Consolidated financial statements of

## Ivanhoe Mines Ltd.

December 31, 2017 (Stated in U.S. dollars)

#### Management's responsibility for financial reporting

The accompanying annual consolidated financial statements of Ivanhoe Mines Ltd. (the "Company") have been prepared by management and are in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Management acknowledges its responsibility for the preparation and presentation of the annual consolidated financial statements, which includes designing and implementing internal controls to provide reasonable assurance of the fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate accounting policies, and making accounting estimates that are reasonable in the circumstances.

Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. 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.

The Board of Directors approves the consolidated financial statements and ensures that management discharges its financial reporting responsibilities. The Board's review is accomplished principally through the Audit Committee, which is composed of non-executive directors. The Audit Committee meets periodically with management and the auditors to review financial reporting and control matters.

(Signed) Lars-Eric Johansson

Lars-Eric Johansson,
President and Chief Executive Officer

March 19, 2018

(Signed) Marna Cloete

Marna Cloete, Chief Financial Officer

## December 31, 2017

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March 21, 2018

#### **Independent Auditor's Report**

#### To the Shareholders of Ivanhoe Mines Ltd.

We have audited the accompanying consolidated financial statements of Ivanhoe Mines Ltd. and its subsidiaries, which comprise the consolidated statements of financial position as at December 31, 2017 and December 31, 2016 and the consolidated statements of comprehensive income, consolidated statements of changes in equity, consolidated statements of cash flows for the years then ended, and the related notes, which comprise a summary of significant accounting policies and other explanatory information.

#### Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



#### **Opinion**

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Ivanhoe Mines Ltd. and its subsidiaries as at December 31, 2017 and December 31, 2016 and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

#### **Emphasis of matter**

Without qualifying our opinion, we draw attention to note 1 in the consolidated financial statements which describes matters and conditions that indicate the existence of material uncertainty that may cast significant doubt about Ivanhoe Mines Ltd.'s ability to continue as a going concern.

#### (Signed) PricewaterhouseCoopers Inc.

PricewaterhouseCoopers Inc. Chartered Accountants (South Africa) Johannesburg - South Africa

# Consolidated statements of comprehensive income for the year ended December 31,

(stated in thousands of U.S. dollars, except for share and per share amounts)

	Notes	2017	2016
		\$	\$
Expenses	_	40.500	00.400
Exploration and project expenditure	5	40,503	32,426
Salaries and benefits		11,501	10,993
Share-based payments	21	4,908	5,977
Travel		3,723	3,158
Office and administration		2,729	2,093
Other expenditure		1,810	1,353
Professional fees		1,644	1,628
Legal		380	383
Reversal of impairment of mineral property and other items	5(b)	(286,283)	-
Foreign exchange gain		(2,527)	(773)
(Profit) loss from operating activities		(221,612)	57,238
Share of losses from joint venture	6	27,505	21,732
Finance costs	24	1,710	1,798
Finance income	23	(32,614)	(29,902)
Other income	22	(9,381)	(5,864)
			<u> </u>
(Profit) loss before income taxes		(234,392)	45,002
Income tax expense			
Current	16	84	189
Deferred tax expense	16	349	790
		433	979
(PROFIT) LOSS FOR THE YEAR		(233,959)	45,981
(Profit) loss attributable to:			
Owners of the Company		(170,218)	32,160
Non-controlling interests		(63,741)	13,821
TVOTT COTTLEMINING INTOTOCO		(233,959)	45,981
24			
Other comprehensive profit Items that may subsequently be reclassified to profit:			
· · · · · · · · · · · · · · · · · · ·		(42 022)	(10.221)
Exchange gains on translation of foreign operations		(13,822)	(10,231)
Other comprehensive profit for the year, net of tax  TOTAL COMPREHENSIVE (PROFIT) LOSS FOR THE YEAR		(13,822) (247,781)	(10,231) 35,750
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Total comprehensive (profit) loss attributable to:			
Owners of the Company		(182,872)	23,011
Non-controlling interests	20	(64,909)	12,739
		(247,781)	35,750
Basic (profit) loss per share	25	(0.22)	0.04
Diluted (profit) loss per share	25	(0.21)	0.04
2	20	(0.21)	0.04
Weighted average number of basic shares outstanding	25	785,895,643	779,119,108
Weighted average number of diluted shares outstanding	25	808,803,191	779,119,108

### Consolidated statements of financial position as at December 31,

(stated in thousands of U.S. dollars)

,	December 31,		December 31,	
	Notes	2017	2016	
		\$	\$	
ASSETS				
Non-current assets				
Property, plant and equipment	4	198,583	125,787	
Mineral properties	5	260,287	6,940	
Investment in joint venture	6	552,384	473,648	
Long term loan receivable	8	34,065	-	
Promissory notes receivable	10	11,313	10,804	
Deferred tax asset	16	766	1,033	
Other assets		8,385	4,111	
Total non-current assets		1,065,783	622,323	
Current assets				
Purchase price receivable	7	-	76,177	
Prepaid expenses	9	8,416	9,328	
Promissory notes receivable	10	2,297	-	
Other receivables	11	4,750	6,653	
Financial assets at fair value through profit or loss	12	8,563	2,720	
Cash and cash equivalents	13	181,419	285,029	
Current tax assets		83	-	
Total current assets		205,528	379,907	
Total assets		1,271,311	1,002,230	
EQUITY AND LIABILITIES				
Capital and reserves Share capital	18	1,141,514	1,125,434	
Share capital Share option reserve	18	128,809	135,217	
Foreign currency translation reserve	19	(8,855)	(21,509)	
Accumulated profit (deficit)	19	18,251	(151,967	
Accumulated profit (deficit)		10,231	(131,907)	
Equity attributable to owners of the Company		1,279,719	1,087,175	
Non-controlling interests	20	(68,229)	(130,913)	
Total equity		1,211,490	956,262	
• •			,	
Non-current liabilities	4.4	00.004	22.275	
Borrowings	14	29,204	26,875	
Advances payable Deferred tax liabilities	15 16	2,344	- 2,082	
Total non-current liabilities	10	2,082 33,630	28,957	
		33,030	20,937	
Current liabilities	4-	00 505	45	
Trade and other payables	17	23,586	15,140	
Financial liability		2,605	1,870	
Current tax liabilities  Total current liabilities		26,191	1 17,011	
Total current liabilities Total liabilities		26,191 59,821	45,968	
		•	•	
Total equity and liabilities		1,271,311	1,002,230	

Continuing operations (Note 1)

Commitments and contingencies (Note 32)

## (Signed) Oyvind Hushovd Oyvind Hushovd, Director

## (Signed) Livia Mahler Livia Mahler, Director

# Consolidated statements of changes in equity (stated in thousands of U.S. dollars, except for share amounts)

		Share capital						
	Number		Share option	Foreign currency	Accumulated	Equity attributable	Non-controlling	
	of shares	Amount	reserve	translation reserve	profit (deficit)	to owners	interests	Total
		\$	\$	\$	\$	\$	\$	\$
Balance at January 1, 2016	778,959,807	1,124,032	131,129	(30,658)	(127,505)	1,096,998	(118,174)	978,824
Net loss for the year	-	-	-	-	(32,160)	(32,160)	(13,821)	(45,981)
Other comprehensive profit	-	-	-	9,149	-	9,149	1,082	10,231
Total comprehensive loss	-	-	-	9,149	(32,160)	(23,011)	(12,739)	(35,750)
Transactions with owners								
Equity transactions in joint venture								
not affecting control	-	-	-	-	7,698	7,698	-	7,698
Share-based payments								
charged to operations (Note 21)	-	-	5,312	-	-	5,312	-	5,312
Restricted share units vested (Note 18(c))	2,400,678	1,134	(1,134)	-	-	-	-	-
Options exercised (Note 18(b))	225,000	268	(90)	-	-	178	-	178
Balance at December 31, 2016	781,585,485	1,125,434	135,217	(21,509)	(151,967)	1,087,175	(130,913)	956,262
Net profit for the year	-	-	-	=	170,218	170,218	63,741	233,959
Other comprehensive profit	-	-	=	12,654	=	12,654	1,168	13,822
Total comprehensive profit	-	-	-	12,654	170,218	182,872	64,909	247,781
Transactions with owners								
Share-based payments								
charged to operations (Note 21)	-	-	4,174	=	-	4,174	-	4,174
Reversal of impairment of common share investment								
funded on behalf of non-controlling interest (Note 5(b))	-	-	-	-	-	-	(2,225)	(2,225)
Shares issued (Note 18(a))	30,000	128	-	-	-	128	-	128
Restricted share units vested (Note 18(c))	2,400,678	1,134	(1,134)	-	-	-	-	-
Options exercised (Note 18(b))	6,371,005	14,818	(9,448)	-	-	5,370	-	5,370
Balance at December 31, 2017	790,387,168	1,141,514	128,809	(8,855)	18,251	1,279,719	(68,229)	1,211,490

## Consolidated statements of cash flows years ended December 31, (stated in thousands of U.S. dollars)

(stated in thousands of U.S. dollars)	Notes	2017	2016
		\$	\$
Cash flows from operating activities			
Profit (loss) before income taxes		234,392	(45,002)
Items not involving cash		204,032	(40,002)
Reversal of impairment of mineral property, goodwill and other	5(b)	(286,283)	_
Share of losses from joint venture	6	27,505	21,732
Share-based payments	21	4,908	5,977
Depreciation and amortization	4	4,397	4,217
Transfer from other assets to working capital items		2,179	825
Finance costs	24	1,710	1,798
Finance income	23	(32,614)	(29,902)
Increase in fair value of financial asset		(5,843)	(1,693)
Unrealized foreign exchange gain		(2,626)	(899)
Promissory note fair value adjustment		(985)	(777)
Profit on disposal of property, plant and equipment		(2)	(3)
		(53,262)	(43,727)
Change in non-cash working capital items	28	11,332	10,472
Interest received	20	3,681	2,694
Interest paid		(101)	(119)
Income taxes paid		(153)	(326)
Net cash used in operating activities		(38,503)	(31,006)
Property, plant and equipment acquired Other assets acquired Mineral properties acquired Proceeds from cancellation of mining guarantee Proceeds from sale of property, plant and equipment	4	(61,781) (6,205) (1,010) 29 3	(43,489) (2,635) - - 142
Net cash used in investing activities		(147,811)	(104,380)
Cash flows from financing activities			
Proceeds from the partial sale of subsidiary, which is now jointly controlled	7	82,400	134,347
Options exercised		5,497	178
Transaction costs paid on partial sale of subsidiary, which is now jointly			
controlled		(4,685)	(7,656)
Cash paid on behalf of the joint venturer		(1,822)	(950)
Net cash generated by financing activities		81,390	125,919
Effect of foreign exchange rate changes on cash		1,314	548
Net cash outflow		(103,610)	(8,919)
Cash and cash equivalents, beginning of year		285,029	293,948
Cash and cash equivalents, end of year		181,419	285,029
Cash and cash equivalents consists of			
Cash		181,419	285,029
Short-term fixed deposits			
		181,419	285,029

Supplemental cash flow information (Note 28)

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 1. Basis of presentation and going concern assumption

Ivanhoe Mines Ltd. is a mining development and exploration company incorporated in Canada which, together with its subsidiaries (collectively referred to as the Company), is focused on the exploration, development and recovery of minerals and precious metals from its property interests located primarily in Africa.

The registered and records office of the Company are located at Suite 654-999 Canada Place, Vancouver, British Columbia, Canada V6C 3E1. The Company is listed on the Toronto Stock Exchange ("TSX") under the ticker symbol IVN. The shares of the Company are also traded on the OTCQX Best Market in the United States under the symbol IVPAF.

These consolidated financial statements have been prepared on the historical cost basis except for the revaluation of certain non-current assets and financial instruments. Historical cost is generally based on the fair value of the consideration given in exchange for assets. The financial statements are also prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business.

As at December 31, 2017, the Company's total assets exceeds its total liabilities by \$1,211.5 million and current assets exceeds current liabilities by \$179.3 million. The Company has an accumulated profit of \$18.3 million at December 31, 2017. The Company's total current assets exceeds the Company's total liabilities. The Company currently has no producing properties and expects to fund all of its exploration and development activities through debt and equity financing until operating revenues are generated. The Company's spending plan for 2018 exceeds the cash and cash equivalents as at December 31, 2017, of \$181.4 million.

Continuation of the Company as a going concern is dependent upon establishing profitable operations, the confirmation of economically recoverable reserves, and the ability of the Company to obtain further financing to develop properties. Failure to obtain further financing could result in the delay or indefinite postponement of further exploration and development of the Company's properties, which could result in a material uncertainty that may cast significant doubt upon the Company's ability to meet its operational and capital objectives, realize its assets and discharge its liabilities in the normal course of business and accordingly the appropriateness of the use of accounting principles applicable to a going concern. Although the Company has been successful in raising funds in the past, there can be no assurance that it will be able to raise sufficient funds in the future.

Continuing strategic discussions concerning the Company and its projects are ongoing with several significant mining companies and investors across Asia, Europe, Africa and elsewhere. Several investors that have expressed interest have no material limit on the provision of capital. There can be no assurance that the Company will pursue any transaction or that a transaction, if pursued, will be completed.

#### 2. Significant accounting policies

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). The significant accounting policies used in these consolidated financial statements are as follows:

#### (a) Statement of compliance

The Company's consolidated financial statements have been prepared using accounting policies in compliance with IFRS and International Accounting Standards ("IAS") and Interpretations of the IFRS Interpretations Committee ("IFRIC"), effective for the Company's reporting for the year ended December 31, 2017. The Company has not adopted any new or amended standards which are not yet effective.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (b) Basis of consolidation

The consolidated financial statements incorporate the financial statements of Ivanhoe Mines Ltd. and entities it controls (its subsidiaries).

Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

When the Company has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Company considers all relevant facts and circumstances in assessing whether or not the Company's voting rights in all investees are sufficient to give it power, including:

- the size of the Company's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Company, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Company has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive loss from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive loss of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to align their accounting policies with those used by other members of the Group.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

Changes in the Company's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. The Company accounts for a change in the Company's share of comprehensive loss of the joint venture in the consolidated statement of comprehensive income. The carrying amount of the Company's interest and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity attributed to the owners of the Company. The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IAS 39, when applicable, the cost on initial recognition of an investment in an associate or joint venture.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (c) Interests in joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. The Company has two joint operations, as described in Note 26.

When a group entity undertakes its activities under joint operations, the Company as a joint operator recognizes in relation to its interest in the joint operation:

- Its assets, including its share of any assets held jointly.
- Its liabilities, including its share of any liabilities incurred jointly.
- Its revenue from the sale of its share of the output arising from the joint operation.
- Its share of the revenue from the sale of the output by the joint operation.
- Its expenses, including its share of any expenses incurred jointly.

The Company accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the IFRS applicable to the particular assets, liabilities, revenues and expenses.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Company is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognized in the Company's consolidated financial statements only to the extent of other parties interests in the joint operation.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a purchase of assets), the Company does not recognize its share of the gains and losses until it resells those assets to a third party.

#### (d) Interests in joint ventures

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or portion thereof, is classified as held for sale, in which case it is accounted for in accordance with IFRS 5. Under the equity method a joint venture is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Company's share of the profit or loss and the other comprehensive income of the joint venture. When the Company's share of losses of the joint venture exceeds the Company's interest in that joint venture (which includes any long term interests that in substance form part of the Company's net investment in the joint venture), the Company discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the joint venture.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (d) Interests in joint ventures (continued)

An investment in a joint venture is accounted for using the equity method from the date on which the investee becomes a joint venture. On acquisition of the investment in a joint venture, any excess of the cost of the investment over the Company's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

When a group entity transacts with a joint venture of the Company, profits and losses resulting from the transactions with the joint venture are recognised in the Company's consolidated financial statements only to the extent of interests in the joint venture that are not related to the Company.

#### (e) Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks; and
- exchange differences on monetary items receivable from or payable to a foreign operation
  for which settlement is neither planned nor likely to occur (therefore forming part of the
  net investment in the foreign operation), which are recognized initially in other
  comprehensive income and reclassified from equity to profit or loss on repayment of the
  monetary items.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are translated into currency units using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive loss and accumulated in equity (attributed to non-controlling interests as appropriate).

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (e) Foreign currencies (continued)

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss. For all other partial disposals (i.e. partial disposals of associates or jointly controlled entities that do not result in the Company losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognized in equity.

#### (f) Cash and cash equivalents

Cash and cash equivalents comprise bank balances and highly liquid investments with original maturities of three months or less.

#### (g) Mineral properties

Direct costs related to the acquisition of mineral properties are capitalized on a property by property basis. 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 as property, plant and equipment. 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. The determination is made on a property by property basis and generally coincides with the finalization of a preliminary economic assessment or prefeasibility study of the property.

Development costs are capitalised as property, plant and equipment and are costs incurred to obtain access and to provide facilities for extracting, treating, gathering, transporting and storing the minerals. Development expenditures are capitalised to the extent that they are necessary to bring the property to commercial production.

The Company reviews the carrying values of its mineral properties whenever events or changes in circumstances indicate that their carrying values may exceed their estimated net recoverable amounts determined by reference to estimated future operating results and discounted net cash flows. An impairment loss is recognized when the carrying value of those assets are not recoverable and exceeds their fair value. Amortization of mineral properties will commence when commercial production starts. Mineral properties will be amortized over the expected life of mine.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (g) Mineral properties (continued)

On the commencement of commercial production, net capitalized costs are charged to operations on a unit-of-production basis, by property, using estimated proven and probable recoverable reserves as the depletion base. Where the Company's exploration and development activities are conducted jointly with others, these consolidated financial statements reflect only the Company's interests in such activities.

#### (h) Financial instruments

All financial instruments are initially recorded at fair value. Financial assets are designated upon inception as either (i) held-to-maturity, (ii) at fair value through profit or loss, (iii) available-for-sale, or (iv) loans and receivables. The designation determines the method by which the financial assets are measured on the statement of financial position subsequent to inception and how changes in value are recorded.

All of the Company's financial assets, other than the financial assets at fair value through profit or loss, have been designated as loans and receivables and are carried on the statements of financial position at amortized cost.

Financial liabilities are designated as either (i) at fair value through profit or loss or (ii) other liabilities. The Company's share purchase warrants are designated at fair value through profit or loss, and all other financial liabilities have been designated as other liabilities and are carried on the statements of financial position at amortized cost.

Transaction costs associated with fair value through profit or loss financial instruments are expensed as incurred, while transaction costs associated with all other financial instruments are added to the initial carrying amount of the asset or liability.

#### (i) Property, plant and equipment

All property, plant and equipment are initially recorded at historical cost. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Depreciation commences once the asset is available for use and is calculated on the straight line method to write off the cost of each asset to its residual value over their estimated useful life. The assets' residual values, useful lives and depreciation methods are reviewed and adjusted if appropriate, at each financial year end. Any changes are accounted for prospectively as a change in accounting estimate. Depreciation is recognized so as to write off the cost or valuation of assets (other than freehold land and assets under construction) less their residual values over their useful lives, using the straight-line method.

The expected lives applicable to each category of fixed assets are as follows:

Office equipment and furniture and fixtures 3 – 6 years
 Motor vehicles 5 years
 Plant and equipment 5 years
 Buildings 10 years

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

(i) Property, plant and equipment (continued)

The Company reviews the carrying values of its property, plant and equipment whenever events or changes in circumstances indicate that their carrying values may exceed their estimated net recoverable amounts determined by reference to estimated future operating results and discounted net cash flows. An impairment loss is recognized when the carrying value of those assets is not recoverable and exceeds their fair value.

The gain or loss arising on the disposal of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognized in profit and loss.

Freehold land is not depreciated.

Assets in the course of construction for production, supply or administrative purposes, including development costs, are carried at cost, less any recognized impairment loss. Cost includes costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalized in accordance with the Company's accounting policy. Such assets are initially categorized in the assets under construction category, and re-classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

#### (j) Prepaid expenses and deposits

Prepaid expenses is cash paid for which a service or benefit is expected to be derived in the future. The future write-off period of the incurred cost will normally be determined by the period of benefit covered by the prepayment. Prepaid expenses specific to a particular period will be expensed when the period arrives and the costs will be treated as a period cost for that period. Prepaid costs for an extended period of time are normally written off equally during the period in which the benefit will be derived.

Prepaid expenses are generally classified as current assets unless a portion of the prepayment covers a period longer than twelve months or the prepayment relates to a non-current asset to be received in the future. When payments may be accounted for as prepaid expenses but the payment will be amortized within the current period and is not considered material to the presentation of financial position, such payments may be expensed in the month the payment is made.

#### (k) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in profit or loss in the period in which they incurred.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (I) Decommissioning liabilities

The Company recognizes liabilities for statutory, contractual or legal obligations associated with the reclamation of mining property, plant and equipment, when those obligations result from the acquisition, construction, development or normal operation of the assets. Initially, a liability for a decommissioning liability is recognized at its fair value in the period in which it is incurred. Upon initial recognition of the liability, the corresponding asset is added to the carrying amount of the related asset and the cost is amortized as an expense over the economic life of the asset using either the unit-of-production method or the straight-line method, as appropriate. Following the initial recognition of the decommissioning liability, the carrying amount of the liability is increased for the passage of time and adjusted for changes to the amount or timing of the underlying cash flows needed to settle the obligation. As at December 31, 2017 and December 31, 2016, there was no material rehabilitation provision.

#### (m) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Company is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Company will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

#### (n) Taxation

#### Current tax

The tax currently payable is based on taxable income for the year. Taxable profit differs from profit as reported in the consolidated statement of comprehensive loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

#### Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting deficit.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

#### (n) Taxation (continued)

#### Deferred tax (continued)

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

#### Current and deferred tax for the period

Current and deferred taxes are recognized as an expense or income in profit or loss, except when they relate to items that are recognized outside profit or loss (whether in other comprehensive income or directly in equity), in which case the tax is also recognized outside profit or loss, or where they arise from the initial accounting for a business combination. In the case of a business combination, the tax effect is taken into account in the accounting for the business combination.

#### (o) Share-based payments

Equity settled share-based payments to employees providing services are measured at the fair value of the equity instruments at the grant date.

The fair value of share options is estimated as of the date of the grant using a Black-Scholes option valuation model and are recorded in profit and loss over their vesting periods. Share options with graded vesting schedules are accounted for as separate grants with different vesting periods and fair values. Changes to the estimated number of awards that will eventually vest are accounted for prospectively. When the share options are ultimately exercised, the amount in the share-based payment reserve is moved to share capital.

The share-based payment expense relating to the B-BBEE transaction described in Note 21, was determined by using a Monte Carlo simulation of the underlying share, together with its dividends, to estimate the closing share price at vesting date, as well as the remaining funding balance.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

(o) Share-based payments (continued)

Restricted share units are equity settled share-based payments and are valued using the fair value of a common share at time of grant and are recorded in profit and loss over their vesting periods.

(p) Significant accounting estimates and judgements

The preparation of financial statements in conformity with IFRS requires the Company's management to make estimates and assumptions concerning the future. The resulting accounting estimates can, by definition, only approximate the actual results. Estimates are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Significant accounting judgements are accounting policies that have been identified as being complex or involving subjective judgements or assessments.

#### 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 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.

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 loss.

Where an impairment loss subsequently reverses the carrying amount of the asset or CGU is increased to the revised estimate of its recoverable amount, and is limited to the carrying amount that would have been determined had no impairment loss been recognized for the asset or CGU in prior years. A reversal of an impairment loss is recognized immediately in the statement of comprehensive loss.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

(p) Significant accounting estimates and judgements (continued)

#### Determination of functional currency

In determining the functional currency of the Company the following was considered:

- the currency that primarily affects the selling prices of goods and services. Although the Company does not currently sell goods and services it is anticipated that selling prices of goods in the future will be primarily affected by the U.S. dollar.
- the currency of the country whose competitive forces and regulations mainly determine
  the selling prices of their goods and services. Although the Company does not currently
  sell goods and services it is anticipated that selling prices of goods in the future will be
  primarily affected by the U.S. dollar and not by the currency of the countries in which the
  goods are produced.
- the currency that mainly influences the cost of labour, materials and other costs of producing goods or providing services. A greater percentage of expenditures for technical and administrative services are denominated in U.S. Dollars.
- the currency in which the funds are generated from financing activities, i.e. that corresponds to debt instruments and equity securities issued. Financing for the Company are generated mostly in Canadian dollars and U.S. dollars.
- the currency used to maintain the amounts utilized by operating activities were considered.

The Company's functional currency is U.S. dollar. The Company's subsidiaries have a variety of functional currencies that include, but are not limited to, South African Rand ("ZAR"), U.S. dollar ("USD") and Canadian dollar ("C\$").

#### Technical feasibility and commercial viability of projects

In determining whether an exploration and evaluation property is technically feasible and commercially viable, the Company considers the following elements:

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

#### Classification of Kamoa Holding Limited as a joint venture

Kamoa Holding Limited is a limited liability company whose legal form confers separation between the parties to the joint arrangement and the company itself. Furthermore, there is no contractual arrangement or any other facts and circumstances that indicate that the parties to the joint arrangement have rights to the assets and obligations for the liabilities of the joint arrangement. Accordingly, Kamoa Holding Limited is classified as a joint venture of the Company. See Note 6 for details.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

(q) Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-makers. The Company's executive management team has been identified as the chief operating decision-makers, and are responsible for allocating resources and assessing performance of the operating segments.

(r) Earnings per share

The basic earnings per share is computed by dividing the profit or loss attributable to the owners of the Company from continuing operations and discontinued operations by the weighted average number of common shares outstanding during the year. The diluted earnings per share reflects the potential dilution of common share equivalents, such as preference shares, outstanding share options and share purchase warrants, in the weighted average number of common shares outstanding during the year, if dilutive.

(s) Future accounting changes

The following new standards, amendments to standards and interpretations have been issued but are not effective during the year ended December 31, 2017:

<u>International Financial Reporting Standards and amendments issued but not effective for 31</u> December 2017 year-end

• Amendments to IFRS 2 – Share-based payments. This amendment clarifies the measurement basis for cash-settled, share-based payments and the accounting for modifications that change an award from cash-settled to equity-settled. (i)

The Company is in the process of determining the impact of the adoption of this standard on the consolidated financial statements, if any.

 Amendment to IFRS 9 - Financial instruments. The standard comprises guidance on Classification and Measurement, Impairment Hedge Accounting and Derecognition. The IASB has amended IFRS 9 to align hedge accounting more closely with an entity's risk management. The revised standard also establishes a more principles-based approach to hedge accounting and addresses inconsistencies and weaknesses in the current model in IAS 39. The new standard also introduces a single "expected credit loss" impairment model for the measurement of financial assets. (i)

The Company is in the process of determining the impact of the adoption of this standard on the consolidated financial statements, if any.

• IFRS 11 – Joint arrangements. Annual Improvements 2015 – 2017 Cycle: Clarification that when an entity obtains joint control of a business that is a joint operation, the entity does not re-measure previously held interests in that business. (ii)

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

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

- (s) Future accounting changes (continued)
  - IFRS 15 Revenue from contracts with customers. It is a single, comprehensive revenue recognition model for all contracts with customers to achieve greater consistency in the recognition and presentation of revenue. (i)

The Company expects the impact not to be material as the Company's properties will not be in commercial production prior to the effective date. All future operating mines will adopt IFRS 15 upon achieving commercial production.

• IFRS 16 – Leases. The standard requires lessees to recognise assets and liabilities arising from all leases (with limited exceptions) on the balance sheet. Lessor accounting has not substantially changed in the new standard. (ii)

As at December 31, 2017, the Company has operating lease commitments totalling \$1.8 million (see Note 32). However, the Company is in the process of determining the impact these commitments will have on the consolidated financial statements, if any.

 IAS 23 Borrowing Costs. Annual Improvements 2015 -2017 Cycle: The amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalisation rate on general borrowings. (ii)

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

• IFRIC 22, 'Foreign currency transactions and advance consideration. This IFRIC addresses foreign currency transactions or parts of transactions where there is consideration that is denominated or priced in a foreign currency. (i)

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

 Annual improvements 2014-2016. IFRS 1,' First-time adoption of IFRS', regarding the deletion of short term exemptions for first-time adopters regarding IFRS 7, IAS 19, and IFRS 10. (i)

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

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 2. Significant accounting policies (continued)

- (s) Future accounting changes (continued)
  - Annual improvements 2014-2016. IAS 28, Investments in associates and joint ventures' regarding measuring an associate or joint venture at fair value. IAS 28 allows venture capital organisations, mutual funds, unit trusts and similar entities to elect measuring their investments in associates or joint ventures at fair value through profit or loss (FVTPL). The Board clarified that this election should be made separately for each associate or joint venture at initial recognition. (i)

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

- (i) Effective for annual periods beginning on or after January 1, 2018
- (ii) Effective for annual periods beginning on or after January 1, 2019

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

#### 3. Application of new and revised standards

(a) Newly adopted accounting standards

The following standards became effective for annual periods beginning on or after January 1, 2017. The Company adopted these standards in the current period and they did not have a material impact on its consolidated financial statements.

- Amendment to IAS 7 Cash flow statements. In January 2016, the International Accounting Standards Board (IASB) issued an amendment to IAS 7 introducing an additional disclosure that will enable users of financial statements to evaluate changes in liabilities arising from financing activities.
- Amendment to IAS 12 Income taxes. The amendments were issued to clarify the requirements for recognising deferred tax assets on unrealised losses.
- Annual improvements 2014-2016. IFRS 12 Disclosure of interests in other entities regarding clarification of the scope of the standard. The amendment clarified that the disclosures requirement of IFRS 12 are applicable to interest in entities classified as held for sale except for summarised financial information.

Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 4. Property, plant and equipment

	Land	Buildings	Office equipment	Motor vehicles	Plant and equipment	Mining infrastructure	Assets under construction	Total
	\$	\$	\$	\$	\$		\$	\$
2017								
Cost								
Beginning of the year	2,278	11,379	5,210	2,070	16,637	4,020	100,441	142,035
Additions	-	99	543	1,145	4,010	1,564	54,420	61,781
Disposals	-	-	(5)	-	-	-	-	(5)
Foreign exchange translation	228	1,135	430	104	135	520	13,459	16,011
End of the year	2,506	12,613	6,178	3,319	20,782	6,104	168,320	219,822
Accumulated depreciation								
and impairment								
Beginning of the year	-	1,234	3,598	1,220	10,115	81	-	16,248
Depreciation	-	141	601	242	3,265	148	-	4,397
Disposals	-	-	(4)	-	-	-	-	(4)
Transfers	-	(283)	-	-	-	283	-	-
Foreign exchange translation	-	115	308	42	98	35	-	598
End of the year	-	1,207	4,503	1,504	13,478	547	-	21,239
Carrying value								
Beginning of the year	2,278	10,145	1,612	850	6,522	3,939	100,441	125,787
End of the year	2,506	11,406	1,675	1,815	7,304	5,557	168,320	198,583

#### Assets under construction

Assets under construction includes development costs capitalised as property, plant and equipment which are costs incurred to obtain access and to provide facilities for extracting, treating, gathering, transporting and storing the minerals.

#### Assets pledged as security

Buildings with a carrying amount of \$10.0 million (December 31, 2016 - \$9.1 million) have been pledged to secure borrowings of the Company (see Note 14). The buildings have been pledged as security for bank loans under a mortgage. The Company is not allowed to pledge these assets as security for other borrowings or to sell them to another entity.

Notes to the consolidated financial statements December 31, 2017 (Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### Property, plant and equipment (continued) 4.

	Land	Dellaliana	Office	Motor	Plant and	Mining	Assets under	Tatal
	Land e	Buildings \$	equipment •	vehicles	equipment •	infrastructure	construction \$	Total \$
2016	\$	Ф	Φ	\$	Ф		Ф	Ф
Cost								
	1.014	15 577	4 240	2.000	14.607		E0 00E	00.000
Beginning of the year	1,914	15,577	4,318	2,009	14,607	-	50,865	89,290
Additions	164	225	761	8	2,025	-	40,306	43,489
Disposals	(48)	-	(80)	(64)	(66)	-	-	(258)
Transfers	-	(2,739)	-	-	-	3,720	(981)	-
Foreign exchange translation	248	(1,684)	211	117	71	300	10,251	9,514
End of the year	2,278	11,379	5,210	2,070	16,637	4,020	100,441	142,035
Accumulated depreciation								
and impairment								
Beginning of the year	-	1,007	2,826	966	7,105	-	-	11,904
Depreciation	-	298	625	240	3,025	29	-	4,217
Disposals	-	-	(51)	(29)	(39)	-	-	(119)
Transfers	-	(72)	-	-	-	72	-	-
Foreign exchange translation	-	1	198	43	24	(20)	-	246
End of the year	-	1,234	3,598	1,220	10,115	81	-	16,248
Carrying value								
Beginning of the year	1,914	14,570	1,492	1,043	7,502	-	50,865	77,386
End of the year	2,278	10,145	1,612	850	6,522	3,939	100,441	125,787

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 5. Mineral properties and exploration and project expenditures

#### Mineral properties

The following table summarizes the carrying values of the Company's mineral property interests as described below:

	December 31,	December 31,
	2017	2016
	\$	\$
Platreef property, South Africa (a)	6,940	6,940
Kipushi Properties, Democratic Republic of Congo (b)	252,337	-
Other properties (d)	1,010	-
	260,287	6,940

Direct costs related to the acquisition of mineral properties are capitalized on a property by property basis. Exploration costs are expensed 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 as property, plant and equipment in the assets under construction category (see Note 4).

#### Exploration and project expenditure

The following table summarizes the exploration and project expenditures for the year ended December 31, 2017 and December 31, 2016:

	December 31,	December 31,
	2017	2016
	\$	\$
Exploration and project expenditure		
Salaries and benefits	13,898	11,881
Utilities	5,871	5,287
Drilling	4,125	-
Depreciation	4,125	3,218
Studies	3,136	662
Repairs and maintenance	1,596	3,505
Community liaison	1,105	2,051
Office, administration and other expenditure	6,647	5,822
	40,503	32,426

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 5. Mineral properties and exploration expenditures (continued)

#### (a) Platreef property

The Platreef Project is located in the northern limb of the Bushveld Complex approximately 11 km from Mokopane and 280 km northeast of Johannesburg, South Africa.

In November 2014 the mining right for the development and operation of the Company's Platreef mining project was notorially executed. The mining right, authorizes the Company to mine and process platinum-group metals, nickel, copper, gold, silver, cobalt, iron, vanadium and chrome at its Platreef discovery. The mining right was issued for an initial period of 30 years and may be renewed for further periods, each of which may not exceed 30 years at a time, in accordance with the terms of section 24 of the Mineral and Petroleum Resources Development Act.

Itochu, together with other Japanese-based investors, holds an effective 10% interest in the Platreef Project. Additionally, the Company transferred 26% of Platreef to a broad-based black economic empowerment (B-BBEE) special purpose vehicle in compliance with South African ownership requirements (see Note 21).

#### (b) Kipushi properties

The Kipushi Project is a past-producing, high-grade underground zinc—copper mine in the Central African Copperbelt, in Haut-Katanga Province, DRC. The Kipushi Project lies adjacent to the town of Kipushi and the border with Zambia, and about 30 km southwest of the provincial capital of Lubumbashi.

Ivanhoe Mines and La Générale des Carrières et des Mines SARL ("Gecamines") own, respectively, 68% and 32% of the Kipushi Project, through their holdings in Kipushi Corporation SA ("Kipushi"), the mining rights holder. Ivanhoe Mines' interest in Kipushi was acquired in November 2011 and comprises mining rights for zinc, copper and cobalt as well as the underground workings and related infrastructure, inclusive of a series of vertical mine shafts.

During the financial year ended December 31, 2013, the Company recorded an impairment charge of \$334.3 million, upon completion of its annual assessment of the carrying value of Kipushi's CGU.

During the financial year ended December 31, 2017 the company completed its NI 43-101 compliant Pre-feasibility Study ("PFS") for the Kipushi Project. This PFS included updated estimates for the following key assumptions:

- Increased long term consensus on the zinc price;
- Optimization of the zinc processing methodology;
- · Reduced capital expenditure estimates; and
- Reduced transport, treatment & refining cost estimates.

These updated estimates resulted in a significant increase in the estimated recoverable amount for the Kipushi Project. As a result, the Company recorded a reversal of the impairment charge of \$286.3 million.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 5. Mineral properties and exploration expenditures (continued)

#### (b) Kipushi properties (continued)

The reversal of the impairment charge, which was recorded within a separate line in the consolidated statement of comprehensive loss, included the following:

	December 31, 2017
Kipushi mineral properties	252,337
Long-term loan receivable (see Note 8)	34,065
Advances payable to Gecamines (see Note 15)	(2,344)
Common share investment funded on behalf of	
non-controlling interest (see Note 20)	2,225
	286,283

Significant judgments and assumptions are required in making estimates of determining the recoverable amount (value in use). This is particularly so in the assessment of long life assets. It should be noted that the valuations are subject to variability in key assumptions including, but not limited to, long-term commodity prices, capital expenditures, discount rates, transport costs and the cost of production and operating costs.

The assumptions made included, but were not limited to, the following:

- · A life of mine of 11 years;
- A zinc price of \$1.10 per pound;
- A copper price of \$3.02 per pound; and
- A real discount rate of 8%.

A change in one or more of the assumptions used to estimate recoverable amount could result in a reduction or an increase in a CGU's recoverable amount. The estimated recoverable amount for the Kipushi Project would still exceed its carrying value if the assumed real discount rate is increased to 12% or if the assumed zinc price is reduced to \$0.90 per pound.

#### (c) Kamoa-Kakula properties

The Company is a joint venturer in the Kamoa-Kakula Project which is located within the Central African Copperbelt in Lualaba Province, DRC. The Kamoa-Kakula Project lies approximately 25 km west of the town of Kolwezi, and about 270 km west of the provincial capital of Lubumbashi (see Note 6).

#### (d) Other properties

The Company continues to evaluate other opportunities as part of its objective to become a broadly based, international mining company.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 6. Investment in joint venture

Kamoa Holding Limited ("Kamoa Holding"), a joint venture between the Company and Zijin Mining Group Co., Ltd. ("Zijin"), holds a direct interest in the Kamoa-Kakula Copper Project. The Kamoa-Kakula Copper Project is the largest copper discovery ever made on the African continent, with adjacent prospective exploration areas within the Central African Copperbelt in the Democratic Republic of Congo ("DRC") and is approximately 25 kilometres west of the town of Kolwezi and about 270 kilometres west of Lubumbashi.

The Company holds an indirect 39.6% interest in the Kamoa-Kakula Copper Project through its 49.5% shareholding in Kamoa Holding. Kamoa Holding owns a direct interest of 80% of the Kamoa-Kakula Copper Project. On November 11, 2016, Kamoa Holding signed an agreement with the government of the Democratic Republic of Congo, transferring 15% interest in the Kamoa-Kakula Copper Project to the DRC government, increasing its total stake in the project to 20%. The transfer represents a change in ownership that did not result in a change of control. The Company has accounted for this change in the consolidated statement of changes in equity.

#### Company's share of comprehensive loss from joint venture

The following table summarizes the Company's share of comprehensive loss of Kamoa Holding for the years ending December 31, 2017 and December 31, 2016.

	December 31,	December 31,
	2017	2016
	\$	\$
Interest expense	42,137	32,438
Exploration costs	26,631	14,743
Foreign exchange loss	4,333	187
Interest income	(1,747)	(111)
Loss for the period	71,354	47,257
Non-controlling interest	(15,788)	(3,354)
Loss for the period	55,566	43,903
Share of losses from joint venture (49.5%)	27,505	21,732

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 6. Investment in joint venture (continued)

#### Net assets of the joint venture

The assets and liabilities of the joint venture were as follows:

	December	December	31, 2016	
	100%	49.5%	100%	49.5%
	\$	\$	\$	\$
Assets				
Property, plant and equipment	317,180	157,004	226,766	112,249
Other assets	58,185	28,802	16,401	8,118
Mineral property	802,021	397,000	802,021	397,000
Prepaid expenses	10,479	5,187	2,940	1,455
Cash and cash equivalents	40,645	20,119	36,795	18,214
Liabilities				
Shareholder's loans	(746,182)	(369,360)	(531,927)	(263,304)
Accruals and payables	(19,901)	(9,851)	(19,216)	(9,511)
Non-controlling interest	(93,691)	(46,377)	(109,479)	(54,192)
Net assets of the joint venture	368,736	182,524	424,301	210,029

#### Investment in joint venture

	December 31,	December 31,
	2017	2016
	\$	\$
Company's share of net assets in joint venture	182,524	210,029
Loan advanced to joint venture	369,860	263,619
	552,384	473,648

The Company earns interest at the USD 12 month LIBOR plus 7% on the loan advanced to the joint venture.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 6. Investment in joint venture (continued)

#### Commitments in respect of joint venture

The Company is required to fund its Kamoa Holding joint venture in an amount equivalent to its proportionate shareholding interest. The following table summarizes the Company's proportionate share of the joint venture's commitments:

	Less than1			After 5	
	year	1 - 3 years	4 - 5 years	years	Total
	\$	\$	\$	\$	\$
Advancement of loan	95,868	-	-	-	95,868
Kakula decline development	10,933	-	-	-	10,933
Other commitments	4,951	-	-	-	4,951
	111,752	-	-	-	111,752

On March 21, 2014, a financing agreement was entered into between a subsidiary of Kamoa Holding and La Société Nationale d'Electricité SARL ("SNEL") relating to the first stage upgrade of two existing hydroelectric power plants in the DRC to feed up to 113 MW into the national power supply grid and for the supply of electricity to the Kamoa-Kakula project.

Under the agreement, Kamoa Holding agreed to provide a loan relating to the power upgrade, which is estimated to be \$141 million (including a \$4.5 million pre-finance loan), but is capped at a maximum commitment of \$250 million.

The loan advanced as at December 31, 2017 by the subsidiary of Kamoa Holding amounted to \$56.3 million (December 31, 2016: \$16.3 million) and is included in the investment in joint venture.

The term for repayment of accrued interest and future costs is estimated to be 15 years, beginning after the expiry of a two year grace period from the signing date of the agreement. The actual repayment period will ultimately depend on the amount actually financed and on the amounts deducted from electricity bills based on a fixed percentage of the actual bill as per the terms of the loan repayment. The interest rate is 6 month LIBOR + 3%.

The Kamoa-Kakula project will be given a priority electricity right by which SNEL commits to make available, sufficient energy from its grid to meet the energy needs of the project as per an agreed power requirements schedule. This includes, on an exclusivity and priority basis, following the upgrade, up to 200 MW depending on the production and mine expansion scenarios.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 7. Purchase price receivable

On December 8, 2015 the Company sold a 50.5% stake in Kamoa Holding, the company that at the time owned 95% of the Kamoa-Kakula project. Zijin – through its subsidiary, Gold Mountains (H.K.) International Mining Company Limited – bought a 49.5% share interest in Kamoa Holding for an aggregate consideration of \$412.0 million. In addition, the Company sold 1% of its share interest in Kamoa Holding to Crystal River Global Limited ("Crystal River") for \$8.32 million, which Crystal River will pay through a non-interest-bearing, 10 year promissory note (see Note 10). The consideration received, net of transaction costs, was discounted using a risk free rate adjusted for country risk premium of 8.3% on the date of closing, resulting in a purchase price receivable of \$390.4 million. Upon closing of the transaction, each shareholder is required to fund Kamoa Holding in an amount equivalent to its proportionate shareholding interest.

	December 31,	December 31,
	2017	2016
	\$	\$
Balance at beginning of the year	76,177	191,856
Purchase consideration received	(82,400)	(134,347)
Transaction costs paid	4,685	7,656
Unwinding discount	1,538	11,012
	-	76,177

Zijin paid \$206.0 million of the purchase consideration on closing of the transaction and the remaining \$206.0 million was agreed to be paid in five equal instalments, every 3.5 months from the date of closing. The five instalments of \$41.2 million were received in March 2016, July 2016, October 2016, February 2017 and May 2017 respectively.

#### 8. Long term loan receivable

The long term loan receivable from Gecamines of \$10 million was ceded to the Company on completion of the purchase of Kipushi on November 28, 2011, by the seller. An additional \$20 million was requested and advanced to Gecamines during November 2012.

The loan receivable is unsecured and repayment will be made by offsetting the loan against future royalties and dividends payable to Gecamines from future profits earned in Kipushi. The fair value of the receivable at acquisition date has been estimated by the Company by calculating the present value of the future expected cash flows using an effective interest rate of 9.2%, which is deemed to be as follows:

	December 31,	December 31,
	2017	2016
	\$	\$
Social development loan	34,065	-
	34,065	-

A provision was recognised against the loan receivable in the 2013 upon completion of the Company's annual assessment of the carrying value of the Kipushi CGU. Due to changes in events and circumstances, the Company has reversed the provision against the loan (see Note 5(b)).

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 9. Prepaid expenses

	December 31,	December 31,
	2017	2016
	\$	\$
Advance payment on shaft construction	4,158	3,339
Consumable stores	2,028	1,508
Deposits	1,340	1,283
Other prepayments	890	1,700
Electrical infrastructure	-	1,498
	8,416	9,328

Prepaid expenses are amounts paid in advance which give the Company rights to receive future goods or services.

#### 10. Promissory notes receivable

The Company has the following promissory notes receivable:

	December 31,	December 31,
	2017	2016
	\$	\$
Promissory note receivable from Crystal River (a)	11,313	8,840
A\$3 million promissory note receivable (b)	2,297	1,964
	13,610	10,804
Non-current promissory note	11,313	10,804
Current promissory note	2,297	-
	13,610	10,804

- (a) The promissory note receivable with a carrying value of \$11.3 million is a non interest-bearing, 10 year promissory note, of which \$8.32 million was received by the Company as the purchase consideration for selling 1% of its share in Kamoa Holding (see Note 7). The remaining \$3.0 million is for subsequent funding provided to Kamoa Holding on Crystal River's behalf. The promissory note is payable on the earlier of December 8, 2025 or the next business day following the completion of the sale, transfer or disposition of the shares held by Crystal River in Kamoa Holding.
- (b) The promissory note receivable with a carrying value of \$2.3 million is a A\$3 million promissory note which bears no interest and is receivable on March 31, 2018. This note was received as part of the purchase consideration received when the Company sold its Australian subsidiaries.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 11. Other receivables

	December 31,	December 31,
	2017	2016
	\$	\$
Advances	1,043	1,058
Administration consulting receivable from joint venture	1,344	1,896
Other	1,310	1,968
Refundable taxes (a)	1,053	1,731
	4,750	6,653

(a) Refundable taxes are net of an impairment provision for value-added taxes receivable in foreign jurisdictions where recoverability of those taxes are uncertain.

#### 12. Financial assets at fair value through profit or loss

The Company holds listed shares which have been classified as financial assets at fair value through profit or loss. The trading value of the listed shares as at December 31, 2017 is \$8.6 million (December 31, 2016: \$2.7 million).

#### 13. Cash and cash equivalents

As at December 31, 2017, the Company had cash and cash equivalents of \$181.4 million (December 31, 2016: \$285.0 million). At December 31, 2016, \$19.8 million was contractually restricted for use on the Platreef Project and was not available for the Company's general corporate purposes. As at December 31, 2017 there are no cash balances subject to these contractual restrictions.

#### 14. Borrowings

	December 31,	December 31,
	2017	2016
	\$	\$
Unsecured - at amortised cost		
(a) Loans from other entities	24,847	22,913
Secured - at amortised cost		
(b) Citi bank loan	4,357	3,962
	29,204	26,875

- (a) On June 6, 2013, the Company, through its subsidiary Ivanplats (Pty) Ltd, ("Ivanplats") the owner of the Platreef Project, became party to a \$28.0 million loan payable to ITC Platinum Development Limited,. The loan is repayable only once Ivanplats has residual cashflow, which is defined in the loan agreement as gross revenue generated by Ivanplats, less all operating costs attributable thereto, including all mining development and operating costs. The loan attracts interest of LIBOR plus 2% calculated monthly in arrears. Interest is not compounded. Using prevailing market interest rates for an equivalent loan of LIBOR plus 7% at June 6, 2013, the fair value of the loan as at December 31, 2017, is estimated at \$24.8 million (2016: \$22.9 million). The difference of \$6.6 million (2016: \$7.3 million) between the contractual amount due and the fair value of the loan is the benefit derived from the low-interest loan. Interest of \$1.6 million (2016: \$1.7 million) was recognised during the year ended December 31, 2017.
- (b) The Citi bank loan of \$4.4 million (£3.23 million) is secured by the Rhenfield property (see Note 26). The loan is an interest only term loan repayable at August 31, 2020, and incurs interest at a rate of USD LIBOR plus 1.90% payable monthly in arrears.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 15. Advances payable

	December 31,	December 31,
	2017	2016
	\$	\$
Advances payable to Gecamines	2,344	-
	2,344	-

Advances payable to Gecamines are unsecured and bear interest at LIBOR plus 4% and represent the liabilities assumed on the acquisition of Kipushi (see Note 5(b)).

#### 16. Income taxes

#### (a) Rate reconciliation

A reconciliation of the provision for income taxes is as follows:

	December 31, 2017	December 31, 2016
	\$	\$
(Profit) loss before income taxes	(234,393)	45,002
Statutory tax rate	26.00%	26.00%
Expected expense (recovery) of income taxes based on combined		
Canadian Federal and provincial statutory rates	60,942	(11,701)
Add (deduct):		
Tax effect of tax losses and temporary		
differences not recognized	(58,781)	20,142
Effect of foreign exchange on temporary		
differences not recognized	1,597	(2,617)
Non-deductible expenses and non-taxable income	(1,025)	(1,378)
Different effective tax rates in foreign		
jurisdictions	(3,206)	(4,453)
Amendments to prior year tax submissions	-	986
Effect of change in future tax rates	906	-
Income tax expense	433	979

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 16. Income taxes (continued)

#### (b) Deferred tax balances

The Company's deferred income tax liabilities and assets are as follows:

	2017	2016
	\$	\$
Deferred tax liability to be recovered after more than 12 months		
Property, plant and equipment	(2,082)	(2,082)
Deferred income tax liabilities	(2,082)	(2,082)
Deferred tax assets to be recovered after more than 12 months Unrealised foreign exchange losses	694	1,015
Deferred tax asset to be recovered within 12 months		
Provisions and prepayments	72	18
Deferred income tax assets	766	1,033

Deferred income tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable. Future taxable profits are considered to be probable in the relevant service entity as a profit has been recognized in the current and prior year.

#### (c) Unrecognized and taxable temporary differences

The Company's unrecognized deductible temporary differences and unused tax losses consist of the following amounts:

	2017	2016
	\$	\$
Non-capital loss carryforwards	169,233	475,696
Investment in RK1	11,289	11,289
Foreign exploration expenses and share issuance costs	2,936	3,660
Capital assets	127	127
Unrecognized deductible temporary differences	183,585	490,772

The Company has an estimated aggregate amount of \$182.5 million (2016: \$210.0 million) in temporary differences associated with its investment in joint venture for which no deferred tax liability have been recognized.

The Company has foreign subsidiaries that have undistributed earnings of \$299.9 million (2016: 253.4 million). The Company can control the timing of the repatriation and it is probable that these amounts will not be repatriated for the foreseeable future. Therefore, deferred tax has not been provided in respect of these earnings.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 16. Income taxes (continued)

### (d) Loss carryforwards

The Company's unrecognized deferred tax assets related to unused tax losses have the following expiry dates:

		Local	U.S. dollar	
		currency	equivalent	
			\$	_
South African rand	R	276,406	22,318	(a)
Congolese franc	CDF	58,682,600	37,372	(b)
Canadian dollar	\$	112,075	87,555	2026 to 2036
Gabonese franc	XAF	6,628,380	12,126	(a)
English Pound	£	5,545	7,488	(a)
Barbados	BBD	1,460	730	(a)
Euro	€	1,081	1,297	(a)
Namibian dollar	NAD	4,306	347	(a)
			169,233	

- (a) These losses can be carried forward indefinitely, subject to continuity of trading.
- (b) These losses are accumulated and set-off against future taxable income when mining operations commence.

### 17. Trade and other payables

	December 31,	December 31,
	2017	2016
	\$	\$
Trade accruals	10,701	5,423
Trade payables	8,714	7,571
Other payables	3,733	2,098
Indirect taxes payable	438	48
	23,586	15,140

The Company has policies in place to ensure trade and other payables are paid within agreed terms.

### 18. Share capital

### (a) Shares issued

The Company is authorized to issue an unlimited number of Class A Shares, an unlimited number of Class B Shares (together with the Class A Shares, the "common shares") and an unlimited number of Preferred Shares. As at December 31, 2017, 790,387,168 (December 31, 2016: 781,585,485) Class A Shares, nil Class B Shares and nil Preferred Shares were issued and outstanding.

During 2017, 30,000 Class A Shares were issued to certain non-executive directors as settlement for deferred share units.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 18. Share capital (continued)

### (b) Options

Share options are granted at an exercise price equal to the estimated value of the Company's common shares on the date of the grant. As at December 31, 2017, 48,576,500 share options have been granted and exercised, and 22,348,500 have been granted and are outstanding. All outstanding share options vest in four equal parts, commencing on the one year anniversary of the date of grant and on each of the three anniversaries thereafter. The maximum term of options awarded is five years.

A summary of changes in the Company's outstanding share options is presented below:

		2017		2016
		Weighted		Weighted
		average		average
	Number of	exercise	Number of	exercise
	options	price	options	price
		\$		\$
Balance at the beginning of year	32,050,000	1.54	40,825,000	1.68
Granted	-	-	-	-
Exercised	(9,576,500)	1.91	(225,000)	0.86
Expired	(75,000)	4.90	(7,330,000)	2.40
Forfeited	(50,000)	1.11	(1,220,000)	1.07
Balance at the end of the year	22,348,500	1.36	32,050,000	1.54

No options were granted during the year ended December 31, 2017.

The following table summarizes information about share options outstanding and exercisable as at December 31, 2017:

	Options outstanding		Options	exercisable
		Weighted		Weighted
		average		average
	Number of	exercise	Number of	exercise
Expiry date	shares	price	shares	price
		\$		\$
January 11, 2018	1,500,000	4.90	1,500,000	4.90
February 1, 2018	100,000	4.81	100,000	4.81
April 1, 2018	530,000	4.45	530,000	4.45
August 14, 2018	25,000	1.44	25,000	1.44
August 16, 2018	750,000	1.45	750,000	1.45
December 13, 2018	4,167,500	1.86	4,167,500	1.86
March 31, 2019	50,000	1.57	-	1.57
June 16, 2019	250,000	1.20	125,000	1.20
August 15, 2019	375,000	1.33	125,000	1.33
December 8, 2019	9,073,500	0.86	6,198,500	0.86
December 15, 2020	5,527,500	0.47	2,437,500	0.47
	22,348,500	1.36	15,958,500	1.57

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 18. Share capital (continued)

### (c) Restricted share units

The Company issues restricted share units ("RSUs") as a security based compensation arrangement. Each restricted share unit represents the right of an eligible participant to receive one Class A Share.

RSUs vest in three equal parts, commencing on the initial vesting date established at grant and on each of the two anniversaries thereafter, subject to the satisfaction of any performance conditions.

A summary of changes in the Company's RSUs is presented below:

	December 31,	December 31,
	2017	2016
Balance at the beginning of the year	6,814,942	7,277,081
RSUs issued	43,683	2,013,539
RSUs cancelled	-	(75,000)
RSUs vested	(2,400,678)	(2,400,678)
Balance at the end of the year	4,457,947	6,814,942

An expense of \$0.1 million for the RSUs granted during the year ended December 31, 2017 (December 31, 2016: \$3.6 million), using the fair value of a common share at time of grant, will be amortized over the vesting period (see Note 21).

#### 19. Foreign currency translation reserve

	December 31,	December 31,
	2017	2016
	\$	\$
Balance at the beginning of the year	(21,509)	(30,658)
Exchange differences arising on translation of the foreign		
operations	12,654	9,149
Balance at the end of the year	(8,855)	(21,509)

Exchange differences relating to the translation of the results and net assets of the Company's foreign operations from their functional currencies to the Company's presentation currency are recognized directly in other comprehensive profit and accumulated in the foreign currency translation reserve.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 20. Non-controlling interests

	December 31, 2017	December 31, 2016
	\$	\$
Balance at beginning of the year	(130,913)	(118,174)
Share of comprehensive profit (loss) for the year	64,909	(12,739)
Reversal of impairment of common share investment funded		
on behalf of non-controlling interest	(2,225)	-
Balance at the end of the year	(68,229)	(130,913)

The common share investment funded on behalf of non-controlling interest was provided for in 2013 upon completion of the Company's annual assessment of the carrying value of the Kipushi CGU. Due to changes in events and circumstances, the Company has reversed the provision (see Note 5(b)).

The total non-controlling interest at December 31, 2017 is \$68.2 million (2016: \$130.9 million), of which \$61.1 million (2016: \$60.8 million) is attributed to Ivanplats (Pty) Ltd and \$9.2 million (2016: \$71.8 million) is attributed to Kipushi Corporation SA. The non-controlling interest attributable to Ivanplats Holding SARL is not material.

Set out below is the summarised financial information for each subsidiary that has non-controlling interests that are material to the group.

#### Summarised balance sheet

	Ivanplats (Pty) Ltd		Kipushi Corp	oration SA
	2017	2016	2017	2016
	\$	\$	\$	\$
Non-current assets	174,061	110,677	273,258	8,595
Non-current liabilities	(453,161)	(360, 264)	(276,305)	(217,030)
Total non-current net liabilities	(279,100)	(249,587)	(3,047)	(208,435)
Current assets	37,442	11,184	3,679	4,092
Current liabilities	(9,879)	(11,447)	(7,512)	(5,261)
Current net (liabilities) assets	27,563	(263)	(3,833)	(1,169)
Net liabilities	(251,537)	(249,850)	(6,880)	(209,604)

### Summarised income statement

2016	2017	
	2017	2016
\$	\$	\$
10,070	(202,724)	40,555
(10,816)	-	-
(746)	(202,724)	40,555
(75)	(64,872)	12,977
	\$ 10,070 (10,816) (746)	\$ \$ 10,070 <b>(202,724)</b> (10,816) - (746) <b>(202,724)</b>

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 21. Share-based payments

The share-based payment expense of the Company is summarized as follows:

	December 31,	December 31,
	2017	2016
	\$	\$
Equity settled share-based payments		
Share options (Note 18(b))	1,879	4,086
Restricted share unit expense (Note 18(c))	2,295	1,226
	4,174	5,312
Cash settled share-based payments		
B-BBEE transaction expense	734	665
	4,908	5,977

Of the share-based payment expense recognised for the year ended December 31, 2017, \$0.7 million (2016: \$0.7 million) related to the Platreef B-BBEE transaction, with the remaining \$4.2 million (2016: \$5.3 million) being the expense for options and restricted share units granted to employees recognised over the vesting period.

#### 22. Other Income

Other income is summarized as follows:

	December 31, 2017	December 31, 2016
	\$	\$
Fair valuation of financial asset (a)	(5,843)	(1,693)
Administration consulting income	(2,412)	(2,918)
Promissory notes unwinding discount (b)	(985)	(777)
Other income	(141)	(476)
	(9,381)	(5,864)

- (a) The Company owns shares in a listed company. The shares are carried at fair value through profit and loss (see Note 12).
- (b) The unwinding discount relates to the unwinding of the promissory notes (see Note 10).

### 23. Finance income

Finance income is summarized as follows:

	December 31, 2017	December 31, 2016
	\$	\$
Interest from loan to joint venture	(27,394)	(16,197)
Unwinding discount (a)	(1,538)	(11,012)
Other interest income	(3,682)	(2,693)
	(32,614)	(29,902)

(a) The unwinding discount is the unwinding of the purchase price receivable from Zijin (see Note 7).

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 24. Finance costs

The finance costs of the Company are summarized as follows:

	December 31,	December 31,
	2017	2016
	\$	\$
Interest on non-current borrowings (Note 14)	1,707	1,677
Other financing costs	3	121
	1,710	1,798

### 25. (Profit) loss per share

The basic (profit) loss per share is computed by dividing the (profit) loss attributable to the owners of the Company by the weighted average number of common shares outstanding during the period. The diluted (profit) loss per share reflects the potential dilution of common share equivalents, such as outstanding stock options and restricted share units, in the weighted average number of common shares outstanding during the year, if dilutive. All outstanding stock options and restricted share units were anti-dilutive for the year ended December 31, 2016.

	December 31,	December 31,
	2017	2016
	\$	\$
Basic (profit) loss per share		
(Profit) loss attributable to owners of the Company	(170,218)	32,160
Weighted average number of basic shares outstanding	785,895,643	779,119,108
Basic (profit) loss per share	(0.22)	0.04
Diluted (profit) loss per share		
(Profit) loss attributable to owners of the Company	(170,218)	32,160
Weighted average number of diluted shares outstanding	808,803,191	779,119,108
Diluted (profit) loss per share	(0.21)	0.04

The weighted average number of shares for the purpose of diluted profit per share reconciles to the weighted average number of shares used in the calculation of basic profit per share as follows:

	December 31, 2017	December 31, 2016
Weighted average number of basic shares outstanding	\$ 785,895,643	\$ 779,119,108
Shares deemed to be issued for no consideration in respect of: - employee options - restricted share units	16,164,224 6,743,324	- -
Weighted average number of diluted shares outstanding	808,803,191	779,119,108

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 26. Joint operations

The Company has a 50% interest in Rhenfield Limited, a British Virgin Islands registered company. Rhenfield Limited purchased buildings in London, England which the Company uses for office space. The company's share of the buildings have a carrying value of \$10.0 million (2016: \$9.1 million) and are included in Property, Plant and Equipment (see Note 4).

The Company has a 25% interest in the RK1 consortium ("RK1") through its subsidiaries Gardner and Barnard Mining (UK) Limited ("GBUK") and RKR Mining (UK) Ltd. and their subsidiaries, the remainder of which is held 50% by Sibanye and 25% by Sylvania Resources Limited, operating at the Sibanye mine on the western limb of the Bushveld Complex in South Africa's North West Province. The RK1 Consortium is undergoing care and maintenance which is managed by a subsidiary of Sibanye.

### 27. Related party transactions

The financial statements include the financial results of Ivanhoe Mines Ltd., its subsidiaries, joint ventures and joint operations listed in the following table:

ventures and joint operations listed in th	le following table.	% equity	interest
		as	at
	Country of	December 31,	December 31,
Name	Incorporation	2017	2016
Out of the size			
Subsidiaries	Darbadaa	4000/	1000/
Gabon Holding Company Ltd.	Barbados	100%	100%
Ivanhoe DRC Holding Ltd.	Barbados	100%	100%
Ivanhoe Mines (Barbados) Limited	Barbados	100%	100%
Kipushi Holding Limited	Barbados	100%	100%
African Copperbelt Exploration Ltd.	Barbados	100%	0%
Nzuri Exploration Holdings Limited	Barbados	100%	0%
Ivanhoe Mines DRC SARL	Democratic Republic of Congo	100%	100%
Ivanhoe Mines Exploration DRC SARL	Democratic Republic of Congo	100%	100%
Kipushi Corporation SA	Democratic Republic of Congo	68%	68%
Ivanhoe Gabon SA	Gabon	100%	100%
Ivanplats Finance Limited	Ireland	97%	97%
Ivanplats Holding SARL	Luxembourg	97%	97%
Ivanhoe (Namibia) (Pty) Ltd.	Namibia	100%	100%
Africa Consolidated Mineral Exploration	South Africa	100%	100%
(Pty) Ltd.			
GB Mining & Exploration (SA) (Pty) Ltd.	South Africa	100%	100%
Ivanhoe Mines SA (Pty) Ltd.	South Africa	100%	100%
Ivanplats (Pty) Ltd.	South Africa	64%	64%
RK Mining (SA) (Pty) Ltd.	South Africa	100%	100%
Ivanhoe Mines UK Limited	United Kingdom	100%	100%
Ivanhoe Mines US LLC	United States of America	100%	100%
Ivanhoe (Zambia) Ltd.	Zambia	100%	100%
(		10070	
Joint ventures			
Kamoa Holding Limited	Barbados	49.50%	49.50%
<b>9</b>			
Joint operations			
Rhenfield Limited	British Virgin Islands	50%	50%
RK1 Consortium	South Africa	25%	25%
		- · ·	* *

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 27. Related party transactions (continued)

The following table summarizes related party income earned and expenses incurred by the Company, primarily on a cost-recovery basis, with companies related by way of directors or shareholders in common.

	December 31, 2017	December 31, 2016
	\$	\$
Global Mining Management Corporation (a)	2,256	2,697
Ivanhoe Capital Aviation LLC (b)	2,000	1,800
GMM Tech Holdings Inc. (c)	681	167
HCF International Advisers (d)	601	487
Ivanhoe Capital Services Ltd. (e)	465	560
Ivanhoe Capital Pte Ltd (f)	285	258
Global Mining Services Ltd. (g)	24	114
Kamoa Copper SA (h)	(3,746)	(4,542)
Ivanhoe Mines Energy DRC Sarl (i)	(383)	(1,184)
Ivanhoe Capital Corporation (UK) Limited (j)	(44)	2
	2,139	359
Travel	2,258	2,081
Salaries and benefits	2,154	3,021
Consulting	1,655	594
Office and administration	201	389
Cost recovery and management fee	(4,129)	(5,726)
· · · · · · · · · · · · · · · · · · ·	2,139	359

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

As at December 31, 2017, trade and other payables included \$0.93 million (2016: \$1.2 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 December 31, 2017 amounted to \$0.18 million (2016: \$0.05 million).

- (a) Global Mining Management Corporation ("Global") is a private company based in Vancouver. The Company and a director of the Company hold an indirect equity interest in Global. Global provides administration, accounting and other services to the Company on a cost-recovery basis.
- (b) Ivanhoe Capital Aviation LLC ("Aviation") is a private company owned indirectly by a director of the Company. Aviation operates an aircraft for which the Company contributes toward the running costs.
- (c) 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.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 27. Related party transactions (continued)

- (d) 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. HCF has a director in common with the Company and provides financial advisory services to the Company.
- (e) Ivanhoe Capital Services Ltd. ("Services") is a private company owned indirectly by a director of the Company. Services provides for salaries administration and other services to the Company in Singapore and Beijing on a cost-recovery basis.
- (f) Ivanhoe Capital Pte Ltd. ("Capital") is a private company owned indirectly by a director of the Company. Capital provides administration, accounting and other services in Singapore on a cost-recovery basis.
- (g) Global Mining Services Ltd. ("Mining") is a private company incorporated in Delaware 100% owned by Global. Mining provides administration and other services to the Company on a cost-recovery basis.
- (h) Kamoa Copper SA ("Kamoa Copper") is a company incorporated in the DRC. Kamoa Copper is 80% owned by the Kamoa Holding joint venture (see Note 6). The Company provides administration, accounting and other services to Kamoa Copper on a cost-recovery basis.
- (i) Ivanhoe Mines Energy DRC Sarl ("Energy") is a company incorporated in the DRC. Energy is 100% owned by the Kamoa Holding joint venture (see Note 6). The Company provides administration, accounting and other services to Energy on a cost-recovery basis.
- (j) Ivanhoe Capital Corporation (UK) Ltd. ("UK") is a private company 100% owned by a director of the Company. UK provides administration, accounting and other services in Singapore on a cost-recovery basis.

#### 28. Cash flow information

Net change in non-cash working capital items:

	December 31,	December 31,
	2017	2016
	\$	\$
Net decrease (increase) in		
Other receivables	1,903	12,336
Prepaid expenses	983	(2,677)
Net increase in		
Trade and other payables	8,446	813
	11,332	10,472

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

#### 29. Financial instruments

(a) Fair value of financial instruments

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

		December 31,	December 31,
Financial instrument	Level	2017	2016
		\$	\$
Financial assets			
Financial assets at fair value through profit or le	oss		
Investment in listed entity	Level 1	8,563	2,720
Loans and receivables			
Promissory note receivable	Level 3	13,610	10,804
Financial liabilities			
Borrowings	Level 3	29,204	26,875

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.

The Company has two promissory notes:

- i) The fair value of the promissory note received as part of the purchase consideration when the Company sold its Australian subsidiaries (see Note 10(b)) was originally determined assuming repayment occurs on March 31, 2018 and is discounted using a rate of 8%.
- ii) The fair value of the promissory note receivable by the Company from Crystal River (see Note 10(a)) was originally determined assuming repayment occurs on December 31, 2017 and is discounted using a rate of 8.3%.

The carrying value of the promissory notes are not significantly different to the fair value.

The fair value of borrowings are determined in accordance with generally accepted pricing models based on discounted future cashflow analysis. The fair value of the loan payable to ITC Platinum Development Limited (Note 14 (a)) was originally determined assuming repayment occurs on August 31, 2022 and using an interest rate of LIBOR plus 7%. The carrying value of borrowings is not significantly different to their fair value.

The fair value of the Company's remaining financial instruments, which include the purchase price receivable, trade and other payables and the financial liability, were estimated to approximate their carrying values, due primarily to the immediate or short-term maturity.

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 29. Financial instruments (continued)

### (b) 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 on a timely and effective manner.

### (i) Foreign exchange risk

The Company incurs certain of its expenses in currencies other than the U.S. dollar. As such, the Company is subject to foreign exchange risk as a result of fluctuations in exchange rates. The Company has not entered into any derivative instruments to manage foreign exchange fluctuations, however, management monitors foreign exchange exposure.

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

	December 31,	December 31,
	2017	2016
	\$	\$
Assets		
Canadian dollar	2,597	2,479
Australian dollar	8,563	2,720
South African rand	46,030	20,486
British pounds	452	695
Liabilities		
Canadian dollar	(384)	(1,000)
Australian dollar	(57)	(21)
South African rand	(11,100)	(7,384)
British pounds	(180)	(162)

#### Foreign currency sensitivity analysis

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

	December 31,	December 31,
	2017	2016
	\$	\$
Canadian dollar	110	74
Australian dollar	425	(1)
South African rand	(97)	(97)

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 29. Financial instruments (continued)

(b) Financial risk management objectives and policies (continued)

### (ii) 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 trade and other receivables and cash equivalents as well as long term loan receivables.

The Company reviews the recoverable amount of their receivables at each statement of financial position date to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the Company considers that the credit risk is significantly reduced. The credit risk on cash equivalents is limited because the cash equivalents are composed of financial instruments with major banks who have investment grade credit ratings assigned by international credit rating agencies and have low risk of default. The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to historical information about counterparty default rates. The Company had a purchase price receivable from Zijin which was received in five equal instalments, payable every 3.5 months from the date of closing. The five instalments were received in March 2016, July 2016, October 2016, February 2017 and May 2017.

Therefore, the Company is not exposed to significant credit risk and overall the Company's credit risk has not changed significantly from prior years.

### (iii) Liquidity risk

In the management of liquidity risk of the Company, the Company maintains a balance between continuity of funding and the flexibility through the use of borrowings. Management closely monitors the liquidity position and expects to have 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			More	Total un-
	than 1	1 to 3	3 to 12	than 12	discounted
	month	months	months	months	cash flows
	\$	\$	\$	\$	\$
As at December 31, 2017					
Trade and other payables	21,154	1,452	940	40	23,586
Non-current borrowings	-	-	-	35,711	35,711
As at December 31, 2016					
•					
Trade and other payables	13,903	366	88	783	15,140
Current income tax liabilities	1	-	-	-	1
Non-current borrowings	-	-	-	34,270	34,270

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 29. Financial instruments (continued)

- (b) Financial risk management objectives and policies (continued)
  - (iv) Interest rate risk

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

If interest rates (including applicable LIBOR rates) had been 50 basis points higher or lower and all other variables were held constant the Company's loss for the year ended December 31, 2017 would have increased or decreased by \$2.8 million.

### 30. Capital risk management

The Company includes as capital its common shares and share option reserve. The Company's objectives are to safeguard it's ability to continue as a going concern in order to pursue the development of its mineral properties and to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk.

The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. Currently the Company has no cash inflows from operations. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue new debt and acquire or dispose of assets to satisfy cash requirements. In order to facilitate the management of its capital requirements, the Company prepares annual expenditure budgets that are updated as necessary depending on various factors, including capital deployment, results from the exploration and development of its properties and general industry conditions. The annual and updated budgets are approved by the Board of Directors.

In order to maximize ongoing development efforts, the Company does not pay dividends. The Company's investment policy is to invest its cash in highly liquid, short-term, interest-bearing investments with maturities 90 days or less from the original date of acquisition, selected with regard to the expected timing of expenditures from operations.

### 31. Key management personnel compensation

The remuneration of directors and other members of key management were as follows:

	December 31,	December 31,
	2017	2016
	\$	\$
Short-term benefits	9,070	9,017
Share-based payments	3,815	3,515
	12,885	12,532

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 32. Commitments and contingencies

Due to the size, complexity and nature of the Company's operations, various legal and tax matters arise in the ordinary course of business. The Company accrues for such items when a liability is both probable and the amount can be reasonably estimated. In the opinion of management, these matters will not have a material effect on the consolidated financial statements for the Company.

As at December 31, 2017, the Company's commitments that have not been disclosed elsewhere in the consolidated financial statements are as follows:

	Less than			After	
	1 year	1 - 3 years	4 - 5 years	5 years	Total
	\$	\$	\$	\$	\$
Shaft 1 construction Platreef project	22,475	-	-	-	22,475
Shaft 2 construction Platreef project	5,504	-	-	-	5,504
Operating leases	491	1,009	319	-	1,819
	28,471	1,009	319	-	29,799

The Company contracted Aveng Mining for the sinking of shaft 1 at the Platreef Project. The contract will conclude once the shaft reaches the contracted depth of 777 metres below surface.

The commitments in respect of the joint venture are set out in Note 6.

### 33. Segmented information

At December 31, 2017, the Company has four reportable segments, being the Platreef property, Kamoa Holding joint venture, Kipushi properties and the Company's treasury offices.

An operating segment is defined as a component of the Company:

- that engages in business activities from which it may earn revenues and incur expenses;
- whose operating results are reviewed regularly by the entity's chief operating decision maker; and
- for which discrete financial information is available.

For these four reportable segments, the Company receives discrete financial information that is used by the chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance.

The reportable segments are principally engaged in the development of mineral properties in South Africa; exploration and development of mineral properties through a joint venture in the DRC; and the upgrading of mining infrastructure and refurbishment of a mine in the DRC respectively. The following is an analysis of the non-current assets by geographical area and reconciled to the Company financial statements:

	South Africa	DRC	Other	Total
	\$	\$	\$	\$
Non-current assets				
As at December 31, 2017	175,435	826,568	63,780	1,065,783
As at December 31, 2016	112,542	482,483	27,298	622,323

# Notes to the consolidated financial statements December 31, 2017

(Stated in U.S. dollars unless otherwise noted; tabular amounts in thousands)

### 33. Segmented information (continued)

	December 31,	December 31,
		2016 \$
Segment assets	Ð	Ψ
Kamoa Holding joint venture	552,384	473,648
Kipushi properties	311,030	12,717
Platreef property	221,353	136,999
Treasury (ii)	158,969	358,948
All other segments (i)	27,575	19,918
Total	1,271,311	1,002,230
Segment liabilities		
Platreef property	34,472	28,937
All other segments (i)	11,981	7,242
Kipushi properties	9,193	3,915
Treasury (ii)	4,175	4,982
Kamoa Holding joint venture	, -	892
Total	59,821	45,968
Segment losses (profits)		
Kamoa Holding Limited joint venture	27,505	21,732
All other segments (i)	5,872	(30,182)
Platreef properties	4,280	3,962
Kipushi properties	(249,914)	62,535
Treasury (ii)	(21,702)	(12,066)
Total	(233,959)	45,981
Capital expenditures	40.005	40.047
Platreef properties	49,095	40,647
Kipushi properties	11,649	1,863
All other segments (i)	1,037	979
Total	61,781	43,489
Exploration expenditure		
Kipushi properties	34,024	31,674
All other segments (i)	6,304	561
Platreef properties	175	191
Total	40,503	32,426

<sup>(</sup>i) The Company's other divisions that do not meet the quantitative thresholds of IFRS 8 Operating segments, are included in the segmental analysis under the all other segments.

### 34. Approval of the financial statements

The Consolidated Financial Statements of Ivanhoe Mines Ltd., for the year ended December 31, 2017, were approved and authorized for issue by the Board of Directors on March 19, 2018.

<sup>(</sup>ii) Treasury includes cash balances, the promissory note receivable and the financial asset at fair value through profit and loss.



### MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2017

**DATED: MARCH 19, 2018** 

#### INTRODUCTION

This management's discussion and analysis (MD&A) should be read in conjunction with the audited consolidated financial statements of Ivanhoe Mines Ltd. ("Ivanhoe", "Ivanhoe Mines" or the "Company") for the years ended December 31, 2017 and 2016, 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 *March 19, 2018*. Additional information relating to the Company is available on SEDAR. 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 regarding Shaft 1 providing initial access for early underground development at the Flatreef Deposit; (ii) statements regarding the station development of Shaft 1 at the 750, 850 and 950 metre levels; (iii) statements regarding the sinking of Shaft 1, including that the average sinking rate is between 40 and 50 metres a month; (iv) statements regarding Shaft 1 reaching the planned, final depth at 980 metres below surface in 2019; (v) statements regarding the timing of Shaft 2 development, including that construction of the box cut will take approximately 12 months to complete and that Shaft 2 will be sunk to a final depth of more than 1,100 metres; (vi) statements regarding the operational and technical capacity of Shaft 1; (vii) statements regarding the internal diameter and hoisting capacity of Shaft 2; (viii) statements regarding the Company's plans to develop the Platreef Mine in three phases: an initial annual rate of four million tonnes per annum (Mtpa) to establish an operating platform to support future expansions; followed by a doubling of production to eight Mtpa; and then a third expansion phase to a steady-state 12 Mtpa; (ix) statements regarding the planned underground mining methods of the Platreef Project including longhole stoping and drift-and-fill mining; (x) statements regarding peak water use of 7.5 million litres per day at the Platreef Project and development of the Pruissen Pipeline Project; (xi) statements regarding the Platreef Project's estimated electricity requirement of 100 million volt-amperes; (xii) statements regarding the timing and completion of a pre-feasibility study for a six Mtpa mine at Kakula; (xiii) statements regarding the timing, size and objectives of drilling and other exploration programs for 2018 and future periods; (xiv) statements regarding exploration on the Western Foreland exploration licenses; (xv) statements regarding completion of the twin declines at Kakula scheduled for completion of the contract by the end of 2018; (xvi) statements regarding the timing of an update to the Kipushi Mineral Resource estimate early in Q2 2018; (xvii) statements regarding the timing and completion of the feasibility study at the Kipushi Project; and (xviii) statements regarding expected expenditure for 2018 of \$64 million on further development at the Platreef Project; \$62 million at the Kipushi Project; \$12 million on regional exploration in the DRC; and \$18 million on corporate overheads in 2018 - as well as its proportionate funding of the Kamoa-Kakula Project, expected to be \$76 million for 2018.

As well, all of the results of the pre-feasibility study of the Kamoa-Kakula Project and preliminary economic assessment of development options for the Kakula deposit, 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; and (xiv) 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 licenses; 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", 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 48 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 Platreef Project. Construction of the planned Platreef mine is now underway on the Company's discovery of platinum, palladium, nickel, copper, gold and rhodium on the Northern Limb of South Africa's Bushveld 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 Corporation; and Japan Gas Corporation. (See "Platreef Project")
- The Kipushi Project. The existing Kipushi Mine is located on the Central African Copperbelt in the Democratic Republic of Congo's (DRC) 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, Gécamines, holds the remaining 32% interest. (See "Kipushi Project")
- The Kamoa-Kakula Copper 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 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 demonstrated as the largest copper discovery ever made in the history of mining on the African continent and already ranks as the world's fourth-largest copper deposit. (See "Kamoa-Kakula Project")

#### PLATREEF PROJECT

The Platreef Project is owned by Ivanplats (Pty) Ltd., 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 a total of approximately 150,000 people, project employees and local entrepreneurs. In January 2017, Ivanplats reconfirmed its Level 3 status in its third verification assessment on a 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 in 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 hosted primarily 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

At the end of 2017, the Platreef Project reached a total of 215,496 lost time injury (LTI) free hours worked in terms of South Africa's Mines Health and Safety Act and Occupational Health and Safety Act. The Platreef Project continues to strive toward its workplace objective of an environment that causes zero harm to employees, contractors, sub-contractors and consultants.

Positive independent, definitive feasibility study for Platreef's first-phase development; Platreef projected to be Africa's lowest-cost producer of platinum-group metals

On July 31, 2017, Ivanhoe Mines announced the positive results of an independent, definitive feasibility study (DFS) for the planned first phase of the Platreef Project's platinum-group metals, nickel, copper and gold mine in South Africa.

The Platreef DFS covers the first phase of development that would include construction of a state-of-theart underground mine, concentrator and other associated infrastructure to support initial production of concentrate by 2022. As Phase 1 is being developed and commissioned, there would be opportunities to refine the timing and scope of subsequent phases of expanded production.

### 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.
- Increased Mineral Reserves containing 17.6 million ounces of platinum, palladium, rhodium and gold

   an increase of 13% 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%.

The DFS was prepared for Ivanhoe Mines by principal consultant DRA Global, with economic analysis led by OreWin, and specialized sub-consultants including Amec Foster Wheeler E&C Services (Amec Foster Wheeler), Stantec Consulting, Murray & Roberts Cementation, SRK Consulting, Golder Associates and Digby Wells Environmental.

#### Platreef Mineral Resources

On May 11, 2016, Ivanhoe Mines announced a substantial increase in Indicated and Inferred Mineral Resources at the Platreef Project. The updated Mineral Resource estimate, which included updated UMT\_TCU Mineral Resources, Bikkuri Mineral Resources and the Mineral Resources in the immediate footwall of the TCU, was prepared by Ivanhoe Mines under the direction of Dr. Harry Parker, RM SME, of Amec Foster Wheeler. Dr. Parker and Timothy Kuhl, RM SME, also of Amec Foster Wheeler, have independently confirmed the Mineral Resource estimate and are the Qualified Persons 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 and a platinum-to-palladium ratio of approximately 1:1, which is significantly higher than other recent PGM discoveries on the Bushveld's Northern Limb.

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 has reached a depth of more than 700 metres below surface

Sinking of Platreef's Shaft 1 had reached a depth of 584 metres at the end of December 2017 and further advanced to 711 metres on March 19, 2018. The shaft is expected to intersect the upper contact of the Flatreef Deposit (T1 mineralized zone), at an approximate shaft depth of 783 metres, during the third quarter of this year. The grade for the T1 mineralized zone at this location is 4.83 grams per tonne of 3PE (platinum, palladium and rhodium) plus gold, 0.33% nickel and 0.15% copper over a vertical thickness of 12 metres.

Shaft 1, with an internal diameter of 7.25 metres, will provide access to the Flatreef Deposit and enable the initial underground development to take place during the development of Shaft 2. Ultimately, Shaft 1 will become the primary ventilation intake shaft during the project's four-million-tonne-per-annum production case.

The average sinking rate has ranged between 40 to 50 metres a month. The shaft includes a 300-millimetre-thick, concrete-lined shaft wall. The main sinking phase is expected to reach its projected, final depth of 980 metres below surface in 2019.

Shaft stations to provide access to horizontal mine workings for personnel, materials, pump stations and services will be developed at depths of 450 metres, 750 metres, 850 metres and 950 metres.

The first off-shaft lateral development on the 450-metre level, which will serve as an intermediate water pumping and shaft cable-termination station, was successfully completed in September 2017. The next off-shaft lateral development will be at the 750-metre-level and will serve as the first mine-working level. The 750-metre-level station development is expected to be completed by September 2018.

Figure 1: Benjamin Sekano (centre), Platreef's Mine Manager, reviews shaft sinking plans with geotechnical engineers at the 450-metre-level substation in Shaft 1.



### Shaft 2 early-works construction progressing

Shaft 2, to be located approximately 100 metres northeast of Shaft 1, will have an internal diameter of 10 metres, will be lined with concrete and sunk to a planned, final depth of more than 1,104 metres below surface. It will be equipped with two, 40-tonne, rock-hoisting skips capable of hoisting a total of six million tonnes of ore a year – the single largest hoisting capacity at any mine in Africa.

The headgear for the permanent hoisting facility was designed by South Africa-based Murray & Roberts Cementation. The early-works for Shaft 2 include the excavation of a surface box cut to a depth of approximately 29 metres below surface and the construction of the concrete hitch (foundation) for the 103-metre-tall concrete headgear (headframe) that will house the shaft's permanent hoisting facilities

and support the shaft collar. Excavation of the box cut commenced in January 2018 and is expected to be completed by the end of 2018.

Figure 2: Excavation of a surface box cut now underway as part of early-works construction for Shaft 2 at the Platreef Mine in South Africa.



Shaft 2 engineered to allow for future expansion options

Shaft 2 has been engineered with a crushing and hoisting capacity of six Mtpa. This will allow a relatively quick and capital-efficient first expansion of the Platreef Project to six Mtpa by increasing underground development and commissioning a third, two-Mtpa processing module and associated surface infrastructure as required.

A further expansion to more than eight Mtpa would entail converting Shaft 1 from a ventilation shaft into a hoisting shaft. This would require additional ventilation exhaust raises, as well as a further increase of underground development, commissioning of a fourth, two-Mtpa processing module and associated surface infrastructure, as described in the Platreef preliminary economic assessment (PEA) as Phase 2 of the project.

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

Ivanhoe plans to develop the Platreef Mine in phases. The initial annual production rate of four million tonnes per annum (Mtpa) is designed to establish an operating platform to support future expansions. This is expected to be followed by a potential doubling of production to eight Mtpa, and then a third expansion phase to a steady-state 12 Mtpa, which would establish Platreef among the largest platinum-group-metals mines in the world.

The mining zones in the current Platreef mine plan occur at depths ranging from approximately 700 metres to 1,200 metres below surface. Primary access to the mining zones will be by way of Shaft 2; secondary access will be via Shaft 1. During mine production, both shafts also will 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. 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.

The current mine plan has been improved beyond the earlier projections in the 2015 PFS mine plan by optimizing stope design, employing a declining Net Smelter Return (NSR) strategy and targeting higher-grade zones early in the mine's life. This strategy has increased the grade profile by 23% on a 3PE+Au basis in the first 10 years of operation and by 10% during the life of the mine.

## Preliminary expressions of interest received for approximately \$900 million of the targeted \$1 billion Platreef project financing

On July 19, 2017, Ivanhoe Mines announced the appointment of another two leading mine-financing institutions — KfW IPEX-Bank, a German government-owned institution, and the Swedish Export Credit Corporation (SEK) — as Initial Mandated Lead Arrangers (IMLAs) to arrange debt financing for the ongoing development of the Platreef Mine.

KfW IPEX-Bank and SEK joined the three initial IMLAs — Export Development Canada, Nedbank Limited (acting through its Corporate and Investment Banking division) and Societe Generale Corporate & Investment Banking — that were appointed last year.

The five IMLAs will make best efforts to arrange a total debt financing of up to \$1 billion for the development of Platreef's first-phase, four-Mtpa mine. Preliminary expressions of interest now have been received for approximately \$900 million of the targeted \$1 billion project financing. Negotiation of a term sheet is ongoing. In addition, preliminary discussions have begun with leading financial institutions around the financing of the contribution by the black economic empowerment partners to the development capital.

### Metallurgical test work and processing methods

Metallurgical test work has focused on maximizing recovery of platinum-group metals (PGM) and base metals, mainly nickel, while producing an acceptably high-grade concentrate suitable for further processing and/or sale to a third party. The three main geo-metallurgical units and composites tested produced smelter-grade final concentrates of approximately 85 g/t PGM+Au at acceptable PGM recoveries. Test work also has shown that the material is amenable to treatment by conventional flotation without the need for mainstream or concentrate ultrafine re-grinding. Extensive bench scale test work comprising of open-circuit and locked-cycled flotation testing, comminution testing, mineralogical characterization, dewatering and rheological characterization was performed at Mintek in South Africa, an internationally accredited metallurgical testing facility and laboratory.

Comminution and flotation test work has indicated that the optimum grind for beneficiation is 80% passing 75 micrometres. Platreef ore is classified as being 'hard' to 'very hard' and thus not suitable for semi-autogenous grinding; a multi-stage crushing and ball-milling circuit has been selected as the preferred size reduction route.

Improved flotation performance has been achieved using high-chrome grinding media as opposed to carbon-steel media. The inclusion of a split-cleaner flotation circuit configuration, in which the fast-floating fraction is treated in a cleaner circuit separate from the medium- and slow-floating fractions, resulted in improved PGM, copper and nickel recoveries and concentrate grades.

A two-phased development approach was used for the DFS flow-sheet design. The selected flow sheet comprises a common four-Mtpa, three-stage crushing circuit that feeds crushed material to two parallel milling-flotation modules, each with a nominal capacity of two Mtpa. Flotation is followed by a common concentrate thickening, concentrate filtration, tailings disposal and tailings-handling facility.

### Bulk water and electricity supply

The Olifants River Water Resource Development Project (ORWRDP) is designed to deliver water to the Eastern and Northern limbs of South Africa's Bushveld Complex. The project consists of the new De Hoop Dam, the raised wall of the Flag Boshielo Dam and related pipeline infrastructure that ultimately is expected to deliver water to Pruissen, southeast of the Northern Limb. The Pruissen Pipeline Project is expected to be developed to deliver water onward from Pruissen to the municipalities, communities and mining projects on the Northern Limb. Ivanhoe Mines is a member of the ORWRDP's Joint Water Forum.

The Platreef Project's water requirement for the first phase of development is projected to peak at approximately 7.5 million litres per day, which is expected to be supplied by the water network. Ivanhoe also is investigating various alternative sources of bulk water, including an allocation of bulk grey-water from a local source.

The Platreef Project's electrical power requirement for the phase one, four-Mtpa, underground mine, concentrator and associated infrastructure has been estimated at approximately 100 million volt-amperes (MVA). An agreement has been reached with Eskom, South Africa's public electricity utility, for the supply of phase-one power. The Company chose a self-build option for permanent power that will enable lvanhoe to manage the construction of the distribution lines from Eskom's Burutho sub-station to the Platreef Mine. The self-build and electricity supply agreements are being formulated.

### Development of human resources and job skills

Work progressed well on the implementation of Ivanhoe's Social and Labour Plan (SLP) during 2017, to which the Company has pledged a total of R160 million (\$13 million) during the first five years, culminating in November 2019. The approved plan includes R67 million (\$6 million) for the development of job skills among local residents and R88 million (\$7 million) for local economic development projects. Additional internal training is ongoing to upskill the current work force.

#### **KIPUSHI PROJECT**

The Kipushi copper-zinc-germanium-lead mine in the Democratic Republic of Congo, 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, La Générale des Carrières et des Mines (Gécamines).

### Health, safety and community development

The Kipushi Project achieved a total of 458,884 work hours free of lost-time injuries by December 31, 2017. One lost-time injury occurred in September 2017.

In an effort to reduce the incidence of malaria in the Kipushi community, a Water Sanitation and Health (WASH) program has been initiated in cooperation with the Territorial Administrator and the local community. The main emphasis of the program's first phase is cleaning storm drains in the municipality to prevent accumulations of ponded water, where malarial mosquitos breed.

The Ivanhoe-sponsored Fionet program to improve malaria diagnostics and treatment was expanded in 2017 to 300 Deki Readers installed in 252 medical-service providers in Haut-Katanga and Lualaba provinces in southern DRC, which host Ivanhoe's Kipushi and Kamoa-Kakula projects. Deki devices provide automated readings of rapid diagnostic tests to remove the human-error factor and avoid prescription of unnecessary medication. The data are uploaded to a cloud server for analysis by the Ministry of Health in planning malaria-control measures. Deki Readers provided diagnostic testing in more than 30,000 patient encounters during the past year, with approximately 63% of patients testing negative for malaria.

### Kipushi Mineral Resources

The current Mineral Resource estimate for Kipushi was prepared by MSA Group on January 27, 2016. Zinc-rich Measured and Indicated Mineral Resources totalled 10.18 million tonnes at 34.89% zinc, 0.65% copper, 0.96% lead, 19 g/t silver, 15ppm cobalt and 51 g/t germanium at a 7% zinc cut-off, containing 7,833 million pounds of zinc. Zinc-rich Inferred Mineral Resources totalled 1.87 million tonnes at 28.24% zinc, 1.18% copper, 0.88% lead, 10 g/t silver, 15ppm cobalt and 53 g/t germanium at a 7% zinc cut-off containing 1,169 million pounds of zinc.

Copper-rich Measured and Indicated Mineral Resources totalled an additional 1.63 million tonnes at grades of 4.01% copper, 2.87% zinc and 22 g/t silver, at a 1.5% copper cut-off, containing 144 million pounds of copper. Copper-rich Inferred Mineral Resources totalled an additional 1.64 million tonnes at grades of 3.30% copper, 6.97% zinc and 19 g/t silver at a 1.5% copper cut-off, containing 119 million pounds of copper.

## Underground drilling program completed in November 2017 with updated Mineral Resource estimate expected in Q2 2018

Ivanhoe initiated a second phase of underground drilling at Kipushi in April 2017 with the goal of upgrading Inferred Mineral Resources on the Southern Zinc and Fault Zone to Indicated, expanding Mineral Resources in the Série Recurrent Zone and collecting additional sample material for metallurgical flotation testing.

A total of 9,706 metres were drilled in 58 holes. Eight holes were drilled for metallurgy, 31 holes in the Southern Zinc and Big Zinc, five holes in the Nord Riche and 14 holes in the Série Récurrente.

Logging and sampling of the holes was completed at the end of 2017 and the final assays are expected soon. Geology interpretation of the results is ongoing and a new resource update in planned for release in Q2 2018. The updated Mineral Resource will be used in the preparation of the Kipushi Feasibility Study.

### Project development and infrastructure

Ivanhoe completed the refurbishment of a significant amount of underground infrastructure at the Kipushi Project, including a series of vertical mine shafts to various depths, with associated head frames, as well as underground mine excavations. A series of crosscuts and ventilation infrastructure still are in working condition. The underground infrastructure also includes a series of pumps to manage the influx of water into the mine. A schematic layout of the existing development is shown in Figure 3.

Shaft 5, the main production shaft for the Kipushi Mine, is eight metres in diameter and 1,240 metres deep. It now 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 now is fully operational.

Underground upgrading work is continuing on the crusher and the rock load-out facilities at the bottom of Shaft 5 and the main haulage way on the 1,150-metre level, between the Big Zinc access decline and Shaft 5.

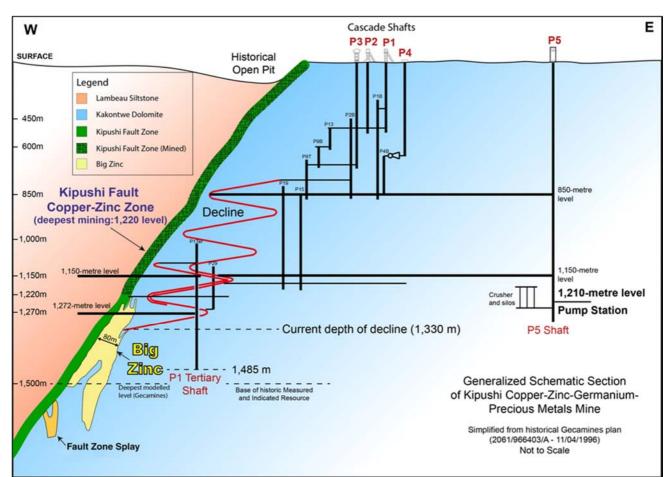
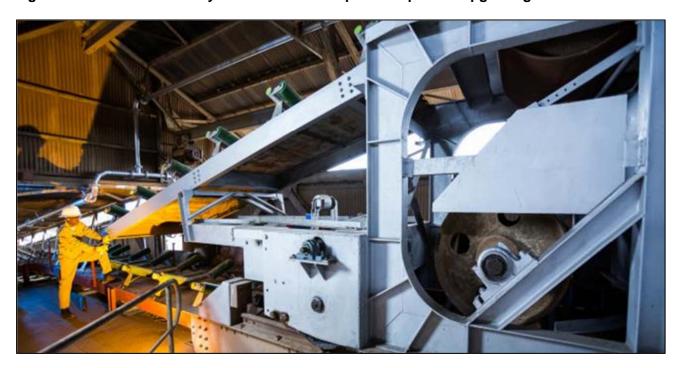


Figure 3: Schematic underground section of Kipushi Mine.

Figure 4: The new ore conveyor belt installed as part of Kipushi's upgrading work.



Pre-feasibility study for Kipushi completed in December 2017; definitive feasibility study underway

On December 13, 2017, Ivanhoe Mines announced the results of a pre-feasibility study for the rebirth of the historic Kipushi Mine. The study anticipates 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 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, estimated at \$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.

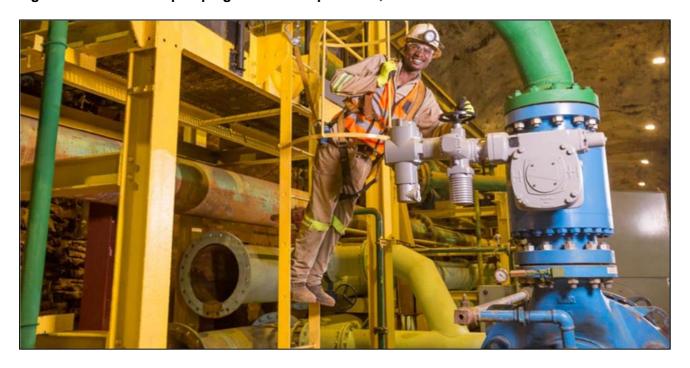
Estimated life-of-mine average cash cost of \$0.48/lb of zinc is expected to rank Kipushi, once in production, in the bottom quartile of the cash cost curve for zinc producers globally.

The definitive feasibility study, to further refine and optimize the project's economics, is underway and is expected to be completed in the second half of 2018.

Figure 5: Kipushi Project's proposed site layout.



Figure 6: Shaft 5 main pumping station at Kipushi's 1,200-metre level.



### Agreement to rebuild railway spur line to support the Kipushi Project

On October 30, 2017, Ivanhoe Mines and the DRC's state-owned railway company, Société Nationale des Chemins de Fer du Congo (SNCC), signed a Memorandum of Understanding (MOU) to rebuild 34 kilometres of track to connect the Kipushi Mine with the DRC national railway at Munama, south of the mining capital of Lubumbashi.

Under the terms of the MOU, Ivanhoe has appointed R&H Rail to conduct a front-end engineering design study to assess the scope and cost of rebuilding the spur line from the Kipushi Mine to the main Lubumbashi-Sakania railway at Munama. The study has begun and construction on the Kipushi-Munama spur line could start in late 2018. Ivanhoe will finance the estimated \$32 million (plus contingency) capital cost for the rebuilding, which is included within the overall Kipushi 2017 PFS capital cost.

The proposed export route is to utilize the SNCC network from Kipushi to Ndola, connecting to the north-south rail corridor from Ndola to Durban. The rail corridor to Durban via Zimbabwe is fully operational and has significant excess capacity.

#### KAMOA-KAKULA PROJECT

The Kamoa-Kakula Copper Project, a joint venture between Ivanhoe Mines and Zijin Mining, has been independently ranked as the largest copper discovery ever made on the African continent with adjacent prospective exploration areas within the Central African Copperbelt in the Democratic Republic of Congo, 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. At the time, Kamoa Holding held a 95% interest in the Kamoa Project. 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

Health and safety remain key priorities for all people working at the Kamoa-Kakula Project, which had achieved 8,686,769 lost-time, injury-free hours worked to the end of 2017. This outstanding achievement reflects the dedication and safety-focused culture of the entire Kamoa-Kakula exploration and development teams.

## February 2018 Mineral Resource Estimate establishes Kamoa-Kakula as world's fourth largest copper deposit

On February 26, 2018, Ivanhoe announced a new Mineral Resource estimate for the Kakula Discovery on the Kamoa-Kakula Project. The updated Kakula Mineral Resource estimate, prepared under the direction of independent consultant Amec Foster Wheeler, covers a mineralized strike length of 13.3 kilometres. For the first time, the updated estimate incorporates Mineral Resources contained in the Kakula West Discovery area and the saddle area between the main Kakula Discovery area and Kakula West. The updated Mineral Resource estimate is based on results from approximately 151,000 metres of drilling in 271 holes completed by December 31, 2017. The updated Kamoa-Kakula Mineral Resource statement is shown in table 1.

### Highlights of the updated Mineral Resource include:

Kakula's Indicated Mineral Resources now total 585 million tonnes at a grade of 2.92% copper, containing 37.7 billion pounds of copper at a 1% copper cut-off. At a 2% copper cut-off, Indicated Mineral Resources total 330 million tonnes at a 4.07% copper grade, containing 29.6 billion pounds of copper. At a higher cut-off of 3% copper, Indicated Mineral Resources total 174 million tonnes at a grade of 5.62% copper, containing 21.5 billion pounds of copper.

Inferred Mineral Resources total 113 million tonnes at a grade of 1.90% copper, containing 4.7 billion pounds of copper at a 1% copper cut-off. At a 2% copper cut-off, Inferred Mineral Resources total 44 million tonnes at a 2.59% copper grade, containing 2.5 billion pounds of copper. At a higher cut-off of 3%

copper, Inferred Mineral Resources total nine million tonnes at a grade of 3.66% copper, containing 0.7 billion pounds of copper.

The average true thickness of the selective mineralized zone (SMZ) at a 1% copper cut-off is 10.1 metres in the Indicated Mineral Resources area and 6.7 metres in the Inferred Mineral Resources area. At a higher 3% copper cut-off, the average true thickness of the SMZ is 4.7 metres in the Indicated Mineral Resources area and 3.3 metres in the Inferred Mineral Resources area.

The Kakula Mineral Resources are defined within a total area of 24.9 square kilometres at a 1% copper cut-off. At the same cut-off grade, the areal extent of Indicated Mineral Resources is 19.4 square kilometres and the areal extent of the Inferred Mineral Resources is 5.5 square kilometres. The Kakula Discovery remains open for significant expansion in multiple directions, while the remainder of the southern parts of the Kamoa-Kakula mining-licence area is virtually untested (see figure 7).

Figure 7: Kamoa-Kakula mining licence, showing the Kamoa, Kakula and Kakula West Mineral Resource areas.

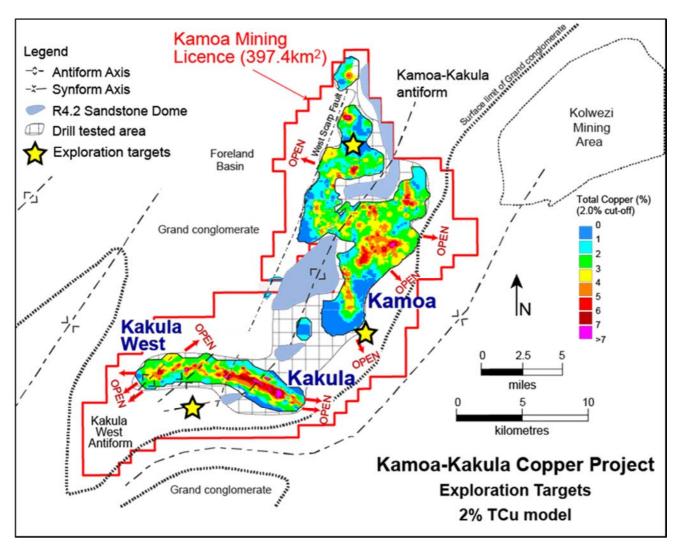


Table 1. Consolidated Mineral Resource Statement, Kamoa-Kakula Project, February 2018.

Deposit	Category	Tonnes (millions)	Area (sq. km)	Copper Grade	Vertical Thickness (metres)	Contained Copper (kt)	Contained Copper (billion lbs)
Vomes	Indicated	759	50.7	2.57%	5.5	19,500	43.0
Kamoa	Inferred	202	19.4	1.85%	3.8	3,740	8.2
	Indicated	585	19.4	2.92%	10.8	17,100	37.7
Kakula	Inferred	113	5.5	1.90%	7.3	2,150	4.7
Total	Indicated	1,340	70.1	2.72%	6.9	36,600	80.7
Kamoa- Kakula Copper Project	Inferred	315	24.9	1.87%	4.6	5,890	13.0

#### Notes:

- Ivanhoe's Mineral Resources Manager, George Gilchrist, Professional Natural Scientist (Pr. Sci. Nat) with the South African Council for Natural Scientific Professions (SACNASP), estimated the Mineral Resources under the supervision of Dr. Harry Parker and Gordon Seibel, both Registered Members of the Society for Mining, Metallurgy and Exploration (SME), who are the Qualified Persons for the Mineral Resource estimate. The effective date of the estimate is February 23, 2018. Mineral Resources are estimated using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. Mineral Resources at Kamoa are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. No Mineral Reserves are currently estimated at Kakula.
- 2. Mineral Resources at Kamoa are reported using a total copper (TCu) cut-off grade of 1% TCu and a minimum vertical thickness of 3 m. There are reasonable prospects for eventual economic extraction under assumptions of a copper price of \$3.00/lb; employment of underground mechanized room-and-pillar and drift-and-fill mining methods; and that copper concentrates will be produced and sold to a smelter. Mining costs are assumed to be \$27/t, and concentrator, tailings treatment, and general and administrative costs (G&A) are assumed to be \$17/t. Metallurgical recovery for Kamoa is estimated to average 84%. At a 1% TCu cut-off grade, assumed net smelter returns for 100% of Mineral Resource blocks will cover concentrator, tailings treatment, and G&A costs.
- 3. Mineral Resources at Kakula are reported using a TCu cut-off grade of 1% TCu and an approximate minimum thickness of 3 m. There are reasonable prospects for eventual economic extraction under assumptions of a copper price of \$3.00/lb, employment of underground, mechanized, room-and-pillar and drift-and-fill mining methods, and that copper concentrates will be produced and sold to a smelter. Mining costs are assumed to be \$42/t and concentrator, tailings treatment, and G&A costs are assumed to be \$18/t. Metallurgical recovery is assumed to average 85% at the average grade of the Mineral Resource. Ivanhoe is studying reducing mining costs using a controlled convergence room-and-pillar method. At a 1% TCu cut-off grade, assumed net smelter returns for 100% of Mineral Resource blocks will cover concentrator, tailings treatment and G&A costs.
- 4. Reported Mineral Resources contain no allowances for hangingwall or footwall contact boundary loss and dilution. No mining recovery has been applied.
- Tonnage and contained-copper tonnes are reported in metric units, contained-copper pounds are reported in imperial units and grades are reported as percentages.
- 6. Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content.
- 7. Resources stated in Tables 2 and 3 are not additive to this table

Table 2. Kakula Deposit Indicated Mineral Resources, Sensitivity Cases.

Category	Cut- off Grade (Cu%)	Tonnes (millions)	Area (Sq. km)	Copper Grade	True Thickness (metres)	Contained Copper (kTonnes)	Contained Copper (billion lbs)
Indicated	7.0	41	2.2	8.07%	6.3	3,290	7.3
Indicated	6.0	67	3.6	7.46%	6.2	4,970	11.0
Indicated	5.0	98	5.7	6.82%	5.7	6,690	14.7
Indicated	4.0	140	9.0	6.13%	5.1	8,560	18.9
Indicated	3.0	174	12.3	5.62%	4.7	9,750	21.5
Indicated	2.5	208	14.4	5.14%	4.8	10,700	23.5
Indicated	2.0	330	16.6	4.07%	6.6	13,400	29.6
Indicated	1.5	420	18.0	3.55%	7.8	14,900	32.9
Indicated	1.0	585	19.4	2.92%	10.1	17,100	37.7

The footnotes 1,3,4,5,6,7 of Table 1 also apply to Table 2.

Table 3. Kakula Deposit Inferred Mineral Resources, Sensitivity Cases.

Category	Cut-off Grade (Cu%)	Tonnes (millions)	Area (Sq. km)	Copper Grade	True Thickness (metres)	Contained Copper (ktonnes)	Contained Copper (billion lbs)
Inferred	4.0	2	0.2	4.17%	3.3	98	0.2
Inferred	3.0	9	0.8	3.66%	3.3	325	0.7
Inferred	2.5	17	1.7	3.20%	3.2	549	1.2
Inferred	2.0	44	3.2	2.59%	4.3	1,140	2.5
Inferred	1.5	69	4.5	2.26%	5.0	1,560	3.4
Inferred	1.0	113	5.5	1.90%	6.7	2,150	4.7

The footnotes 1,3,4,5,6,7 of Table 1 also apply to Table 3.

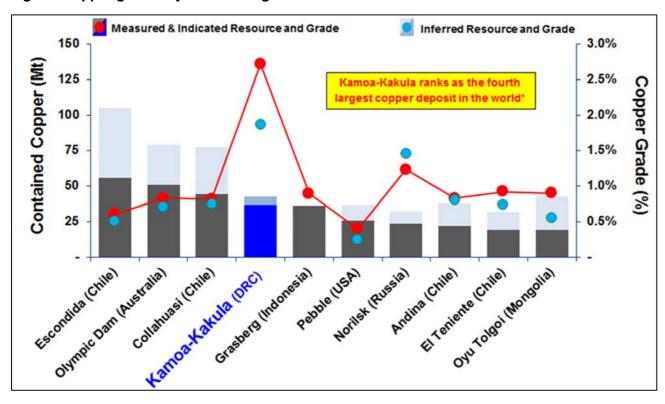
Table 4. Indicated and Inferred Mineral Resources, Kamoa-Kakula Project, February 2018.

Category	Cut-off Grade (Cu%)	Tonnes (millions)	Area (Sq. km)	Copper Grade	Contained Copper (kTonnes)	Contained Copper (billion lbs)
Indicated	3.0	396	33.2	4.79%	19,000	41.8
Indicated	2.5	535	44.0	4.25%	22,800	50.2
Indicated	2.0	780	53.8	3.63%	28,300	62.4
Indicated	1.5	1030	62.8	3.17%	32,500	71.7
Indicated	1.0	1340	70.1	2.72%	36,600	80.7

Category	Cut-off Grade (Cu%)	Tonnes (millions)	Area (Sq. km)	Copper Grade	Contained Copper (kTonnes)	Contained Copper (billion lbs)
Inferred	3.0	28	3.0	3.56%	979	2.2
Inferred	2.5	58	6.1	3.13%	1,800	4.0
Inferred	2.0	111	10.3	2.69%	2,980	6.6
Inferred	1.5	183	16.3	2.31%	4,220	9.3
Inferred	1.0	315	24.9	1.87%	5,890	13.0

The footnotes to Table 1 also apply to Table 4.

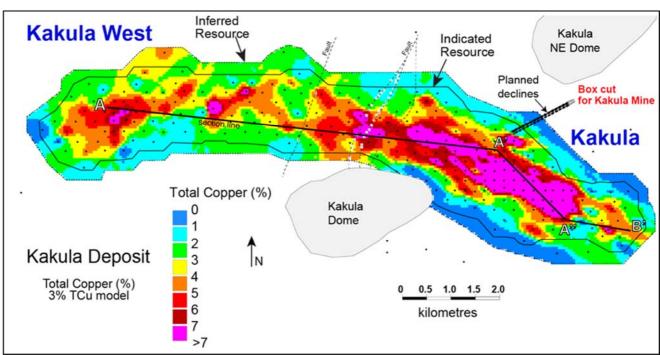
Figure 8: Among the world's largest copper deposits by contained copper, Kamoa-Kakula has the highest copper grades by a wide margin.



Source: Wood Mackenzie

\*Note: Selected based on contained copper (Measured & Indicated Mineral Resources, inclusive of Mineral Reserves, and Inferred Mineral Resources), ranked on contained copper in Measured & Indicated Mineral Resources.

Figure 9: Kakula and Kakula West discovery areas showing grades of Indicated and Inferred Mineral Resource blocks at a 3% copper cut-off.



## Kamoa-Kakula 2017 PEA and Kamoa PFS present three initial development scenarios

On November 28, 2017, Ivanhoe Mines announced positive findings of an expanded, independent PEA for the development of the Kakula Discovery at the Kamoa-Kakula Project. The study was based on the November 2017 Mineral Resource estimate for Kamoa and May 2017 Mineral Resource estimate for Kakula.

Highlights of the three potential development scenarios examined include:

- 1. Initial mine development scenario of a six-Mtpa underground mine and surface processing complex at Kakula:
- For this option, the PEA envisaged an average annual production rate of 246,000 tonnes of copper at a mine site cash cost of \$0.45/lb copper and total cash cost of \$1.08/lb copper for the first five years of operations, and copper annual production of up to 385,000 tonnes by year four.
- An initial capital cost of \$1.2 billion for this option would result in an after-tax net present value at an 8% discount rate (NPV8%) of \$4.2 billion. The internal rate of return of 36.2% and project payback period of 3.1 years confirm the compelling economics for Kamoa-Kakula's initial phase of production.
- Kakula would benefit from an ultra-high, average feed grade of 6.4% copper during the first 10 years of operations, and 5.5% copper on average during a 24-year mine life.
- A six Mtpa Kakula PFS is underway, with completion targeted for the second half of 2018. Kakula's surface box cut was completed in October 2017. Development of twin underground declines, similar to those at the nearby Kansoko Mine, has begun and is expected to take about a year to complete. The first blast for the declines was completed in November 2017.
- 2. Expanded, two-mine scenario for an integrated, 12 Mtpa, two-stage development, beginning with initial production from Kakula, to be followed by a subsequent, separate underground mining operation at nearby Kansoko, along with the construction of a smelter:
- Under this option, initial production would occur at a rate of six Mtpa from the Kakula Mine, before
  increasing to 12 Mtpa with ore from the Kansoko Mine. As resources at Kakula and Kansoko are
  mined, the PEA envisages that production would begin at Kamoa North to maintain 12 Mtpa
  throughput during a 44-year mine life.
- For the two-phase sequential operation, the PEA envisaged \$1.2 billion in initial capital costs. Future expansion at the Kansoko Mine and subsequent extensions could be funded by cash flows from the Kakula Mine, resulting in an after-tax, net present value at an 8% discount rate (NPV8%) of \$7.2 billion and an internal rate of return of 33%.
- Under this approach, the PEA also included the construction of a direct-to-blister flash copper smelter with a capacity of 690,000 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 12 Mtpa scenario would deliver average annual production of 370,000 tonnes of copper at a
  total cash cost of \$1.02/lb copper during the first 10 years of operations and production of 542,000
  tonnes by year nine. At this future production rate, Kamoa-Kakula would rank among the world's five
  largest copper mines.
- 3. Kamoa 2017 pre-feasibility study (PFS) development scenario of building the Kansoko Mine as a stand-alone six-Mtpa underground mine and surface processing complex:
- Under this scenario, the PFS envisages an average annual production rate of 178,000 tonnes of copper for the first 10 years of operations, and annual copper production of 245,000 tonnes by year seven.

• The initial capital cost of \$1.0 billion to develop this mine would result in an after-tax, net present value of \$2.1 billion at an 8% discount rate (NPV8%) – an increase of 109% compared to the net present value projected in the March 2016 Kamoa PFS. The internal rate of return is expected to be 24%, with a five-year project payback period.

Potential phased mine developments to 18 Mtpa and above are under evaluation for Kamoa-Kakula. In light of the successful step-out drilling at Kakula West, as well as the potential to find additional resources in high-priority targets located in the untested parts of the Kamoa-Kakula Project, development plans will be reassessed and amended as the project moves forward.

The Kakula six-Mtpa PFS has begun. The work will be based on an updated Kakula 3-D resource model. The target date for completion is at the end of Q3 2018.

# Improved copper recoveries and concentrate grades confirmed by metallurgical tests on drill core from Kakula

The next phase of flowsheet development is nearing completion following the positive preliminary test work results received during Q4 2016 showing 87.8% recovery at an extremely high concentrate grade of 56% copper.

A metallurgical drilling campaign to compile a representative composite sample was completed during the first half of 2017 and the flowsheet development test work at the XPS metallurgical laboratories in Canada is nearing completion. The results of this work will be used for the PFS, which is planned for completion in 2018.

Earlier metallurgical test work indicated that the Kamoa and Kakula concentrates contain extremely low arsenic levels by world standards – approximately 0.02%. Given this critical competitive marketing advantage, Kamoa-Kakula concentrates are expected to attract a significant premium from copper-concentrate traders for use in blending with concentrates from other mines. The concentrates will help to enable the other concentrates to meet the limit of 0.5% arsenic imposed by Chinese smelters to meet China's environmental restrictions.

## Underground development at the Kakula Deposit advancing ahead of plan

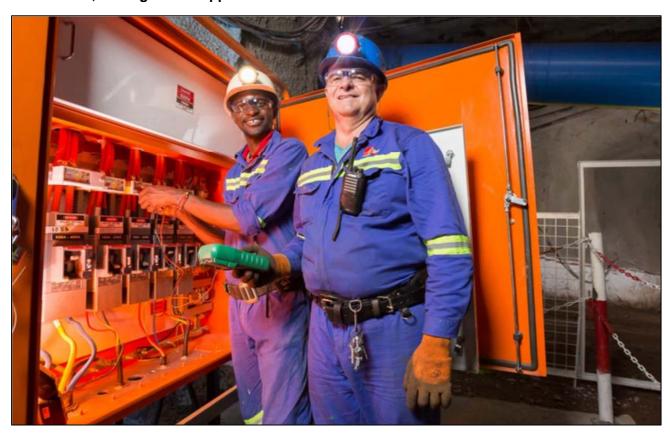
Construction of the 18-metre-deep Kakula box cut was successfully completed in October 2017, allowing access for the start of development of the twin declines in November.

The Kakula decline development contract was awarded to JMMC, the DRC subsidiary of JCHX Mining Management. The first blast for the twin declines at Kakula was carried out in November 2017; approximately 150 metres of development were completed by the end of 2017. As of March 15, each of the declines had been advanced more than 316 metres. The 3,535-metre decline development contract is scheduled to be completed by the end of 2018.

Figure 10: Underground development at Kakula has advanced each of the service and conveyor declines more than 316 metres toward the mineralized zone.



Figure 11: Kamoa-Kakula electricians testing a new electrical panel installed in one of Kakula's twin declines where development work is well underway to provide access to what will be a highly mechanized, underground copper mine.



# Underground development at the Kansoko Deposit reached the high-grade mineralization in mid-2017; awaiting finalization of Kamoa-Kakula development plans

Underground development at Kamoa-Kakula's Kansoko Mine, consisting of service and conveyor declines, was completed by Byrnecut Underground Congo SARL in September, 2017. The high-grade Kansoko Sud copper mineralization was reached and approximately 13,500 tonnes of development ore was stockpiled at surface. Various development options for Kansoko are being assessed in conjunction with the ongoing mine development activities at Kakula.

## Exploration activities focused on expanding Kakula Discovery

Exploration activity in Q4 2017 focused on infill drilling at Kakula West and the saddle area between Kakula and Kakula West. Drilling for the resource estimate was extended to the end of Q4 2017 to ensure that almost the entire, 13.3 kilometre strike length of Kakula was converted directly to Indicated Mineral Resources. A total of 31,433 metres of exploration drilling was completed in 60 holes. In addition to exploration drilling, 1,754 metres of hydro-geology drilling was completed in 10 holes and 400 metres of underground cover drilling also was completed.

Exploration drilling completed in 2017 at the Kamoa-Kakula Project totalled 121,899 metres in 239 holes. This total included 26 wedges for geotechnical and metallurgy test work. In addition, 3,420 metres of hydro-geology drilling and 664 metres of cover drilling were completed.

Figure 12: Underground development progress at the Kakula mine.



### Other exploration activities

The Kamoa geology team have been busy working on stratigraphic interpretation and lateral variation and have been collecting hangingwall density data, P-wave velocity data and magnetic susceptibility measurements in order to assist with stratigraphic interpretation. This work is ongoing and will be used to assist with both the airborne gravity survey and interpretation of the seismic program.

Additional structural modelling was completed to incorporate the Kakula West drilling. An initial model was produced and is being tested with both the drilling and seismic survey.

A program of downhole acoustic televiewer (ATV) and rock property test work was completed. The ATV data will be used in conjunction with the geophysical study of Kakula and the rock property analysis will be used to help tie in the seismic data.

### Regional geophysical surveys underway at Kamoa-Kakula and Western Forelands

An airborne gravity survey at Kamoa-Kakula and the Western Forelands area was completed in January 2018. The data are being processed, and will be integrated with other geophysical and geological data and used for target development during Q1 2018.

Figure 13: The seismic vibrator rig being used in a geophysical survey of the Kamoa-Kakula licence area. The vibrator stops every 10 metres and sends controlled, seismic pulses into the ground to detect key geological markers.



Initial seismic line surveying and access development were undertaken in Q4 2017 in advance of running seismic traverses. The seismic work is being conducted by Hi-Seis, a leading international services

company based in Australia. A seismic vibrator rig was mobilized to site in early January and high-definition seismic surveys are underway.

The geophysical seismic survey program is designed to assist in mine planning through gaining a better understanding of the relationship between geologic faults and the high-grade copper mineralization, and with targeting exploration-drilling.

## Kakula and Kansoko Mine sites now connected to the national hydroelectric grid

The construction of a 120-kilovolt (kV) power line to the Kansoko Mine was completed and a 120kV mobile substation installed, commissioned and energized in Q4 2016. An eight-kilometre, 11kV overhead power line, with mini—substations, was constructed from the Kansoko Mine to the Kamoa camp and is supplying hydropower to the Kamoa camp. A 12 kilometre, 120kV, dual-circuit power line between Kansoko and Kakula was completed in December 2017 and the Kakula Mine was energized with grid power fed from Kamoa's substation at the Kansoko Mine.

The Kansoko Mine, Kakula Mine and Kamoa camp now all are connected to the national, hydroelectric power grid.



Figure 14: 120kV power line at the Kamoa-Kakula Project.

# Ongoing upgrading work enables Mwadingusha power station to supply 32 megawatts of clean electricity to national grid

In January of this year, Ivanhoe announced that ongoing upgrading work at the Mwadingusha hydropower plant in the DRC had almost tripled the plant's interim power output from 11 to 32 megawatts (MW). This represents 45% of the plant's designed capacity. Three of Mwadingusha's six generators now have been modernized; the remaining three generators are due to be upgraded and fully operational by the end of 2019 – restoring the plant to its installed output capacity of approximately 71 MW of power.

The work at Mwadingusha, part of a program to eventually overhaul and boost output from three hydropower plants, is being conducted by engineering firm Stucky, of Lausanne, Switzerland, under the direction of Ivanhoe Mines and its joint-venture partner, Zijin Mining Group, in conjunction with the DRC's state-owned power company, La Société Nationale d'Electricité (SNEL). Once fully reconditioned, the

three plants will have installed capacity of approximately 200 MW of electricity for the national grid, which is expected to be more than sufficient for the Kamoa-Kakula Copper Project.

## Continued focus on community and sustainability

The number of job opportunities from the Kamoa-Kakula Project and contractors has risen during the fourth quarter of 2017 due to the increase in activity around the camp and mine area. Preference is being given to local job-seekers and numerous positions have been filled.

The Sustainable Livelihoods project is largely aimed at economically empowering communities in the vicinity of the planned mine. The project, which has been in place for the past five years, has continued to successfully manage the following programs during 2017:

- a maize (corn) production program yielded maize from local communities and the mine's farm, which
  now includes a recently acquired sheller, cleaning machine, dehuller and grinding mill to produce
  maize meal;
- a vegetable program supplying produce to the Kamoa-Kakula Project camp kitchen;
- a poultry project that supplies chickens and eggs to the Kamoa-Kakula Project camp kitchen;
- a beekeeping program managing more than 50 honey-producing hives; and
- a fish-farming program, consisting of three fully-stocked dams.

A crop and household relocation survey has been conducted for the entire 15-square-kilometre Kakula mining area. Compensation to farmers has been paid; alternative land has been allocated and is in the process of being ploughed. A total of 45 relocation houses are being built near the village of Muvundaquali for households to be relocated from the mining area.

Figure 15: Pineapples being harvested from the livelihoods garden as part of the program supplying produce to the Kamoa-Kakula Project.



Figure 16: The poultry project that supplies chickens and eggs to the Kamoa-Kakula Project – one of the initiatives of the Kamoa-Kakula Sustainable Livelihoods Project working to build a sustainable, independent economy in nearby communities.



In 2017, the Kamoa-Kakula Project constructed, equipped and handed over a primary school at the Muvunda village and a secondary school at the Kaponda village. In addition, three communities now are being supplied with fresh, clean water from boreholes drilled by the project's personnel and equipment.

Figure 17: Upgraded buildings at the Kaponda Primary School – one of the schools constructed and furnished by Ivanhoe Mines.



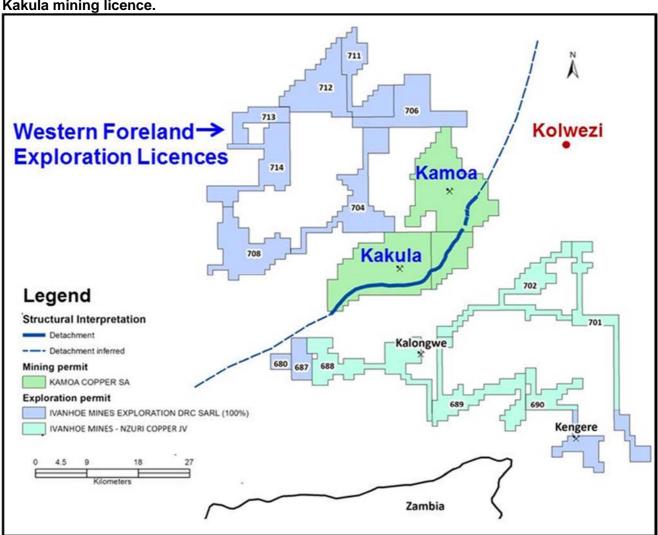
### DRC WESTERN FORELAND EXPLORATION PROJECT

Ivanhoe's DRC exploration group is targeting Kamoa-Kakula-style copper mineralization through a regional drilling program on its 100%-owned Western Foreland exploration licences, located to the west of the Kakula-Kamoa Project.

Ivanhoe successfully continued its exploration drilling program through the rainy season during Q4 2017, based out of its new stand-alone exploration camp. Drilling with two rigs is focused on one of the Company's promising targets, utilizing the new, all-weather road that connects the Kamoa-Kakula road network to the Western Foreland exploration licences. A recently completed bridge across the Lufupa River will provide all-weather road access west of the river to previously inaccessible targets. One drill rig presently is drilling west of the river.

During Q4 2017, Ivanhoe's exploration team completed 5,925 metres of drilling and finalized interpretation of the regional geology of the Western Foreland area. The Company undertook a regional airborne gravity survey across the area and the data are expected to be available soon for interpretation by geologists. Acquisition of 2-D seismic data is underway; approximately 11 kilometres of data will be recorded over the Western Foreland exploration licences.

Figure 18: Ivanhoe's 100%-owned Western Foreland exploration licences, west of the Kamoa-Kakula mining licence.



## Ongoing detailed discussions to resolve issues arising from DRC's 2018 mining code

On March 9, 2018, DRC President Joseph Kabila Kabange signed a new mining code into effect that revises and updates the country's 2002 mining code.

International mining companies that have operations in the DRC, including Glencore, Randgold, China Molybdenum, MMG, Ivanhoe Mines and Zijin Mining, are collectively negotiating with the government to resolve their concerns about the impacts on their DRC operations that would result from the new mining code. The companies have confirmed their willingness to negotiate royalties and changes to other taxes as part of this process, but they expect that the negotiations will give priority to the recognition of the stability clauses contained in Article 276 of the 2002 mining code and certain mining conventions. Most notably, Article 276 provides that existing mining projects will continue to benefit from the terms of the 2002 code for 10 years after the implementation of a new code. The stability afforded under Article 276 influenced the decisions by many of the companies to invest in the DRC, resulting in more than \$10 billion in direct investments and the creation more than 20,000 full-time mining jobs in the country.

The detailed, DRC mining-code negotiations are scheduled to begin March 26, following an initial, high-level meeting in Kinshasa on March 7 during which President Kabila gave an assurance that the companies' concerns would be resolved through transitional arrangements, mining regulations and respect for existing agreements and guarantees.

## Egizio Bianchini appointed as Ivanhoe Mines' Executive Vice Chairman

On February 8, 2018, Ivanhoe announced the strengthening of the Company's senior management team with the appointment of Egizio Bianchini as Ivanhoe's Executive Vice Chairman. Mr. Bianchini's appointment with Ivanhoe Mines is effective from March 12, 2018. He has also joined Ivanhoe's board of directors.

#### SELECTED ANNUAL FINANCIAL INFORMATION

This selected financial information is in accordance with IFRS as presented in the annual consolidated financial statements. Ivanhoe had no operating revenue in any financial reporting period and did not declare or pay any dividend or distribution in any financial reporting period.

	For the year ended December		ember 31,
	2017 2016		2015
	\$'000	\$'000	\$'000
Exploration and project expenditure	40,503	32,426	40,751
Share of losses from joint venture	27,505	21,732	1,030
General administrative expenditure	19,260	18,835	17,445
Share-based payments	4,908	5,977	7,722
Reversal of impairment of mineral property and other			
items	(286,283)	-	-
Gain on partial sale of subsidiary	-	-	(357,671)
Re-measurement to fair value of the interest retained in			
joint venture	-	-	(376,148)
Mark-to-market gain on revaluation of warrants	-	-	(6,945)
Loss from subsidiary held for partial sale	-	-	(4,319)
Finance income	(32,614)	(29,902)	(2,204)
Finance costs	1,710	1,798	1,674
Total comprehensive (profit) loss attributable to:			
Owners of the Company	(182,872)	23,011	(681,274)
Non-controlling interest	(64,909)	12,739	12,969
Basic (profit) loss per share	(0.22)	0.04	(0.93)
Diluted (profit) loss per share	(0.21)	0.04	(0.93)
Total assets	1,271,311	1,002,230	1,022,578
Non-current liabilities	33,630	28,957	28,103

## **DISCUSSION OF RESULTS OF OPERATIONS**

Review of the year ended December 31, 2017 vs. December 31, 2016

The Company recorded a total comprehensive profit of \$247.8 million for the year ended December 31, 2017, compared to a total comprehensive loss of \$35.8 million for the year ended December 31, 2016. The profit in 2017 was attributable mainly to the reversal of the impairment of mineral property and other items of the Kipushi Project of \$286.3 million.

During 2017, the Company recorded a reversal of the impairment of \$286.3 million relating to the Kipushi Project. The circumstances leading to the reversal of the impairment charge included, but were not limited to, (i) an increase in the long-term zinc price estimate; (ii) optimized zinc processing methodology; (iii) reduced capital expenditure estimates; and (iv) reduced realization cost estimates. All these estimates were supported by the pre-feasibility study for the Kipushi Project announced on December 13, 2017.

When excluding the 2017 reversal of impairment of \$286.3 million, the Company's total comprehensive loss for the year ended December 31, 2017, amounted to \$38.5 million. This is \$2.7 million higher than the total comprehensive loss of \$35.8 million for the same period in 2016. The increase mainly was due to an increase in exploration and project expenditure of \$8.1 million and an increase in the Company's share of losses from the Kamoa Holding joint venture of \$5.8 million, which was partially offset by an increase in exchange gains on translation of foreign operations, finance income and other income when compared to 2016.

Exploration and project expenditures for the year ended December 31, 2017, amounted to \$40.5 million and were \$8.1 million more than for the same period in 2016 (\$32.4 million).

Of the total \$40.5 million exploration and project expenditure, \$36.7 million related to the Kipushi Project and \$3.6 million was for exploration at Ivanhoe's 100%-owned Western Foreland exploration licences. Exploration and project expenditures at the Kipushi Project increased by \$5.0 million compared to the same period in 2016. The main classes of expenditure at the Kipushi Project for the year ended December 31, 2017 and 2016 are set out in the following table:

	Year ended	Year ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Kipushi Project		
Salaries and benefits	14,569	11,742
Electricity	6,204	5,255
Repair and maintenance	3,820	3,477
Depreciation	3,445	3,197
Studies and contracting work	3,240	828
Drilling	2,262	-
Site security and safety	979	735
Other expenditure	4,421	6,440
Total project expenditure	38,940	31,674
Capitalized as development cost in property, plant and equipment	(2,259)	
Total project expenditure (excluding capex)	36,681	31,674

Costs incurred at the Kipushi Project subsequent to the finalization of its pre-feasibility study, have been capitalized as property, plant and equipment.

The following table summarizes the Company's share of the comprehensive loss of the Kamoa Holding joint venture for the year ended December 31, 2017, and for the same period in 2016:

	Year ended December 31,	Year ended December 31,
	2017	2016
	\$'000	\$'000
Interest expense	42,137	32,438
Exploration costs	26,631	14,743
Foreign exchange loss	4,333	187
Interest income	(1,747)	(111)
Loss for the period	71,354	47,257
Loss attributible to non-controlling interest	(15,788)	(3,354)
Loss for the period attributible to joint venture partners	55,566	43,903
Company's share of losses from joint venture (49.5%)	27,505	21,732

The costs associated with mine development are capitalized as development costs in Kamoa Holding, while the exploration expenditure is expensed. Capitalization of costs at Kakula commenced during Q2 2017, coinciding with the start of the Kakula box cut. Exploration drilling at Kakula West and in the saddle area between Kakula West and Kakula still is expensed.

The interest expense 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.

Exchange gains on translation of foreign operations amounted to \$13.8 million for the year ended December 31, 2017, compared to \$10.2 million for the same period in 2016.

Finance income for the year ended December 31, 2017, amounted to \$32.6 million, and was \$2.7 million more than for the same period in 2016 (\$29.9 million). The increase mainly was due to interest earned on loans to the Kamoa Holding joint venture to fund operations that amounted to \$27.4 million in 2017 (2016: \$16.2 million), as the accumulated loan balance increased.

Financial position as at December 31, 2017 vs. December 31, 2016

The Company's total assets increased by \$269.1 million, from \$1,002.2 million as at December 31, 2016, to \$1,271.3 million as at December 31, 2017. This mainly was due to the \$253.3 million increase in mineral properties and the \$34.1 million increase in long term loan receivable resulting from the reversal of the impairment relating to the Kipushi Project.

The Company received a fourth installment of \$41.2 million on February 8, 2017, a fifth and final installment on May 23, 2017, which represented the remaining purchase-price receivable due to the Company as at December 31, 2016, as a result of the sale of 49.5% of Kamoa Holding.

The Company's investment in the Kamoa Holding joint venture increased by \$78.7 million from \$473.6 as at December 31, 2016, to \$552.4 million as at December 31, 2017, 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 \$78.8 million during 2017, while the Company's share of comprehensive loss from the joint venture amounted to \$27.5 million.

Property, plant and equipment increased by \$72.8 million, with a total of \$61.8 million being spent on project development and to acquire other property, plant and equipment, \$47.2 million and \$7.1 million pertained to development costs of the Platreef Project and Kipushi Project respectively. The total property, plant and equipment additions at the Kipushi Project for 2017 amounted to \$11.6 million.

The Company utilized \$38.5 million of its cash resources in its operations and received interest of \$3.7 million during 2017.

The main components of the capitalized development costs of the Platreef Project for the year ended December 31, 2017, and for the same period in 2016, are set out in the following table:

	Year ended	Year ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Platreef Project		
Shaft 1 construction	23,112	15,268
Salaries and benefits	8,222	6,659
Administrative and other expenditure	6,929	5,501
Studies and contracting work	4,371	9,866
Social and environmental	2,431	2,177
Shaft 2 early works	1,164	-
Site costs	865	829
Infrastructure	145	6
Total development costs	47,239	40,306
Other additions to property, plant and equipment	1,856	341
Total additions to property, plant and equipment for Platreef	49,095	31,674

The Company's total liabilities increased by \$13.9 million to \$59.8 million as at December 31, 2017, from \$46.0 million as at December 31, 2016.

## **SELECTED QUARTERLY FINANCIAL INFORMATION**

The following table summarizes selected financial information for the prior eight quarters. Ivanhoe had no operating revenue in any financial reporting period and did not declare or pay any dividend or distribution in any financial reporting period.

	Three months ended			
	December 31, S	September 30,	June 30,	March 31,
	2017	2017	2017	2017
	\$'000	\$'000	\$'000	\$'000
Exploration and project expenditure	10,986	11,595	9,626	8,296
Share of losses from joint venture	10,193	6,759	5,035	5,518
General administrative expenditure	3,316	6,039	4,952	4,953
Share-based payments	1,111	1,224	1,201	1,372
Reversal of impairment of mineral				
property and other items	(286,283)	-	-	-
Finance income	(8,986)	(8,032)	(9,167)	(6,429)
Finance costs	442	434	355	479
Total comprehensive (profit) loss attribut	able to:			
Owners of the Company	(207,991)	15,893	7,477	1,749
Non-controlling interest	(77,336)	5,269	3,885	3,273
Basic (profit) loss per share	(0.25)	0.01	0.01	0.01
Diluted (profit) loss per share	(0.24)	0.01	0.01	0.01

	Three months ended			
	December 31, Sep	otember 30,	June 30,	March 31,
	2016	2016	2016	2016
	\$'000	\$'000	\$'000	\$'000
Exploration and project expenditure	9,507	7,769	8,233	6,917
Share of losses from joint venture	5,890	6,306	5,320	4,216
General administrative expenditure	7,272	4,213	3,657	3,693
Share-based payments	1,442	1,750	1,312	1,473
Finance income	(6,827)	(7,239)	(7,367)	(8,469)
Finance costs	471	454	445	428
Total comprehensive loss (profit) attribut	table to:			
Owners of the Company	14,101	(1,860)	6,568	4,203
Non-controlling interest	3,914	2,445	3,483	2,897
Loss per share (basic and diluted)	0.02	0.01	0.01	0.01

#### Review of the three months ended December 31, 2017 vs. 2016

The Company recorded a total comprehensive profit of \$285.3 million for Q4 2017 compared to a loss of \$18.0 million for the same period in 2016. The profit in 2017 was attributable mainly to the reversal of the impairment of mineral property and other items of the Kipushi Project of \$286.3 million as described above.

When excluding the 2017 reversal of impairment, the total comprehensive loss for Q4 2017 amounts to \$1.0 million, \$17.0 million lower than in the same period in 2016. This largely was due to exchange gains on translation of foreign operations recognized in Q4 2017 of \$12.4 million resulting from the strengthening of the South African Rand by more than 8% from September 30, 2017, to December 31, 2017, compared to an exchange loss on translation of foreign operations recognized in Q4 2016 of \$0.1 million.

Exploration and project expenditures for the three months ended December 31, 2017, amounted to \$11.0 million and were \$1.5 million more than for the same period in 2016 (\$9.5 million). \$8.3 million of the total \$11.0 million exploration and project expenditure related to the Kipushi Project with \$2.6 million being spent on exploration at Ivanhoe's 100%-owned Western Foreland exploration licences in Q4 2017. Expenditure at the Kipushi Project decreased by \$1.1 million compared to the same period in 2016. The main classes of expenditure at the Kipushi Project in Q4 2017 and Q4 2016 are set out in the following table:

	Three months	Three months
	ended	ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Kipushi Project		
Salaries and benefits	4,789	3,697
Electricity	1,919	1,247
Studies and contracting work	1,096	317
Depreciation	912	840
Drilling	529	-
Repair and maintenance	197	1,061
Other expenditure	1,108	2,268
Total project expenditure	10,550	9,430
Capitalized as development cost in property, plant and equipment	(2,259)	
Total project expenditure (excluding capex)	8,291	9,430

The Company's share of losses from the Kamoa Holding joint venture increased from \$5.9 million in Q4 2016 to \$10.2 million in Q4 2017. The following table summarizes the Company's share of the comprehensive loss of Kamoa Holding for the three months ended December 31, 2017 and for the same period in 2016:

	Three months ended	Three months ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Interest expense	12,137	9,427
Exploration costs	9,989	4,539
Foreign exchange loss	4,336	(160)
Interest income	(588)	(111)
Loss for the period	25,874	13,695
Loss attributible to non-controlling interest	(5,281)	(1,796)
Loss for the period attributible to joint venture partners	20,593	11,899
Company's share of losses from joint venture (49.5%)	10,193	5,890

#### LIQUIDITY AND CAPITAL RESOURCES

The Company had \$181.4 million in cash and cash equivalents as at December 31, 2017. At this date, the Company had consolidated working capital of approximately \$181.9 million, compared to \$364.8 million at December 31, 2016. The Platreef Project's restricted cash has been fully utilized and the project's current expenditure is being funded solely by Ivanhoe as the Japanese consortium of ITOCHU Corporation; Japan Oil, Gas and Metals National Corporation and Japan Gas Corporation have elected not to contribute to current expenditures. Since the Platreef Project's restricted cash was fully utilized, the Company has contributed a total of \$6.7 million on behalf of the Japanese consortium.

Continuation of the Company as a going concern is dependent upon establishing profitable operations, the confirmation of economically recoverable reserves, and the ability of the Company to obtain further financing to develop its projects. Although the Company has been successful in raising funds in the past, the Company's access to financing always is uncertain and there can be no assurance that additional funding will be available to the Company in the near future.

On December 8, 2015, Zijin, through a subsidiary company, acquired a 49.5% interest in Kamoa Holding for a total of \$412 million to be settled in a series of payments. Ivanhoe received an initial \$206 million from Zijin on December 8, 2015, and a further \$41.2 million on each of March 23, 2016, July 8, 2016, October 25, 2016, February 8, 2017, and May 23, 2017. 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 Company's main objectives for 2018 at the Platreef Project are the continuation of Shaft 1 construction, securing a bulk water supply and completion of early-works construction of Shaft 2. At Kipushi, the principal objective is the completion of the feasibility study and continued upgrading of mining infrastructure. At the Kamoa-Kakula Project, priorities are the continuation of decline construction at Kakula and the completion of a pre-feasibility study for Kakula. The Company expects to spend \$64 million on further development at the Platreef Project; \$62 million at the Kipushi Project; \$12 million on regional exploration in the DRC; and \$18 million on corporate overheads in 2018 – as well as its proportionate funding of the Kamoa-Kakula Project, expected to be \$76 million for 2018.

Continuing strategic discussions concerning Ivanhoe Mines and its projects are ongoing with several significant mining companies and investors across Asia, Europe, Africa and elsewhere. Several investors that have expressed interest have no material limit on the provision of capital. There can be no assurance that the Company will pursue any transaction or that a transaction, if pursued, will be completed.

The Company has a mortgage bond outstanding on its offices in London, United Kingdom, of £3.2 million (\$4.4 million). The bond is fully repayable on August 31, 2020, secured by the property and incurs interest at a rate of 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 \$24.8 million as at December 31, 2017, and a contractual amount due of \$31.4 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 LIBOR plus 2% calculated monthly in arrears. Interest is not capitalized. The difference of \$6.6 million between the contractual amount due and the fair 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
December 31, 2017	\$'000	\$'000	\$'000	\$'000	\$'000
Debt	35,711	-	-	4,357	31,354
Operating leases	1,819	491	1,009	319	-
Shaft 1 construction – Platreef Project	22,475	22,475	-	-	-
Total contractual obligations	60,005	22,966	1,009	4,676	31,354

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 related parties:

	Year ended December 31,	Year ended December 31,
	2017 \$'000	<b>2016</b> \$'000
	ΨΟΟΟ	φοσο
Global Mining Management Corporation (a)	2,256	2,697
Ivanhoe Capital Aviation LLC (b)	2,000	1,800
GMM Tech Holdings Inc. (c)	681	167
HCF International Advisers (d)	601	487
Ivanhoe Capital Services Ltd. (e)	465	560
Ivanhoe Capital Pte Ltd (f)	285	258
Global Mining Services Ltd. (g)	24	114
Kamoa Copper SA (h)	(3,746)	(4,542)
Ivanhoe Mines Energy DRC Sarl (i)	(383)	(1,184)
Ivanhoe Capital Corporation (UK) Limited (j)	(44)	2
	2,139	359
Travel	2,258	2,081
Salaries and benefits	2,154	3,021
Consulting	1,655	594
Office and administration	201	389
Cost recovery and management fee	(4,129)	(5,726)
	2,139	359

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.

As at December 31, 2017, trade and other payables included \$0.93 million (December 31, 2016: \$1.2 million) with regards to amounts due to related parties related by way of director or officers in common. These amounts are unsecured and non-interest bearing.

- (a) Global Mining Management Corporation (Global) is a private company based in Vancouver. The Company and the Executive 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.
- (b) Ivanhoe Capital Aviation LLC (Aviation) is a private company owned indirectly by the Executive Chairman of the Company. Aviation operates an aircraft for which the Company contributes toward the running costs.

- (c) 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.
- (d) 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 is the President and co-founder of HCF, which provides financial advisory services to the Company.
- (e) Ivanhoe Capital Services Ltd. (Services) is a private company owned indirectly by the Executive Chairman of the Company. Services provides for salaries administration and other services to the Company in Singapore and Beijing on a cost-recovery basis.
- (f) Ivanhoe Capital Pte. Ltd. (Capital) is a private company owned indirectly by the Executive Chairman of the Company. Capital provides administration, accounting and other services in Singapore on a cost-recovery basis.
- (g) Global Mining Services Ltd. (Mining) is a private company incorporated in Delaware and is 100% owned by Global. Mining provides administration and other services to the Company on a cost-recovery basis.
- (h) Kamoa Copper SA ("Kamoa Copper") is a company incorporated in the DRC. Kamoa Copper is 80% owned by Kamoa Holding Limited ("KHL), a joint venture of the Company provides administration, accounting and other services to Kamoa Copper on a cost-recovery basis.
- (i) Ivanhoe Mines Energy DRC Sarl ("Energy") is a company incorporated in the DRC. Energy is 100% owned by Kamoa Holding Limited ("KHL), a joint venture of the Company. The Company provides administration, accounting and other services to Energy on a cost-recovery basis.
- (j) Ivanhoe Capital Corporation (UK) Limited (UK) is a private company owned indirectly by the Executive Chairman of the Company. UK provides administration, accounting and other services in London on a cost-recovery basis.

### **CRITICAL ACCOUNTING ESTIMATES**

The Company's significant accounting policies are presented in Note 2 to the consolidated financial statements for the year ended December 31, 2017. 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:

## (i) Technical feasibility and commercial viability of projects

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

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

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

## (ii) Preparation of the financial statements on a going concern basis

As at December 31, 2017, the Company's total assets exceeds its total liabilities by \$1,211.5 million and current assets exceeds current liabilities by \$179.3 million. The Company has an accumulated profit of \$18.3 million at December 31, 2017. The Company's total current assets exceeds the Company's total liabilities. The Company currently has no producing properties and expects to fund all of its exploration and development activities through debt and equity financing until operating revenues are generated. The Company's spending plan for 2018 exceeds the cash and cash equivalents as at December 31, 2017, of \$181.4 million.

Continuation of the Company as a going concern is dependent upon establishing profitable operations, the confirmation of economically recoverable reserves, and the ability of the Company to obtain further financing to develop properties. Failure to obtain further financing could result in the delay or indefinite postponement of further exploration and development of the Company's properties, which could result in a material uncertainty that may cast significant doubt upon the Company's ability to meet its operational and capital objectives, realize its assets and discharge its liabilities in the normal course of business and accordingly the appropriateness of the use of accounting principles applicable to a going concern. Although the Company has been successful in raising funds in the past, there can be no assurance that it will be able to raise sufficient funds in the future.

### 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, 2017, with earlier application permitted. The Company adopted these standards in the current period, which did not have a material impact on its consolidated financial statements.

- Amendment to IAS 7 Cash flow statements on additional disclosure requirements.
- Amendment to IAS 12 Income taxes on the requirements for recognising deferred tax assets on unrealised losses.
- Annual improvements 2014-2016. IFRS 12 Disclosure of interests in other entities regarding clarification that the disclosures requirement are applicable to interest in entities classified as held for sale.

## Accounting standards issued but not yet effective

- IFRS 2 Share-based payments. (i)
- Amendment to IFRS 9 Financial instruments. (i)
- IFRS 11 Joint arrangements. (ii)
- IFRS 15 Revenue from contracts with customers. (i)
- IFRS 16 Leases. (ii)
- IAS 23 Borrowing Costs. (ii)
- IFRIC 22 'Foreign currency transactions and advance consideration'. (i)
- Annual improvements 2014-2016. IFRS 1 'First-time adoption of IFRS'. (i)
- Annual improvements 2014-2016. IAS 28 'Investments in associates and joint ventures'. (i)
- (i) Effective for annual periods beginning on or after January 1, 2018
- (ii) Effective for annual periods beginning on or after January 1, 2019

The Company is in the process of determining the impact of the adoption of these standards on the consolidated financial statements, if any. 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:

		December 31,	December 31,
	Level	2016	2016
		\$'000	\$'000
Financial assets			
Financial assets at fair value through profit or loss			
Investment in listed entity	Level 1	8,563	2,720
Loans and receivables			
Promissary note receivable	Level 3	13,610	10,804
Financial liabilities			
Borrowings	Level 3	29,204	26,875

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 establishes 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.

The Company has two promissory notes:

- The fair value of the promissory note received as part of the purchase consideration when the Company sold its Australian subsidiaries was originally determined assuming repayment occurs on March 31, 2018 and is discounted using a rate of 8%.
- The fair value of the promissory note receivable by the Company from Crystal River was originally determined assuming repayment occurs on December 31, 2017 and was discounted using a rate of 8.3%.

The carrying value of the promissory notes are not significantly different to the fair value.

The fair value of borrowings are determined in accordance with generally accepted pricing models based on discounted future cashflow analysis. The fair value of the loan payable to ITC Platinum Development Limited was originally determined assuming repayment occurs on August 31, 2022 and using an interest rate of USD LIBOR plus 7%. The carrying value of borrowings is not significantly different to their fair value.

The fair value of the Company's remaining financial instruments, which include trade and other payables and the financial liability, were estimated to approximate their carrying values, due primarily to their immediate or short-term maturity.

#### Finance income

The Company's finance income is summarized as follows:

, ,	Year ended	Year ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Interest from loan to joint venture	(27,394)	(16,197)
Unwinding discount	(1,538)	(11,012)
Other interest income	(3,682)	(2,693)
	(32,614)	(29,902)

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. The unwinding discount represents the unwinding of the purchase price receivable from Zijin.

## 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. As such, the Company is subject to foreign exchange risk as a result of fluctuations in exchange rates. The Company has not entered into any derivative instruments to manage foreign exchange fluctuations, however, management monitors foreign exchange exposure.

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

	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Assets		
Canadian dollar	2,597	2,479
Australian dollar	8,563	2,720
South African rand	46,030	20,486
British pounds	452	695
Liabilities		
Canadian dollar	(384)	(1,000)
Australian dollar	(57)	(21)
South African rand	(11,100)	(7,384)
British pounds	(180)	(162)

## Foreign currency sensitivity analysis

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

	Year ended	Year ended
	December 31,	December 31,
	2017	2016
	\$'000	\$'000
Canadian dollar	110	74
Australian dollar	425	(1)
South African rand	(97)	(97)

#### 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 trade and other receivables and cash equivalents as well as long-term loan receivables.

The Company reviews the recoverable amount of its receivables at each statement of financial position date to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the Company considers that the credit risk is significantly reduced. The credit risk on cash equivalents is limited because the cash equivalents are composed of financial instruments with major banks that have investment grade credit ratings assigned by international credit-rating agencies and have low risk of default. The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to historical information about counterparty default rates.

## Liquidity risk

In the management of liquidity risk of the Company, 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.

					Iotai
	Less than	1 to 3	3 to 12	More than	undiscounted
	1 month	months	months	12 months	cash flows
	\$'000	\$'000	\$'000	\$'000	\$'000
As at December 31, 2017					
Trade and other payables	21,154	1,452	940	40	23,586
Non-current borrowings	-	-	-	35,711	35,711
As at December 31, 2016					
Trade and other payables	13,903	366	88	783	15,140
Current income tax liabilities	1	-	-	-	1
Non-current borrowings	-	-	-	34,270	34,270

#### Interest rate risk

The Company's interest rate risk arises mainly from long term borrowings 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 USD 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 profit for the year ended December 31, 2017 would have increased or decreased by \$2.6 million.

#### **DESCRIPTION OF CAPITAL STOCK**

As at March 19, 2018, 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 791,338,002 Class A Shares, nil Class B Shares, nil warrants and nil preferred shares were issued and outstanding.

The Company granted no options in 2016 or 2017 and 3,500,000 options to one officer in 2018 to date. As at March 19, 2018, there were 23,973,500 options issued in terms of the Equity Incentive Plan exercisable into 23,973,500 Class A Shares.

The Company granted 1,503,509 restricted share units (RSUs) in 2018 to date, 43,683 restricted RSUs in 2017 and 2,013,539 RSUs in 2016 per the Company's restricted share unit plan. As at March 19, 2018, there were 5,285,622 RSUs which may vest into 5,285,622 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 Chief Executive Officer (CEO) and Chief Financial Officer (CFO) have each evaluated the design and operating effectiveness of the Company's DC&P and ICFR as of December 31, 2017 and, in accordance with the requirements established under National Instrument 52-109 - Certification of Disclosure in Issuer's Annual and Interim Filings, the CEO and CFO have concluded that these controls and procedures have been designed and operate to provide reasonable assurance that material information relating to the Company is made known to them by others within the Company and that the information required to be disclosed in reports that are filed or submitted under Canadian securities legislation are recorded, processed, summarized and reported within the time period specified in those rules.

As at December 31, 2017, management, including the CEO and CFO, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon the results of that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that as of the end of the period covered by this MD&A, the Company's disclosure controls and procedures were effective.

The Company's CEO and CFO have used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework to evaluate the design and operation of the Company's ICFR as of December 31, 2017 and have concluded that these controls and procedures have been designed and operated effectively to provide reasonable assurance that financial information is recorded, processed, summarized and reported in a timely manner. Management of the Company was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. The result of the inherent limitations in all control systems means design and operation of controls cannot provide absolute assurance that all control issues and instances of fraud will be detected.

As at December 31, 2017, management assessed the effectiveness of the Company's internal control over financial reporting and concluded that the Company's internal control over financial reporting was effective.

During the year ended December 31, 2017, 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 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 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 2017 Development Plan dated January 10, 2018, prepared by OreWin Pty Ltd; Amec Foster Wheeler E&C Services Inc. and Amec Foster Wheeler Australia Pty Ltd (collectively Amec Foster Wheeler); MDM (Technical) Africa Pty Ltd; Stantec Consulting International LLC and SRK Consulting (South Africa) Pty Ltd, 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 2017 Prefeasibility Study Technical Report dated January 25, 2018, prepared by OreWin Pty Ltd, The MSA Group (Pty) Ltd, SRK Consulting (South Africa) (Pty) Ltd and MDM (Technical) Africa Pty Ltd, 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.