreWin Pty Ltd of Adelaide, Australia; and specialized sub-consultants including Wood plc of Reno, USA; Stantec Consulting International LLC of Phoenix, USA; Murray & Roberts Cementation of Johannesburg, South Africa; SRK Consulting Inc. of Johannesburg, South Africa; Golder Associates Africa of Midrand, South Africa; and Digby Wells Environmental of Johannesburg, South Africa.

### Platreef phased development plan and update of the 2017 DFS

Ivanhoe is investigating a phased development plan for the Platreef Project, targeting significantly lower initial capital, to accelerate first production by using Shaft 1 as the mine's initial production shaft. This plan will focus on initially targeting the development of mining zones accessible from Shaft 1 and maximizing the hoisting capacity of this shaft, followed by expansions to the production rate as outlined in the 2017 DFS.

Concurrently, Ivanhoe is updating the Platreef Project's DFS to take into account development schedule advancement since 2017 when the DFS was completed, updated costs and refreshed metal prices and foreign exchange assumptions. This update, together with the study on the phased development plan, is nearing completion and is expected to be released in mid-November 2020.

#### Platreef Mineral Resources

The Platreef Project's Mineral Resource estimate was prepared for Ivanhoe Mines under the direction of Dr. Harry Parker, RM SME, of Wood plc. Timothy Kuhl, RM SME, also of Wood plc, has independently confirmed the Mineral Resource estimate and is the Qualified Person for the estimate, which has an effective date of April 22, 2016.

The Flatreef Mineral Resource, with a strike length of 6.5 kilometres, lies predominantly within a flat-to-gently-dipping portion of the Platreef mineralized belt at relatively shallow depths of approximately 500 metres to 1,350 metres below the surface. The Flatreef Deposit is characterized by its very large vertical thicknesses of high-grade mineralization.

The Platreef Indicated Mineral Resources for all mineralized zones are 346 million tonnes at a grade of 3.77 grams per tonne (g/t) 3PE+gold (1.68 g/t platinum, 1.70 g/t palladium, 0.11 g/t rhodium, 0.28 g/t gold), 0.32% nickel and 0.16% copper at a 2.0 g/t 3PE+gold cut-off. The average thickness of the 2.0 g/t 3PE+gold grade shell used to constrain the T2MZ resources for the indicated area is 19 metres.

Inferred mineral resources for all mineralized zones are 506 million tonnes at a grade of 3.24 g/t 3PE+gold (1.42 g/t platinum, 1.46 g/t palladium, 0.10 g/t rhodium, 0.26 g/t gold), 0.31% nickel and 0.16% copper. The average thickness of the 2.0 g/t 3PE+gold grade shell used to constrain the T2MZ resources for the inferred area is 12.7 metres.

### Shaft 1 successfully completed down to the final depth of 996 metres

Shaft 1 reached the top of the high-grade Flatreef Deposit (T1 mineralized zone) at a depth of 780.2 metres below surface in Q3 2018 and has since been extended to its final depth of 996 metres below surface. The thickness of the mineralized orebody (T1 and T2 mineralized zones) at Shaft 1 is 29 metres, with grades of platinum-group metals ranging up to 11 grams per tonne (g/t) 3PE (platinum, palladium and rhodium) plus gold, as well as significant quantities of nickel and copper. The 29-metre intersection yielded approximately 3,000 tonnes of ore, estimated to contain more than 400 ounces of platinum-group metals. The ore is stockpiled on surface for further metallurgical sampling.

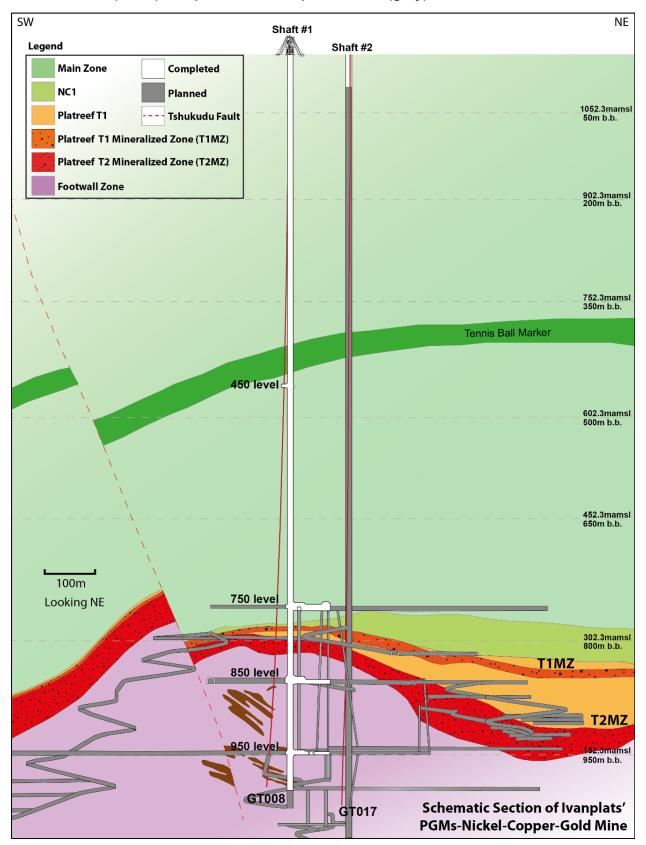
The 750-, 850-, and 950-metre-level station developments have been completed. The three development stations will provide initial, underground access to the high-grade orebody. Shaft 1 changeover detailed designs have successfully been completed and will enable Shaft 1 to be configured for permanent rock hoisting. The changeover construction has been delayed following the September 14, 2020 accident and the Ivanplats team is in the process of assessing the work required to ensure that the shaft can resume normal operations in a safe manner. Ivanhoe is considering alternative construction sequencing to possibly speed up the changeover construction process.

#### Underground mining to incorporate highly-productive, mechanized methods

The mining zones in the current Platreef mine plan occur at depths ranging from approximately 700 metres to 1,200 metres below surface. When completed, Shaft 2 is expected to provide primary access to the mining zones; secondary access is expected to be via Shaft 1. During mine production, both shafts also are expected to serve as ventilation intakes. Three additional ventilation exhaust raises are planned to achieve steady-state production.

Planned mining methods will use highly-productive, mechanized methods, including long-hole stoping and drift-and-fill mining. Each method will utilize cemented backfill for maximum ore extraction. The ore will be hauled from the stopes to a series of internal ore passes and fed to the bottom of Shaft 2, where it will be crushed and hoisted to surface.

Schematic section of the Platreef Mine, showing Flatreef's T1 and T2 thick, high-grade mineralized zones (red and dark orange), underground development work completed to date in shafts 1 and 2 (white) and planned development work (gray).



# Long-term supply of bulk water secured for the Platreef Mine

On May 7, 2018, Ivanhoe announced the signing of a new agreement to receive local, treated water to supply most of the bulk water needed for the first phase of production at Platreef. The Mogalakwena Local Municipality has agreed to supply a minimum of five million litres of treated water a day for 32 years, beginning in 2022, from the town of Mokopane's new Masodi Treatment Works. Initial supply will be used in Platreef's ongoing underground mine development and surface infrastructure construction.

Under the terms of the agreement, which is subject to certain suspensive conditions, Ivanplats will provide financial assistance to the municipality for certified costs of up to a maximum of R248 million (approximately \$16 million) to complete the Masodi treatment plant. Ivanplats will purchase the treated wastewater at a reduced rate of R5 per thousand litres for the first 10 million litres per day to offset a portion of the initial capital contributed.

## Development of human resources and job skills

Consultation regarding the Platreef Project's second Social and Labour Plan (SLP) is in the final stages. In this second SLP, Ivanplats plans to build on the foundation laid in the first SLP and continue with its training and development suite, which includes: 15 new mentors; internal skills training for 78 staff members; a legends program to prepare retiring employees with new/other skills; community adult education training for our host community members; core technical skills training for at least 100 community members, portable skills; and more.

Local economic development projects will contribute community water source development with the Mogalakwena Municipality boreholes program, educational program in partnership with Department of Education and significant contribution funding for sanitation infrastructure at the municipality.

The enterprise and supplier development commitments comprise of expanding the existing kiosk and laundry facilities even further and adding expanded change house facilities to be managed by a community partner in the future. A five year integrated business accelerator and funding project will assist community members interested to obtain help with development and supplier readiness.

The Platreef Project has continued supporting a number of educational programs, including the Elearning project and the maintenance of science and computer laboratories, as well as the provision of free Wi-Fi in host communities. In pursuit of Ivanhoe's de-carbonization agenda, the Platreef Project planted 25 trees at two local schools in the mine's footprint area.

### KIPUSHI PROJECT

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

As part of the Company's cost-cutting measures announced on April 27, 2020, Ivanhoe's board of directors allocated a reduced total budget for 2020 of \$28.7 million for the Kipushi Project, of which approximately \$8 million remains for the rest of the year.

## Health, safety and community development

At the end of September 2020, the Kipushi Project reached a total of 2,677,310 work hours free of lost-time injuries. It has been almost two years since the last lost-time injury occurred at the Kipushi Project.

In response to government-imposed travel restrictions and emergency protocols being introduced worldwide due to the COVID-19 pandemic, Kipushi has temporarily suspended mine development operations in order to reduce the risk to the workforce and local communities. The project is maintaining a reduced workforce to conduct maintenance activities and to maintain pumping operations.

The Kipushi Project operates a potable-water station to supply the municipality of Kipushi with water. This includes power supply, disinfectant chemicals, routine maintenance, security, and emergency repair of leaks to the primary reticulation. During 2020, two additional solar-power boreholes were established, thereby availing clean potable water to a further two host communities near Kipushi. Other community development projects included the donation of 5,000 N95 face masks to host communities, the donation of additional infrared thermometers to the Health Zone management and sponsoring a COVID-19 awareness campaign broadcast on local radio. Additional COVID-19 awareness efforts include signboards erected throughout the town and a motorized caravan which rotates within communities thrice per week. The sewing training centre project produces cloth face masks and donates approximately 2.000 masks a month to host communities.

Louis Watum (right), Kipushi Corporation's General Manager, donating a box of COVID-19 antigen tests to Kiki Mushota (left), Kipushi Territory's Health Administrator.



Kyungu Kabulo, Instrumentation Assistant (left), and Junior Kisula Ngoy, Instrumentation Engineer (right), installing probes and a balance disk on a grifo pump at Kipushi's 1,200-metre-level pumping station.



### Kipushi Mineral Resources

The Kipushi Project's current Mineral Resource estimate was updated with an effective date of June 14, 2018, and was prepared by the MSA Group of Johannesburg, South Africa, in compliance with 2014 CIM Definition Standards. Ivanhoe filed an updated National Instrument 43-101 (NI 43-101) technical report for the Kipushi Project covering the June 2018 Mineral Resource in March 2019. The technical report is filed on the Company's website and under the Company's SEDAR profile at www.sedar.com.

Zinc rich Measured and Indicated Mineral Resources, primarily in the Big Zinc Zone total 11.78 million tonnes at grades of 35.34% zinc, 0.80% copper, 23 g/t silver and 64 g/t germanium, at a 7% zinc cut-off – containing an estimated 9.2 billion pounds of zinc. Zinc-rich Inferred Mineral Resources total an additional 1.14 million tonnes at grades of 33.77% zinc, 1.24% copper, 12 g/t silver and 62 g/t germanium. The Inferred Mineral Resources are contained partly in the Big Zinc Zone and partly in the Southern Zinc Zone.

Copper-rich Measured and Indicated Mineral Resources contained in the adjacent Fault Zone, Fault Zone Splay and Série Récurrente Zone total an additional 2.29 million tonnes at grades of 4.03% copper, 2.85% zinc, 21 g/t silver and 19 g/t germanium, at a 1.5% copper cut-off – containing 204 million pounds of copper. Copper-rich Inferred Mineral Resources in these zones total an additional 0.44 million tonnes at grades of 3.89% copper, 10.77% zinc, 19 g/t silver and 55 g/t germanium.

## Definitive feasibility study in final stages of completion

The Kipushi Project's pre-feasibility study (PFS), announced by Ivanhoe Mines on December 13, 2017, anticipated annual production of an average of 381,000 tonnes of zinc concentrate over an 11-year, initial mine life at a total cash cost of approximately \$0.48 per pound (lb.) of zinc.

Highlights of the PFS, based on a long-term zinc price of \$1.10/lb., include:

- After-tax net present value (NPV) at an 8% real discount rate of \$683 million.
- After-tax real internal rate of return (IRR) of 35.3%.
- After-tax project payback period of 2.2 years.
- Pre-production capital costs, including contingency, of \$337 million.
- Existing surface and underground infrastructure allows for significantly lower capital costs than comparable greenfield development projects.
- Life-of-mine average planned zinc concentrate production of 381,000 dry tonnes per annum, with a
  concentrate grade of 59% zinc, is expected to rank Kipushi, once in production, among the world's
  largest zinc mines.

All figures are on a 100%-project basis unless otherwise stated. Estimated life-of-mine average cash cost of \$0.48/lb. of zinc is expected to rank Kipushi, once in production, in the bottom quartile of the cash-cost curve for zinc producers internationally.

The Kipushi Project's DFS is in the final stages of completion, and some aspects of the design have progressed into a detailed engineering phase.

# Miners Kyungu (left) and Mpoyo (right) performing regular safety procedures on Kipushi's 650-metre level.



## Project development and infrastructure

Although development and rehabilitation activities in the nine months ending September 30, 2020 were limited, significant progress has been made in recent years to modernize the Kipushi Mine's underground infrastructure as part of preparations for the mine to resume commercial production, including upgrading a series of vertical mine shafts to various depths, with associated head frames, as well as underground mine excavations and infrastructure. A series of crosscuts and ventilation infrastructure still is in working condition and have been cleared of old materials and equipment to facilitate modern, mechanized mining. The underground infrastructure also includes a series of high-capacity pumps to manage the mine's water levels, which now are easily maintained at the bottom of the mine.

Shaft 5 is eight metres in diameter and 1,240 metres deep and has been upgraded and re-commissioned. The main personnel and material winder has been upgraded and modernized to meet international industry standards and safety criteria. The Shaft 5 rock-hoisting winder also is fully operational with new rock skips, new head- and tail-ropes, and attachments installed. The two newly-manufactured rock conveyances (skips) and the supporting frames (bridles) have been installed in the shaft to facilitate the hoisting of rock from the main ore and waste storage silos feeding rock on the 1,200-metre level.

The main haulage way on the 1,150-metre level, between the Big Zinc access decline and Shaft 5 rock load-out facilities, has been resurfaced with concrete so the mine now can use modern, trackless, mobile machinery. A new truck-tipping bin, which feeds into the large-capacity rock crusher located directly below, has been installed on this level. The old winder at P2 Shaft has been removed and construction of the new foundation, along with assembly and installation of the new modern winder, has been completed and fully commissioned after passing safety inspection and testing procedures.

# Samuel Ndembo (left) and Mbiya Africa (right) taking air flow measurements at Kipushi's 850-metre-level electrical substation.



#### DRC WESTERN FORELAND EXPLORATION PROJECT

Ivanhoe's DRC exploration group is targeting Kamoa-Kakula-style copper mineralization through a regional exploration and drilling program on its 100%-owned Western Foreland exploration licences, located to the north, south and west of the Kamoa-Kakula Project. Exploration activities on the Western Foreland's exploration project in the DRC will continue with a 2020 budget of \$8 million, of which approximately \$3 million remains for the rest of the year.

Drilling re-commenced in Q3 2020 with a total of seven new holes completed at the Makoko prospect, and an eighth drill hole was deepened. The drilling aimed to confirm the continuation of prospective lower Nguba stratigraphy westwards toward the new exploration permits. A total of 2,589 metres were drilled during the quarter. Additionally, exploration continued on the Western Foreland exploration licences with strict procedures in place to protect employees and drilling contractors from COVID-19. The exploration team conducted exploration on eight new exploration licences in the Western Foreland region. The exploration work, as well as drilling, included stream sediment sampling, soil sampling as well as outcrop and stream mapping. In total, 181 stream sediment samples and 1,249 soil samples were collected and processed for analysis. The target of the current field season is to increase geological understanding for the new permits, as well as to generate targets for future exploration and drilling. The drill core from the program is being processed for analysis and detailed rock physical property testwork also is carried out to further geological understanding, as well as the ability of the data to be used for future larger scale geophysical testwork and analysis.

Logistical organization and mobilization commenced for the planned high-resolution magnetic and radiometric survey, while planning for an airborne gravity survey is ongoing. Both geophysical surveys are planned to commence in Q4 2020. The goal of this work is to understand the magnetic characteristics of the different lithologies and stratigraphy over the broader exploration area.

Road clearance commenced during Q3 2020 in order to extend the current exploration opportunities from the Makoko area. Work planned for Q4 2020 includes the construction of a bridge to access some of the newly acquired permits at the end of the Makoko road, as well as some road upgrades.

# **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			
	September 30,	June 30,	March 31,	December 31,
	2020	2020	2020	2019
	\$'000	\$'000	\$'000	\$'000
Exploration and project expenditure	9,972	9,018	11,980	3,664
Share of loss from joint venture	7,323	6,597	6,728	5,610
General administrative expenditure	4,868	7,464	14,016	5,642
Share-based payments	4,250	4,180	3,677	3,320
Finance income	(20,241)	(18,672)	(20,810)	(20,761)
Finance costs	69	70	100	76
Total comprehensive (income) loss attributa	ble to:			
Owners of the Company	(3,032)	(3,458)	65,736	(25,182)
Non-controlling interest	4,049	3,123	10,889	(317)
Basic loss (profit) per share	0.00	0.00	0.01	(0.01)
Diluted loss (profit) per share	0.00	0.00	0.01	(0.01)

	Three months ended			
	September 30,	June 30,	March 31,	December 31,
	2019	2019	2019	2018
	\$'000	\$'000	\$'000	\$'000
Exploration and project expenditure	3,266	3,290	1,399	4,910
Share of loss (profit) from joint venture	7,084	6,248	5,879	(41,274)
General administrative expenditure	4,985	3,730	2,107	12,869
Share-based payments	2,744	2,239	2,019	1,866
Finance income	(18,920)	(16,859)	(15,855)	(16,481)
Finance costs	71	56	96	66
Total comprehensive loss (income) attributab	ole to:			
Owners of the Company	13,077	(9,570)	(5,536)	(30,740)
Non-controlling interest	3,718	1,441	2,180	2,330
Basic (profit) loss per share	(0.00)	(0.00)	(0.01)	(0.04)
Diluted (profit) loss per share	(0.00)	(0.00)	(0.01)	(0.04)

### **DISCUSSION OF RESULTS OF OPERATIONS**

Review of the three months ended September 30, 2020 vs. September 30, 2019

The Company recorded a total comprehensive loss of \$1.0 million for Q3 2020 compared to loss of \$16.8 million for the same period in 2019. The majority of the loss in Q3 2019 mainly was due to an exchange loss on translation of foreign operations of \$17.7 million resulting from the weakening of the South African Rand by 7% from June 30, 2019, to September 30, 2019. The Company recognized an exchange gain on translation of foreign operations in Q3 2020 of \$4.3 million.

Finance income for Q3 2020, amounted to \$20.2 million, and was \$1.3 million more than for the same period in 2019 (\$18.9 million). Included in finance income is the interest earned on loans to the Kamoa Holding joint venture to fund operations that amounted to \$18.0 million for Q3 2020, and \$13.8 million for the same period in 2019, interest increased as the accumulated loan balance increased. Interest received on cash and cash equivalents decreased due to interest rate cuts by the US Federal Reserve.

Exploration and project expenditure amounted to \$10.0 million in Q3 2020 and \$3.3 million for the same period in 2019. While all the exploration and project expenditure incurred in Q3 2019 related to exploration at Ivanhoe's 100%-owned Western Foreland exploration licences, Q3 2020 also included \$7.7 million spent at the Kipushi Project which incurred limited costs of a capital nature in the quarter due to reduced activities. The main classes of expenditure at the Kipushi Project in Q3 2020 and Q3 2019 are set out in the following table:

	Three months ended			
	September	September 30,		
_	2020	2019		
	\$'000	\$'000		
Kipushi Project				
Salaries and benefits	2,977	4,547		
Depreciation	1,811	491		
Electricity	884	1,598		
Other additions to property, plant and equipment	506	-		
Studies and contracting work	57	1,611		
Other expenditure	2,009	1,881		
Infrastructure, equipment and refurbishment	-	5,576		
Total project expenditure	8,244	15,704		
Exclude:				
Capitalized as development cost in property, plant and equipment	-	(15,704)		
Other additions to property, plant and equipment	(506)	-		
Exploration and project expenditure in the loss from operating activities	7,738	-		

The Company's share of losses from the Kamoa Holding joint venture increased from \$7.1 million in Q3 2019 to \$7.3 million in Q3 2020. The following table summarizes the Company's share of the losses of Kamoa Holding for the three months ended September 30, 2020, and for the same period in 2019:

	Three months	Three months ended September 30,		
	September			
	2020	2019		
	\$'000	\$'000		
Finance costs	20,410	17,863		
Exploration expenses	2,214	4,951		
Foreign exchange loss	44	164		
Finance income	(1,138)	(1,410)		
Loss before taxes	21,530	21,568		
Current tax expense	4	-		
Deferred tax recovery	(4,596)	(4,948)		
Loss after taxes	16,938	16,620		
Non-controlling interest of Kamoa Holding	(2,145)	(2,309)		
Loss for the period attributable to joint venture partners	14,793	14,311		
Company's share of loss from joint venture (49.5%)	7,323	7,084		

The finance costs in the Kamoa Holding joint venture relates to shareholder loans where each shareholder is required to fund Kamoa Holding in an amount equivalent to its proportionate shareholding interest. The Company is advancing Crystal River's portion on its behalf in return for an increase in the promissory note due to Ivanhoe.

Review of the nine months ended September 30, 2020 vs. September 30, 2019

The Company recorded a total comprehensive loss of \$77.3 million for the nine months ended September 30, 2020 compared to a loss of \$5.3 million for the same period in 2019. The comprehensive loss for the nine months ended September 30, 2020 included an exchange loss on translation of foreign operations of \$49.6 million, resulting from the weakening of the South African Rand by 22% from December 31, 2019, to September 30, 2020, compared to an exchange loss on translation of foreign operations of \$11.9 million for the same period in 2019.

Finance income for the nine months ended September 30, 2020, amounted to \$59.7 million, and was \$8.1 million more than the same period in 2019 (\$51.6 million). Included in finance income is the interest earned on loans to the Kamoa Holding joint venture to fund operations that amounted to \$50.6 million for the nine months ended September 30, 2020, and \$38.5 million for the same period in 2019, interest increased as the accumulated loan balance increased. Interest received on cash and cash equivalents for the nine months ended September 30, 2020 amounted to \$4.2 million and was \$5.4 million less than the same period in 2019 (\$9.6 million).

Exploration and project expenditure amounted to \$31.0 million for the nine months ended September 30, 2020 and \$8.0 million for the same period in 2019. While all the exploration and project expenditure incurred in 2019 related to exploration at Ivanhoe's 100%-owned Western Foreland exploration licences, 2020 also included \$25.3 million spent at the Kipushi Project which was on reduced activities and incurred limited cost of a capital nature in the year to date.

The main classes of expenditure at the Kipushi Project for the nine months ended September 30, 2020, and for the same period in 2019 are set out in the following table:

Nine months ended

	September	30,
_	2020	2019
	\$'000	\$'000
Kipushi Project		
Salaries and benefits	10,324	12,762
Depreciation	4,932	1,518
Electricity	2,948	4,918
Studies and contracting work	1,432	5,440
Other additions to property, plant and equipment	1,281	1,291
Other expenditure	5,625	7,540
Infrastructure, equipment and refurbishment	-	15,886
Total project expenditure	26,542	49,355
Exclude:		
Capitalized as development cost in property, plant and equipment	-	(48,064)
Other additions to property, plant and equipment	(1,281)	(1,291)
Exploration and project expenditure in the loss from operating activities	25,261	-

The Company's share of losses from the Kamoa Holding joint venture increased from \$19.2 million for the nine months ended September 30, 2019 to \$20.6 million for the same period in 2020. The following table summarizes the Company's share of the losses of Kamoa Holding for the nine months ended September 30 2020, and for the same period in 2019:

	Nine months ended September 30,		
	2020	2019	
	\$'000	\$'000	
Finance costs	58,560	51,129	
Exploration expenses	7,179	12,379	
Foreign exchange loss	146	214	
Finance income	(3,990)	(3,917)	
Loss before taxes	61,895	59,805	
Current tax expense	4	-	
Deferred tax recovery	(13,763)	(14,315)	
Loss after taxes	48,136	45,490	
Non-controlling interest of Kamoa Holding	(6,423)	(6,680)	
Loss for the year attributable to joint venture partners	41,713	38,810	
Company's share of loss from joint venture (49.5%)	20,648	19,211	

Financial position as at September 30, 2020 vs. December 31, 2019

The Company's total assets decreased by \$69.2 million, from \$2,444.7 million as at December 31, 2019, to \$2,375.5 million as at September 30, 2020. The Company utilized \$47.3 million of its cash resources in its operations and received interest of \$4.2 million on cash and cash equivalents during the nine months ended September 30 2020.

Property, plant and equipment decreased by \$15.3 million, from \$421.1 million as at December 31, 2019, to \$405.8 million as at September 30, 2020. The decrease resulted from the foreign exchange translation of property, plant and equipment of non-US dollar operations of \$47.6 million due to the weakening of the South African Rand by 22% from December 31, 2019, to September 30, 2020. A total of \$35.9 million was spent on project development and to acquire other property, plant and equipment, \$34.0 million of which pertained to development costs and other acquisitions of property, plant and equipment at the Platreef Project.

The main components of the additions to property, plant and equipment - including capitalized development costs - at the Platreef Project for the nine months ended September 30, 2020, and for the same period in 2019, are set out in the following table:

Nine months anded

	September 30,		
	2020	2019	
	\$'000	\$'000	
Platreef Project			
Shaft 1 construction	18,998	22,060	
Salaries and benefits	4,588	6,059	
Administrative and other expenditure	2,961	4,867	
Studies and contracting work	1,026	1,106	
Site costs	638	744	
Social and environmental	550	1,793	
Shaft 2 early works	14	3,149	
Infrastructure	2	111	
Total development costs	28,777	39,889	
Other additions to property, plant and equipment	5,208	322	
Total additions to property, plant and equipment for Platreef	33,985	40,211	

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

The Company's investment in the Kamoa Holding joint venture increased by \$267.4 million from \$912.6 million as at December 31, 2019, to \$1,180.0 million as at September 30, 2020, with each of the current shareholders funding the operations equivalent to their proportionate shareholding interest. The Company's portion of the Kamoa Holding joint venture cash calls amounted to \$237.4 million during the nine months ending September 30, 2020, while the Company's share of losses from the joint venture amounted to \$20.6 million.

The Company's investment in the Kamoa Holding joint venture can be broken down as follows:

	September 30,	December 31,
	2020	2019
	\$'000	\$'000
Company's share of net assets in joint venture	156,671	177,319
Loan advanced to joint venture	1,023,353	735,317
Total investment in joint venture	1,180,024	912,636

The Kamoa Holding joint venture principally uses loans advanced to it by its shareholders to advance the Kamoa-Kakula Project through investing in development costs and other property, plant and equipment, as well as continuing with exploration. This can be evidenced by the movement in the Company's share of net assets in the Kamoa Holding joint venture which can be broken down as follows:

	September 30, 2020		<b>December 31, 2019</b>	
	100%	49.5%	100%	49.5%
	\$'000	\$'000	\$'000	\$'000
Assets				
Property, plant and equipment	1,110,183	549,541	727,391	360,059
Mineral property	802,021	397,000	802,021	397,000
Long term loan receivable	143,115	70,842	126,012	62,376
Deferred tax asset	141,247	69,917	127,484	63,105
Prepaid expenses	132,662	65,668	77,844	38,533
Cash and cash equivalents	103,157	51,063	73,968	36,614
Indirect taxes receivable	74,538	36,896	47,233	23,380
Non-current inventory	62,631	31,002	9,188	4,548
Consumable stores	26,750	13,241	8,987	4,449
Right-of-use asset	24,534	12,144	30,128	14,913
Non-current deposits	1,289	638	1,289	638
Liabilities				
Shareholder loans	(2,066,643)	(1,022,988)	(1,484,737)	(734,945)
Trade and other payables	(106,532)	(52,733)	(54,005)	(26,733)
Lease liability	(24,683)	(12,218)	(30,211)	(14,954)
Rehabilitation provision	(15,542)	(7,693)	(5,727)	(2,835)
Non-controlling interest	(92,220)	(45,649)	(98,644)	(48,829)
Net assets of the joint venture	316,507	156,671	358,221	177,319

The Kamoa Holding joint venture's net increase in property, plant and equipment from December 31, 2019, to September 30, 2020, amounted to \$382.8 million and can be further broken down as follows:

Nine months ended

	Mille Illolluls ellueu		
_	September 30,		
	2020	2019	
	\$'000	\$'000	
Kamoa Holding joint venture			
Kakula decline and mine development	166,134	60,513	
Studies and contracting work	46,537	18,422	
Borrowing costs capitalized	43,779	26,434	
Salaries and benefits	18,121	14,591	
Office and administrative expenditure	17,725	7,938	
Camp and office construction	11,699	13,757	
Site costs, security and safety	7,685	3,768	
Roads	5,436	6,794	
Project fleet	1,995	2,536	
Other development costs	31,196	17,251	
Total development costs	350,307	172,004	
Other additions to property, plant and equipment	41,289	7,218	
Total additions to property, plant and equipment for Kamoa Holding	391,596	179,222	
Less depreciation and disposals	(8,804)	(2,790)	
Net increase in property, plant and equipment of Kamoa Holding	382,792	176,432	

The Company's total liabilities decreased by \$6.3 million to \$75.6 million as at September 30, 2020, from \$81.9 million as at December 31, 2019, due to a \$7.3 million decrease in trade and other payables.

## LIQUIDITY AND CAPITAL RESOURCES

The Company had \$375.8 million in cash and cash equivalents as at September 30, 2020. At this date, the Company had consolidated working capital of approximately \$427.4 million, compared to \$688.5 million at December 31, 2019.

Since December 8, 2015, each shareholder in Kamoa Holding has been required to fund Kamoa Holding in an amount equivalent to its proportionate shareholding interest. The Company is advancing Crystal River's portion on its behalf in return for an increase in the promissory note due to Ivanhoe.

The Platreef Project's current expenditure is being funded solely by Ivanhoe, through an interest bearing loan to Ivanplats, as the Japanese consortium has elected not to contribute to current expenditures.

The Company has budgeted \$127 million for its proportionate funding of the Kamoa-Kakula Project for the remainder of 2020, where mine development work at Kakula continues with first production now expected in July 2021. The Company has implemented several cost-saving measures including: reducing its global office footprint; reducing its corporate and senior management headcount by approximately 20%; applying temporary voluntary pay reductions taken by executive management; and implementing other company-wide, cash-saving measures. Ivanhoe's board of directors also allocated reduced 2020 budgets to its projects. The Company has forecasted to spend \$8 million on further development at the

Platreef Project; \$8 million at the Kipushi Project; \$3 million on regional exploration in the DRC; and \$5 million on corporate overheads for the remainder of 2020.

As Ivanhoe continues to advance its projects, the Company's management has reviewed and assessed numerous alternatives to finance its share of construction costs for the Kakula Copper Mine and to advance exploration and development initiatives at its other projects in Southern Africa. These alternatives include, but are not limited to, existing liquidity sources, including cash, receivables and investments, selling assets, project financing, streaming or royalty transactions, equipment and debt financing. While Ivanhoe expects that it will continue to have sufficient cash resources or project-related financing options available to cover its share of the initial capital costs at the Kakula Mine, the Company will continue to seek out and review opportunities presented to Ivanhoe, having regard to the best interests of Ivanhoe as well as to Ivanhoe's operations and financial position, industry conditions and geopolitical considerations.

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 GBP 1 month LIBOR plus 1.9% payable monthly in arrears. Only interest will be payable until maturity.

In 2013, the Company became party to a loan payable to ITC Platinum Development Limited, which had a carrying value of \$31.3 million as at September 30, 2020, and a contractual amount due of \$34.4 million. The loan is repayable once the Platreef Project has residual cashflow, 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 attracts interest of USD 3 month LIBOR plus 2% calculated monthly in arrears. Interest is not compounded. The difference of \$3.1 million between the contractual amount due and the carrying value of the loan is the benefit derived from the low-interest loan.

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				
		Less than			After
Contractual obligations as at	Total	1 year	1-3 years	4-5 years	5 years
September 30, 2020	\$'000	\$'000	\$'000	\$'000	\$'000
Debt	38,499	-	-	4,148	34,351
Shaft 1 construction – Platreef Project	4,679	4,679	-	-	-
Lease commitments	1,989	448	1,541	-	-
Total contractual obligations	45,167	5,127	1541	4,148	34,351

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

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

## **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 such parties:

Three months ended September 30,		onths ended Nine months ende	
		Septembe	r 30,
2020	2019	2020	2019
\$'000	\$'000	\$'000	\$'000
875	1 375	2 625	2,625
	•	•	405
		_	3,025
		•	482
_			113
			58
•			(38,472)
	, ,		(3,806)
• • •	` ,		(1,689)
• • •	` ,		(1,003)
(37)	` ,	` ,	168
-			
-		2	(4) 733
(40.240)		(E2 770)	
(19,310)	(13,409)	(52,776)	(36,559)
875	1.490	2.765	2,847
	•	•	3,097
		•	1,322
_			269
		_	113
(18.972)	(14.794)		(40,204)
	,		(4,003)
	(13,409)	•	(36,559)
	Septembe 2020	September 30,         2020       2019         \$'000       \$'000         875       1,375         215       195         156       921         61       160         50       43         1       35         (17,966)       (13,785)         (1,532)       (1,645)         (1,113)       (968)         (57)       (70)         -       98         -       (4)         -       236         (19,310)       (13,409)         875       1,490         173       991         81       479         72       97         50       43         (18,972)       (14,794)         (1,589)       (1,715)	September 30,         September 2020           \$'000         \$'000         \$'000           875         1,375         2,625           215         195         487           156         921         2,510           61         160         449           50         43         150           1         35         365           (17,966)         (13,785)         (50,645)           (1,532)         (1,645)         (5,469)           (1,113)         (968)         (3,197)           (57)         (70)         (166)           -         98         111           -         (4)         2           -         236         -           (19,310)         (13,409)         (52,778)           875         1,490         2,765           173         991         2,781           81         479         561           72         97         240           50         43         150           (18,972)         (14,794)         (53,640)           (1,589)         (1,715)         (5,635)

The above noted transactions 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.

- (a) Ivanhoe Capital Aviation Ltd. ("Aviation") is a private company owned indirectly by the Executive Co-Chairman of the Company. Aviation operates an aircraft for which the Company contributes toward the running costs.
- (b) Ivanhoe Capital Services Ltd. ("Services") is a private company owned indirectly by the Executive Co-Chairman of the Company. Services provides salaries administration and other services to the Company in Singapore and Beijing on a cost-recovery basis.

- (c) Global Mining Management Corporation ("Global") is a private company based in Vancouver, Canada. The Company and the Executive Co-Chairman 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.
- (d) GMM Tech Holdings Inc. ("GMM Tech") is a private company incorporated in British Columbia, Canada and is 100% owned by Global. GMM Tech provides information technology services to the Company on a cost-recovery basis.
- (e) Citic Metal Africa Investments Limited ("Citic Metal Africa") is a private company incorporated in Hong Kong. Citic Metal Africa is a shareholder in the Company and nominates two directors who serve of the Company's Board of Directors.
- (f) Global Mining Services Ltd. ("GMS") is a private company incorporated in Delaware and is 100% owned by Global. GMS provides administration and other services to the Company on a cost-recovery basis.
- (g) 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.
- (h) Kamoa Copper SA ("Kamoa Copper") is a company incorporated in the DRC. Kamoa Copper is 80% owned by Kamoa Holding Limited, a joint venture of the Company. The Company provides administration, accounting and other services to Kamoa Copper on a cost-recovery basis.
- (i) High Power Exploration Inc. ("HPX") is a private company incorporated under the laws of Delaware, USA. The Company's Executive Co-Chairman is the Chief Executive Officer and Chairman of HPX and holds an indirect equity interest in HPX. The Company's Vice Chairman is also the Vice Chairman of HPX. The Company extended a secured loan of \$50 million to HPX in April 2019. The loan receivable has a two-year maturity and earns interest at a rate of 8% per annum.
- (j) Ivanhoe Mines Energy DRC Sarl ("Energy") is a company incorporated in the DRC. Energy is 100% owned by Kamoa Holding Limited, a joint venture of the Company. The Company provides administration, accounting and other services to Energy on a cost-recovery basis.
- (k) Ivanhoe Capital Pte Ltd. ("Capital") is a private company owned indirectly by the Executive Co-Chairman of the Company. Capital provides administration, accounting and other services in Singapore on a cost-recovery basis.
- (I) Ivanhoe Capital Corporation (UK) Ltd. ("ICC") is a private company owned indirectly by the Executive Co-Chairman of the Company. ICC provides administration, accounting and other services in the United Kingdom on a cost-recovery basis.
- (m) HCF International Advisers ("HCF") is a corporate finance adviser specializing in the provision of advisory services to clients worldwide in the metals, mining, steel and related industries. Guy de Selliers, a director of Ivanhoe is the President and co-founder of HCF, which provides financial advisory services to the Company.

As at September 30, 2020, trade and other payables included \$0.9 million (December 31, 2019: \$0.6 million) with regards to amounts due to parties related by way of director, officers or shareholder in common. These amounts are unsecured and non-interest bearing.

Amounts included in other receivables due from parties related by way of director, officers or shareholder in common as at September 30, 2020 amounted to \$3.5 million (December 31 2019: \$3.9 million).

On March 11, 2020, the Company entered into a purchase and sale agreement with ICA Global Services LLC ("ICA Global"), under which ICA Global agreed to sell a Gulfstream Aerospace G-IV aircraft to the Company for a purchase consideration equal to 1,000,000 Common Shares of the Company. The transaction closed on May 11, 2020. ICA Global is a private company controlled by the Executive Co-Chairman of the Company.

On June 30, 2020, the Kipushi Project sold equipment to Kamoa Copper SA for proceeds of \$1.6 million.

#### 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, 2019. The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the end of the reporting period presented and reported amounts of expenses during said reporting period. Actual outcomes could differ from these estimates. The consolidated financial statements include estimates that, by their nature, are uncertain. Such estimates have a pervasive effect on the consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the year in which the estimate is revised and future years if the revision affects both current and future years. These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

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

#### Recoverability of assets

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

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

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

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

technical reports. These cash flows were discounted using a discount rate that reflected current market assessments of the time value of money and the risks specific to the CGU.

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

#### Technical feasibility and commercial viability of projects

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

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

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

## Determination of inputs into lease accounting

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

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

#### 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, 2020, with earlier application permitted. The Company adopted these standards in the current period.

- IFRS 3 Business Combinations. The amendment to the definition of a business confirmed that a
  business must include inputs and a process and clarified that the process must be substantive and
  that the inputs and process must together significantly contribute to creating outputs. Furthermore,
  the amendment narrowed the definition of a business by focusing the definition of outputs on goods
  and services provided to customers and other income from ordinary activities, rather than providing
  dividends or other economic benefits directly to investors or lowering costs.
- IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments clarify and align the definition of 'material' and provide guidance to help improve consistency in the application of that concept whenever it is used in IFRS Standards.
- IFRS 16 Leases. The amendment relates to providing lessee's with an exemption from assessing
  whether a COVID-19 related rent concession (a rent concession that reduces lease payments due
  on or before September 30, 2021) is a lease modification.

## Accounting standards issued but not yet effective

• IAS 1 – Presentation of Financial Statements. The amendments clarify how to classify debt and other liabilities as current or non-current. (i)

The Company has considered the amendment and assessed that it will have no material impact on adoption.

• IAS 16 – Property, plant and equipment. The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in a manner intended by management. Instead an entity recognises the proceeds from selling such items, and the cost of producing these items, in profit or loss. (i)

The Company has considered the amendment and assessed that it will have no material impact on adoption.

IAS 37 – Provisions, Contingent Liabilities and Contingent Assets. The amendments specify which
costs should be included in an entity's assessment of whether a contract will be loss making. (i)

The Company has considered the amendment and assessed that it will have no material impact on adoption.

(i) Effective for annual periods beginning on or after January 1, 2022

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

## FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

#### Fair value of financial instruments

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

		September 30,	•
	Level	2020	2019
		\$'000	\$'000
Financial assets			
Financial assets at fair value through profit or loss			
Investment in listed entity	Level 1	1,552	1,140
Investment in unlisted entity	Level 3	655	655
Amortized cost			
Loan advanced to joint venture	Level 3	1,023,353	735,317
Cash and cash equivalents		375,813	702,810
Loans receivable	Level 3	96,437	91,955
Promissory note receivable	Level 3	21,581	16,799
Other receivables		7,261	8,036
Financial liabilities			
Amortized cost			
Borrowings	Level 3	35,451	33,904
Trade and other payables	Level 3	15,758	23,025
Advances payable	Level 3	2,759	2,661

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:

	September 30,		
	2020	2019	
	\$'000	\$'000	
Interest on loan to joint venture	(50,645)	(38,472)	
Interest on bank balances	(4,152)	(9,575)	
Interest on loan receivable - HPX	(2,994)	(1,732)	
Interest on long term loan receivable - Gecamines	(1,932)	(1,855)	
	(59,723)	(51,634)	

Nine months ended

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

## Financial risk management objectives and policies

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

## Foreign exchange risk

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

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

	September 30, 2020	December 31, 2019
	\$'000	\$'000
Assets		
Canadian dollar	26,485	41,358
South African rand	19,858	24,386
British pounds	3,594	7,387
Australian dollar	1,552	1,141
Liabilities		
South African rand	(7,886)	(9,484)
British pounds	(3,046)	(7,008)
Canadian dollar	(633)	(718)

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

	Nine months e	Nine months ended September 30,		
	September			
	2020	2019		
	\$'000	\$'000		
Canadian dollar	1,293	28,249		
Australian dollar	78	74		
South African rand	(40)	(87)		

#### 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 Kamoa Holding joint venture, promissory note receivable, loans receivable, other receivables and cash and cash equivalents.

The Company reviews the recoverable amount of their financial assets at each statement of financial position date to ensure that adequate impairment losses are made for irrecoverable amounts. The Company has considered the requirement of IFRS 9 to recognize a loss allowance for expected credit losses on financial assets. The general approach was applied to these financial assets, where the 12 month expected credit losses are calculated. The Company did not apply lifetime expected credit losses as there has not been a significant increase in credit risk in 2020.

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 thirdparty guarantees or credit enhancements, which are expected to reduce the borrower's economic incentive to make scheduled contractual payments or to otherwise have an effect on the probability of a default occurring.

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

The loan advanced to the joint venture will be repaid as and when there is residual cash flow in Kamoa Holding. Due to the positive results of Kamoa-Kakula's definitive feasibility study, repayment of the loan is deemed to be highly probable.

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

The principal amount of the loan receivable from HPX and accrued interest thereon, is convertible in whole, or part, by the Company at its sole discretion into shares of treasury common stock of HPX and/or a subsidiary of HPX. The loan is secured by a pledge of shares of an HPX subsidiary in the United States which is pursuing a Tier One copper-gold exploration and development project, into which the Company also may convert and acquire at least a 25% interest.

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

The credit risk on cash and cash equivalents is limited because the cash and cash equivalents are composed of deposits with major banks who have investment grade credit ratings assigned by international credit ratings agencies and have low risk of default.

Other receivables is comprised primarily of administration consulting income from the joint venture and refundable taxes. The credit quality of these financial assets can be assessed by reference to historical information about counterparty default rates and adjusted to reflect current and forward-looking information, as well as macroeconomic factors affecting the ability of the parties to settle the receivables. The historical loss rates are negligible and therefore the expected credit losses relating to other receivables is also negligible.

The Company continues to monitor its credit risk and assess expected credit losses.

#### Interest rate risk

The Company's interest rate risk arises mainly from long term borrowings, the loans receivable and the loan advanced to the joint venture. The Company's main exposure to interest rate risk arises from the fact that the Company earns and incurs interest on interest rates linked to LIBOR.

If interest rates (including applicable USD LIBOR rates) had been 50 basis points higher or lower and all other variables were held constant, the Company's loss for the nine months ended September 30, 2020 would have decreased or increased by \$4.8 million (2019: \$5.1 million).

## Liquidity risk

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

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

	Less than 1 month	1 to 3 months	3 to 12 months	More than 12 months	Total undiscounted cash flows
	\$'000	\$'000	\$'000	\$'000	\$'000
As at September 30, 2020					
Non-current borrowings	-	-	-	38,499	38,499
Trade and other payables	12,940	873	1,127	-	14,940
Lease liability	65	125	512	14,115	14,817
As at December 31, 2019					
Non-current borrowings	-	-	-	33,767	33,767
Trade and other payables	18,960	1,002	1,376	-	21,338
Lease liability	80	151	640	14,980	15,851
Current borrowings	-	-	4,230	-	4,230

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

#### DESCRIPTION OF CAPITAL STOCK

As at November 6, 2020, the Company's capital structure consists of an unlimited number of Class A common shares without par value (the "Class A Shares"), an unlimited number of Class B common shares without par value (the "Class B Shares") and an unlimited number of preferred shares without par value. At this date 1,204,944,213 Class A Shares, nil Class B Shares, nil warrants and nil preferred shares were issued and outstanding.

The Company granted 7,500,000 options in 2019 and 10,384,900 options in 2020 to date. As at November 6, 2020, there were 19,581,643 options outstanding issued in terms of the Equity Incentive Plan exercisable into 19,581,643 Class A Shares.

The Company granted 1,140,653 restricted share units (RSUs) in 2020 to date and 2,098,333 RSUs in 2019 per the Company's restricted share unit plan. As at November 6, 2020, there were 2,150,667 RSUs which may vest into 2,150,667 Class A Shares.

The Company granted 297,151 deferred share units (DSUs) in 2020 to date and 130,621 DSUs in 2019 per the Company's deferred share unit plan. As at November 6, 2020, there were 399,399 DSUs which may settle into 399,399 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) has evaluated the design effectiveness of the Company's DC&P and ICFR as of September 30, 2020 and, in accordance with the requirements established under National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings, the President has concluded that these controls and procedures have been designed to provide reasonable assurance that material information relating to the Company is made known to her by others within the Company and that the information required to be disclosed in reports that are filed or submitted under Canadian securities legislation are recorded, processed, summarized and reported within the time period specified in those rules.

The Company's President, in the capacity of CEO and CFO, has used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework to evaluate the design of the Company's ICFR as of September 30, 2020 and has concluded that these controls and procedures have been designed 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.

During the nine months ended September 30, 2020, 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.sedar.com.

## DISCLOSURE OF TECHNICAL INFORMATION

Disclosures of a scientific or technical nature regarding the revised capital expenditure and development scenarios at the Kamoa-Kakula Project in this MD&A have been reviewed and approved by Steve Amos, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Amos is not considered independent under NI 43-101 as he is the Head of the Kamoa Project. Mr. Amos has verified the technical data disclosed in this MD&A.

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

Other disclosures of a scientific or technical nature in this MD&A have been reviewed and approved by Stephen Torr, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Mr. Torr is not considered independent under NI 43-101 as he is the Vice President, Project Geology and Evaluation. Mr. Torr has verified the other technical data disclosed in this MD&A.

Ivanhoe has prepared a current, independent, NI 43-101-compliant technical report for each of the Platreef Project, the Kipushi Project and the Kamoa-Kakula Project, which are available under the Company's SEDAR profile at <a href="https://www.sedar.com">www.sedar.com</a>:

- The Kamoa-Kakula Integrated Development Plan 2020 dated October 13, 2020, prepared by OreWin Pty Ltd., China Nerin Engineering Co., Ltd., DRA Global, Epoch Resources, Golder Associates Africa, KGHM Cuprum R&D Centre Ltd., Outotec Oyj, Paterson and Cooke, Stantec Consulting International LLC, SRK Consulting Inc., and Wood plc., covering the Company's Kamoa-Kakula Project;
- The Platreef 2017 Feasibility Study Technical Report dated September 4, 2017, prepared by DRA Global, OreWin Pty. Ltd., Amec Foster Wheeler, Stantec Consulting, Murray & Roberts Cementation, SRK Consulting, Golder Associates, and Digby Wells Environmental, covering the Company's Platreef Project; and
- The Kipushi 2019 Mineral Resource Update dated March 28, 2019, prepared by OreWin Pty Ltd., MSA Group (Pty) Ltd., SRK Consulting (South Africa) (Pty) Ltd and MDM (Technical) Africa Pty Ltd. (a division of Wood PLC), covering the Company's Kipushi Project.

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 Project 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 Project.

# ADDITIONAL INFORMATION

Additional information regarding the Company, including the Company's Annual Information Form, is available on SEDAR at www.sedar.com.