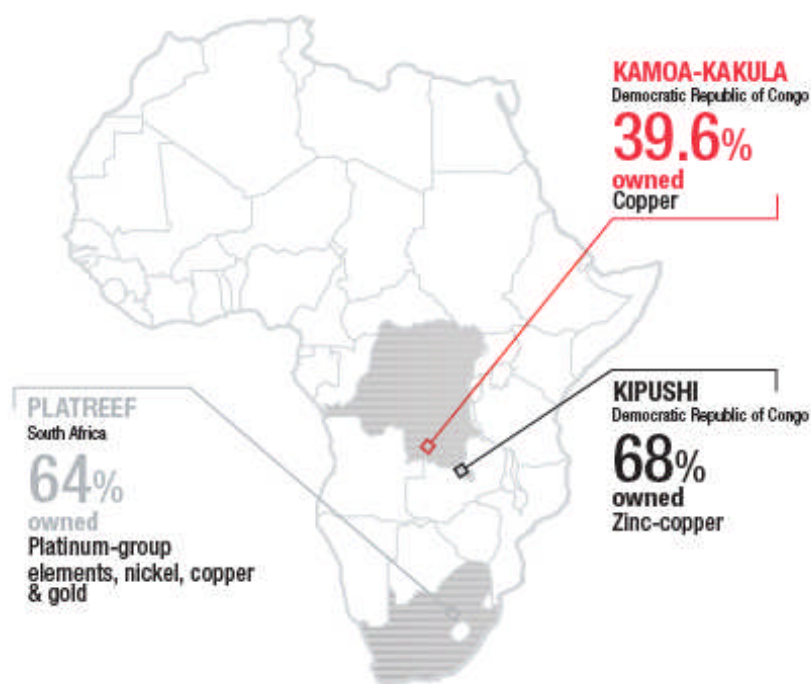




Notice of Annual General Meeting of  
Shareholders  
and  
Management Proxy Circular of  
Ivanhoe Mines Ltd.

Dated: May 11, 2018



## THE KAMOA-KAKULA COPPER PROJECT

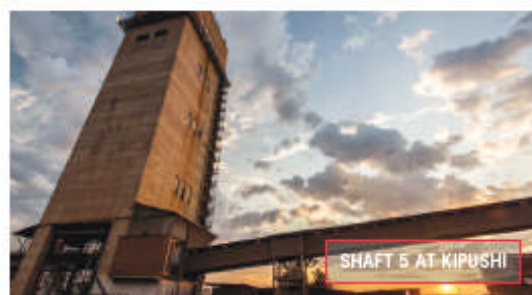
The tier-one Kamoa-Kakula Project is a joint venture between Ivanhoe Mines, Zijin Mining Group Co., Ltd. (Zijin or Zijin Mining) and the government of the DRC. It is located within the Central African Copperbelt in the southern Lualaba Province in the DRC. Following the signing of an agreement with the DRC government in November 2016 to transfer an additional 15% interest in the Kamoa-Kakula Project to the DRC government, Ivanhoe Mines and Zijin Mining each hold an indirect 39.6% interest in the Kamoa-Kakula Project; Crystal River Global Limited holds an indirect 0.8% interest; and the DRC government holds a direct 20% interest. The Kamoa-Kakula Project is independently verified to be the largest copper discovery ever made on the African continent and already ranks as the world's fourth-largest copper discovery.



Our principal projects are:

### THE PLATREEF PROJECT

Construction of the planned Platreef mine is well under way on the Company's discovery of platinum, palladium, rhodium and gold (3PE+Au), nickel and copper, on the Northern Limb of South Africa's Bushveld Igneous Complex. Ivanhoe holds a 64% interest in Platreef. The South African beneficiaries of a broad-based, black economic empowerment (B-BBEE) structure have a combined 26% stake in the Platreef Project; the remaining 10% is owned by a Japanese consortium of ITOCHU Corporation, Japan Oil, Gas and Metals Corporation and Japan Gas Corporation.



### THE KIPUSHI PROJECT

The Historic Kipushi mine is located on the Central African Copperbelt in the southern Haut-Katanga Province of the DRC, 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 1 kilometre from the DRC-Zambia border. Ivanhoe holds a 68% interest in Kipushi; the DRC state-owned mining company, La Générale des Carrières et des Mines (Gécamines), holds the remaining 32% interest.

# **NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS OF IVANHOE MINES LTD. (THE “COMPANY”)**

## **DATE & TIME**

June 28, 2018 at 8:00 AM (Pacific time)

## **PLACE**

Cheakamus Room, Fairmont Waterfront Hotel  
900 Canada Place Way  
Vancouver, British Columbia, V6C 3L5

## **THE BUSINESS OF THE MEETING IS TO:**

1. Receive the Company's audited financial statements for the year ended December 31, 2017 and the auditors' report thereon.
2. Set the number of directors at nine (9) for the ensuing year.
3. Elect the directors for the ensuing year.
4. Re-appoint PricewaterhouseCoopers Inc., Chartered Accountants, as auditors for the ensuing year and authorize the directors to fix the auditors' remuneration.
5. Transact any other business that properly comes before the meeting.

## **YOUR RIGHT TO VOTE**

Shareholders of record at the close of business on April 30, 2018, will be entitled to vote at the meeting and are encouraged to vote either by proxy or in person.

For more information on the Notice-and-Access Provisions and information on voting and obtaining paper copies of the meeting materials, please see Section 1 entitled “Voting and Other Important Information” on page 5 in the accompanying Management Proxy Circular.

## **By order of the Board of Directors,**

*“Lars-Eric Johansson”*

Lars-Eric Johansson  
President and Chief Executive Officer

*“Mary Vincelli”*

Mary Vincelli  
Vice President, Compliance and Corporate  
Secretary

May 11, 2018

## TABLE OF CONTENTS

GENERAL INFORMATION	1
SECTION 1 - VOTING AND OTHER IMPORTANT INFORMATION	4
SECTION 2 - MEETING MATTERS	10
SECTION 3 - DIRECTORS DISCLOSURE	14
SECTION 4 - STATEMENT OF EXECUTIVE COMPENSATION	29
SECTION 5 - CORPORATE GOVERNANCE	52
SECTION 6 - SUMMARY OF SECURITIES-BASED COMPENSATION ARRANGEMENTS	64

## GENERAL INFORMATION

### IVANHOE MINES LTD.

654 – 999 Canada Place  
Vancouver, British Columbia, V6C 3E1  
Tel: (604) 688-6630 • Fax: (604) 682-2060

### DATE OF INFORMATION

This Management Proxy Circular is dated May 11, 2018 and unless otherwise stated, contains information as at May 8, 2018.

### SHARE CAPITAL

Ivanhoe Mines Ltd. (“**Ivanhoe**” or “**Ivanhoe Mines**” or the “**Company**”) has an authorized share capital consisting of an unlimited number of Class A common shares (“**Class A Shares**” or “**Common Shares**”) without par value, an unlimited number of Class B common shares (“**Class B Shares**”) without par value and an unlimited number of Preferred shares without par value. The holders of Class A Shares are entitled to receive notice of, and to attend all meetings of, Ivanhoe shareholders and to have one vote for each Common Share held, except to the extent specifically limited by the *Business Corporations Act* (British Columbia) (“**BCBCA**”). At the close of business on May 8, 2018, there were 791,347,897 fully paid and non-assessable Class A Shares issued and outstanding and no Class B Shares or Preferred shares issued and outstanding.

### STOCK EXCHANGE

The Company’s Class A Shares trade under the symbol “**IVN**” on the Toronto Stock Exchange (“**TSX**”) in Canada and under the symbol “**IVPAF**” on the **OTCQX**® Best Market in the United States.

### CURRENCY

All references to “\$” in this Management Proxy Circular mean U.S. dollars unless otherwise indicated. References to “C\$” mean Canadian dollars.

### PRINCIPAL HOLDERS OF VOTING SECURITIES

To the knowledge of the Company’s directors and executive officers, as at May 8, 2018:

- (a) the only persons who beneficially own, or control or direct, directly or indirectly, Class A Shares carrying 10% or more of the voting rights attached to all outstanding Class A Shares of the Company, and the approximate number of Class A Shares so owned, controlled or directed, and the percentage of voting shares of the Company represented by such shares; and
- (b) the aggregate share ownership by the current directors and executive officers of the Company as a group;

are as follows:

Name and Address of Beneficial Owner	Number of Voting Shares Beneficially Owned	Percentage of Voting Shares Outstanding <sup>(6)</sup>
Robert M. Friedland 150 Beach Road, #25-03 The Gateway West Singapore 189720	171,824,707 <sup>(1)(2)</sup>	21.71%
Directors and Executive Officers as a group	176,892,820 <sup>(1)(3)</sup>	22.35%

Name and Address of Beneficial Owner	Number of Voting Shares Beneficially Owned	Percentage of Voting Shares Outstanding <sup>(6)</sup>
Fidelity <sup>(4)</sup>	106,944,117 <sup>(5)</sup>	13.51%

**Notes:**

- <sup>(1)</sup> Beneficial ownership is determined in accordance with applicable securities laws and generally includes voting or investment power with respect to securities.
- <sup>(2)</sup> Includes 135,335,035 issued Class A Shares held indirectly through Newstar Advantage Ltd., a company beneficially owned and controlled by Mr. Friedland and 33,664,672 issued Class A Shares held beneficially by Mr. Friedland. Mr. Friedland also has the right to acquire 2,825,000 unissued Class A Shares that are exercisable under incentive stock options. Those options are currently exercisable into Class A Shares within 60 days and may therefore be deemed outstanding for certain purposes under securities laws, and are in addition to the Class A Shares reported in the table above. This does not include 1,081,203 unissued Class A Shares issuable upon the vesting of restricted share units.
- <sup>(3)</sup> Two directors, Messrs. Friedland and Bianchini, and executive officers also have the right to acquire an aggregate of 6,825,000 unissued Class A Shares that are exercisable under incentive stock options. Those options are currently exercisable into Class A Shares within 60 days and may therefore be deemed outstanding for certain purposes under securities laws, and are in addition to the Class A Shares reported in the table above. This does not include unissued Class A Shares issuable upon the vesting of restricted share units.
- <sup>(4)</sup> Refers to "Fidelity" as defined in the Early Warning Report under the Alternative Monthly Reporting System of National Instrument 62-103F3 dated August 9, 2017 and filed on SEDAR on August 10, 2017.
- <sup>(5)</sup> Includes 2,636 Class A Shares owned and controlled by Fidelity. The balance of the Class A Shares are controlled, not owned.
- <sup>(6)</sup> Based on 791,347,897 outstanding Class A Shares of the Company.

## INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

Other than routine indebtedness, at no time during the Company's most recently completed financial year was any director, executive officer or proposed management nominee for election as a director of the Company, or any associate of any such director, executive officer or proposed nominee, indebted to the Company or any of its subsidiaries, or to another entity where such indebtedness is or has been the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by the Company or any of its subsidiaries.

## INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS

Other than as disclosed below, the Company is unaware of any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, of any informed person of the Company, any proposed director of the Company, or any associate or affiliate of any informed person or proposed director, in any transaction since the commencement of the Company's most recently completed financial year or in any proposed transaction which has materially affected or would materially affect the Company or any of its subsidiaries.

The Company is a party to a cost-sharing agreement with Kaizen Discovery Inc. (TSX-V), GoviEx Uranium Inc. (TSX-V), Peregrine Diamonds Ltd. (TSX), Cordoba Minerals Corp. (TSX-V; OTCQX), High Power Exploration Inc., Ivanhoe Capital Corporation, JD Holding Inc. and I-Pulse Inc. Except for GoviEx Uranium Inc., Mr. Friedland, Executive Chairman of the Company, has a material direct or indirect beneficial interest in these companies. Through these agreements, the Company shares, on a cost-recovery basis, office space, furnishings, equipment and communications facilities in Vancouver, Singapore, London and Tokyo. In May 2018, a Beijing office was also established. The Company also shares the costs of employing administrative and certain management personnel in these offices. In 2017, the Company's share of these costs was \$3.7 million. In 2001, the Company agreed, as part of the cost sharing arrangements and in connection with Mr. Friedland's position as the Executive Chairman, to share the costs of operating an aircraft owned by a private company of which Mr. Friedland is the sole shareholder. The Company paid \$2.0 million towards aircraft operating costs in 2017.

## MANAGEMENT CONTRACTS

Management functions of the Company and its subsidiaries are not performed by a person or persons other than the directors or senior officers of the Company.



## NATIONAL INSTRUMENT 43-101 STATEMENT

Disclosures of a scientific or technical nature in this Management Proxy Circular 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 National Instrument ("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 Management Proxy Circular.

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 [www.sedar.com](http://www.sedar.com):

- The Kamoa-Kakula 2018 Resource Update dated March 23, 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 Management Proxy Circular, as well as information regarding data verification, exploration procedures and other matters relevant to the scientific and technical disclosure contained in this Management Proxy Circular in respect of the Platreef Project, Kipushi Project and Kamoa-Kakula Project.

## ADDITIONAL INFORMATION

Additional information relating to the Company is available free of charge, including the Company's Financial Statements and management's discussion and analysis, through the Company's website at [www.ivanhoemines.com](http://www.ivanhoemines.com) or through SEDAR at [www.sedar.com](http://www.sedar.com). Shareholders may contact the Company directly to receive copies of information relating to it, including its financial statements and management's discussion and analysis, without charge, upon written or oral request to Mary Vincelli, Vice President, Compliance and Corporate Secretary, Suite 654-999 Canada Place, Vancouver, British Columbia, V6C 3E1, by telephone at 1-888-571-4545 (a toll-free number) or 1-604-688-6630 (not a toll-free number), or by email at [info@ivanhoemines.com](mailto:info@ivanhoemines.com).

## SECTION 1 – VOTING AND OTHER IMPORTANT INFORMATION

SOLICITATION OF PROXIES	5
MEETING MATERIALS	5
VOTING BY REGISTERED SHAREHOLDERS AND APPOINTMENT OF PROXYHOLDERS	6
REVOCATION OF PROXIES	7
EXERCISE OF DISCRETION	7
VOTING BY NON-REGISTERED SHAREHOLDERS	8
VOTES NECESSARY TO PASS RESOLUTIONS	9
INTEREST OF CERTAIN PERSONS OR COMPANIES IN MATTERS TO BE ACTED UPON	9



## SECTION 1 - VOTING AND OTHER IMPORTANT INFORMATION

### SOLICITATION OF PROXIES

This Management Proxy Circular is furnished in connection with the solicitation of proxies by the management of the Company for use at the Annual General Meeting (the “Meeting”) of its shareholders to be held on June 28, 2018, at the time and place and for the purposes set forth in the accompanying Notice of Meeting. Unless otherwise stated, this Management Proxy Circular contains information as at May 8, 2018.

The solicitation of proxies by management will be primarily by mail, but proxies may be solicited by directors, officers and regular employees of the Company personally, by telephone or by other means of electronic communication. All costs of this solicitation will be borne by the Company.

The board of directors of the Company (the “Board”) has fixed the close of business on **April 30, 2018** as the record date, being the date for the determination of the registered shareholders entitled to receive notice of, and to vote those shares at, the Meeting (the “Record Date”). Shareholders who acquire Class A Shares following the Record Date will not be entitled to notice of, or to vote at, the Meeting, unless the transferee produces a properly endorsed share certificate for, or otherwise establishes ownership of, any of the transferred Class A Shares and makes a demand to AST Trust Company (Canada) no later than ten (10) days before the Meeting that the transferee’s name be included in the list of shareholders in respect thereof.

### MEETING MATERIALS

#### *Notice-and-Access*

Ivanhoe has decided to use the notice-and-access mechanism (the “**Notice-and-Access Provisions**”) under National Instrument 54-101 – *Communication with Beneficial Owners of Securities of a Reporting Issuer* (“**NI 54-101**”) for the delivery of this Management Proxy Circular, the annual audited consolidated financial statements of the Company for the year ended December 31, 2017 (“**Financial Statements**”) and management’s discussion and analysis of the Company’s results of operations and financial condition for the year ended December 31, 2017 (“**MD&A**”) (collectively, the “**Meeting Materials**”) to shareholders for the Meeting. Ivanhoe adopted this alternative means of delivery in order to further its commitment to environmental sustainability and to reduce its printing, materials and mailing costs.

Under the Notice-and-Access Provisions, instead of receiving printed copies of the Meeting Materials, shareholders will receive a notice (“**Notice**”) with information on the Meeting date, location and purpose, as well as information on how they may access the Meeting Materials electronically and how they may vote.

The Company will not use the procedures known as “stratification” in relation to the use of Notice-and-Access Provisions meaning that all shareholders will receive a Notice in accordance with the Notice-and-Access Provisions.

#### *Website Where Meeting Materials are Posted*

Electronic copies of this Management Proxy Circular, the Financial Statements and the MD&A may be found on the Company’s SEDAR profile at [www.sedar.com](http://www.sedar.com) and the Company’s website at [www.ivanhoemines.com](http://www.ivanhoemines.com).

#### *Requesting Printed Meeting Materials*

Shareholders can request that printed copies of the Meeting Materials be sent to them by postal delivery at no cost to them up to one year after the date that this Management Proxy Circular was filed on the System for Electronic Document Analysis and Retrieval (“**SEDAR**”) or by calling the Company’s transfer agent, AST Trust Company (Canada), toll-free at **1-888-433-6443**, or contacting the Company’s Vice President, Compliance and Corporate Secretary at Suite 654-999 Canada Place, Vancouver, British

Columbia, V6C 3E1, by telephone at **1-888-571-4545** (a toll-free number) or **1-604-688-6630** (not a toll-free number), or by email at [info@ivanhoemines.com](mailto:info@ivanhoemines.com).

Shareholders also can request paper copies in advance of the Meeting; such request should be sent so that the request is received by the Company or AST Trust Company (Canada), as applicable, by 8:00 AM (Pacific time) on Friday, June 15, 2018 in order to allow sufficient time for shareholders to receive the paper copies and to return their proxies or voting instruction forms to intermediaries not later than 48 hours (excluding Saturdays, Sundays and statutory holidays in the City of Vancouver, British Columbia) prior to the time set for the Meeting or any adjournments or postponements thereof.

## VOTING BY REGISTERED SHAREHOLDERS AND APPOINTMENT OF PROXYHOLDERS

The individuals named in the accompanying proxy form are directors and / or officers of the Company. Only registered holders of Class A Shares ("**Registered Shareholders**") of the Company or the persons they appoint as their proxyholders are permitted to vote at the Meeting. **A shareholder may appoint, as proxyholder or alternate proxyholder, a person or persons other than any of the persons designated in the accompanying proxy form, and may do so either by inserting the name or names of such persons in the blank space provided in the accompanying proxy form or by completing another suitable proxy form.**

An appointment of a proxyholder or alternate proxyholder will not be valid unless a proxy form making the appointment, signed by the shareholder or by an attorney of the shareholder authorized in writing, is deposited with AST Trust Company (Canada):



by Internet by going to [www.astvotemyproxy.com](http://www.astvotemyproxy.com). You will be prompted to enter the 13-digit Control Number, which is located on the reverse side of the proxy form that you will have received,



by mail to AST Trust Company (Canada), Proxy Department, P.O. Box 721, Agincourt, Ontario, M1S 0A1,



by email to [proxyvote@astfinancial.com](mailto:proxyvote@astfinancial.com) (French language proxies to be sent to [votezprocuration@astfinancial.com](mailto:votezprocuration@astfinancial.com)),



by telephone at 1-888-489-7352 (toll free in Canada and the United States) from a touch tone phone,



by facsimile to 1-866-781-3111 (toll free in Canada and the United States) or 1-416-368-2502 (outside Canada and the United States),



by hand to The Oceanic Plaza, 1600 - 1066 Hastings Street, Vancouver, British Columbia, V6E 3K9 or Suite 1200, 1 Toronto Street, Toronto, ON M5C 2V6,



by using smartphone, scan this QR Code,



and, in each case, must be received by AST Trust Company (Canada) not later than 8:00 AM (Pacific time) on Tuesday, June 26, 2018, or 48 hours (excluding Saturdays, Sundays and statutory holidays in the City of Vancouver, British Columbia) before the Meeting or any adjournment(s) or postponement(s) thereof, at which the proxy form is to be used.

If your shares are held in “street name” (meaning through a broker or other nominee name) for your account, your broker or other nominee will advise you whether you may vote through the Internet. A number of banks and brokerage firms participate in programs that permit their clients to vote their shares through the Internet.

A holder of record of one or more Class A Shares on the securities register of the Company on the Record Date who either attends the Meeting personally or deposits a proxy form in the manner and subject to the provisions described above will be entitled to vote or to have such Class A Shares voted at the Meeting, except to the extent that:

- (a) the shareholder has transferred the ownership of any Class A Shares after the Record Date; and
- (b) the transferee produces a properly endorsed share certificate for, or otherwise establishes ownership of, any of the transferred Class A Shares and makes a demand to AST Trust Company (Canada) no later than ten (10) days before the Meeting that the transferee’s name be included in the list of shareholders in respect thereof.

### **REVOCATION OF PROXIES**

A shareholder who has given a proxy may revoke it:

- (a) by voting again by telephone, email or on the Internet before 8:00 AM (Pacific time) on Tuesday, June 26, 2018;
- (b) by completing a proxy form that is dated later than the proxy form you are changing, and mailing it to AST Trust Company (Canada), Proxy Department, P.O. Box 721, Agincourt, Ontario, M1S 0A1, or by facsimile to 1-866-781-3111, so that it is received before 8:00 AM (Pacific time) on Tuesday, June 26, 2018;
- (c) by sending a notice in writing from the shareholder or the shareholder’s authorized attorney (or, if the shareholder is a corporation, by a duly authorized officer) revoking the proxy, to the Vice President, Compliance and Corporate Secretary of the Company so that it is received before 8:00 AM (Pacific time) on Tuesday, June 26, 2018;
- (d) by giving a notice in writing from the shareholder or the shareholder’s authorized attorney (or, if the shareholder is a corporation, by a duly authorized officer) revoking your proxy to the chair of the Meeting, at the Meeting; or
- (e) by attendance at the Meeting and participation in a poll (ballot) by the shareholder (but not by the proxyholder of such Shareholder).

The revocation of a proxy will not affect a matter on which a vote is taken before the revocation.

### **EXERCISE OF DISCRETION**

The nominees named in the accompanying proxy form will vote, or withhold from voting or vote against (as applicable), the Class A Shares represented thereby in accordance with the instructions of the shareholder that submitted the proxy. The proxy form confers discretionary authority on the nominees named therein with respect to:

- (a) each matter or group of matters identified therein for which a choice is not specified;
- (a) any amendment to or variation of any matter identified therein; and
- (b) any other matter that properly comes before the Meeting.

**In respect of a matter for which a choice is not specified in the proxy form, the nominees named in the accompanying proxy form will vote the Class A Shares represented by the proxy form at their own discretion, except where Management recommends that shareholders vote in favour of a matter, in which case the nominees will vote FOR the approval of such matter.**

As of the date of this Management Proxy Circular, management of the Company knows of no amendment, variation or other matter that may come before the Meeting, but if any amendment, variation or other matter properly comes before the Meeting, each nominee named in the accompanying proxy form intends to vote thereon in accordance with the nominee's best judgment or as stated above.

## VOTING BY NON-REGISTERED SHAREHOLDERS

Most shareholders of the Company are "non-registered" shareholders ("**Non-Registered Shareholders**") because the Class A Shares they own are not registered on the Company's share register in their names but are instead registered in the name of the brokerage firm, depository, bank or trust company through which they purchased the Class A Shares or through which the Class A Shares are held. Class A Shares beneficially owned by a Non-Registered Shareholder are registered either:

- (a) in the name of an intermediary (an "**Intermediary**") that the Non-Registered Shareholder deals with in respect of the Class A Shares of the Company (Intermediaries include, among others, banks, trust companies, securities dealers, securities brokers and trustees or administrators of self-administered RRSPs, RRIFs, RESPs and similar plans); or
- (b) in the name of a depository or clearing agency (such as CDS Clearing and Depository Services Inc.) of which the Intermediary is a participant.

Pursuant to NI 54-101, the Company has distributed copies of the Meeting Materials to Non-Registered Shareholders indirectly through Intermediaries using the Notice and Access Provisions. The Company is not using the Notice and Access Provisions to send Meeting Materials directly to Non-Registered Shareholders (but indirectly), nor does the Company intend to pay for the cost of intermediaries to deliver the Meeting Materials to beneficial owners of Class A Shares who have objected to an intermediary disclosing their beneficial ownership information ("**OBOs**"). As a result, OBOs will only receive the Meeting Materials if the OBO's intermediary assumes the cost of delivery.

Intermediaries often use service companies to forward the Meeting Materials to Non-Registered Shareholders. The Company will pay the fees and cost of the Intermediaries for their services in delivering the Meeting Materials to Non-Registered Shareholders. Generally, Non-Registered Shareholders who have not waived the right to receive Meeting Materials will either be given:

- (a) a voting instruction form which is not signed by the Intermediary and which, when properly completed and signed by the Non-Registered Shareholder and returned to the Intermediary or its service company, will constitute voting instructions (often called a "**voting instruction form**") which the Intermediary must follow when it votes. Typically, the voting instruction form will consist of a one page pre-printed form. Sometimes, instead of the one page pre-printed form, the voting instruction form will consist of a regular proxy form accompanied by a page of instructions, which contains a removable label with a bar code and other information. In order for the proxy form to validly constitute a voting instruction form, the Non-Registered Shareholder must remove the label from the instructions and affix it to the proxy form, properly complete and sign the proxy form and submit it to the Intermediary or its service company in accordance with the instructions of the Intermediary or its service company; or
- (b) a proxy form which has already been signed by the Intermediary (typically by a facsimile, stamped signature), which is restricted as to the number of Class A Shares beneficially owned by the Non-Registered Shareholder but which is otherwise not completed by the Intermediary. Because the Intermediary has already signed the proxy form, this proxy form is not required to be signed by the Non-Registered Shareholder when submitting the proxy form. In this case, the Non-Registered Shareholder who wishes to submit a proxy form should properly complete the proxy form and deposit it with the Company, c/o AST Trust Company (Canada), Suite 1600, The Oceanic Plaza, 1066 Hastings Street, Vancouver, British Columbia, V6E 3K9 or 320 Bay Street, Banking Hall Level, Toronto, Ontario, M5H 4A6.

In either case, the purpose of these procedures is to permit Non-Registered Shareholders to direct the voting of the Class A Shares they beneficially own. Should a Non-Registered Shareholder who receives one of the above forms wish to vote at the Meeting in person (or have another person attend and vote on behalf of the Non-Registered Shareholder), the Non-Registered Shareholder should strike out the persons named in the proxy form and insert the Non-Registered Shareholder's name or such other

person's name in the blank space provided. **Non-Registered Shareholders should carefully follow the instructions of their Intermediary, including those regarding when and where the proxy or voting instruction form is to be delivered.**

A Non-Registered Shareholder may revoke a proxy or voting instruction form given to an Intermediary by contacting the Intermediary through which the Non-Registered Shareholder's Class A Shares are held and following the instructions of the Intermediary respecting the revocation of proxies. In order to ensure that an Intermediary acts upon a revocation of a proxy or voting instruction form, the written notice should be received by the Intermediary well in advance of the Meeting.

### **VOTES NECESSARY TO PASS RESOLUTIONS**

Pursuant to the Articles of Continuation (the "**Articles**") of the Company, a quorum for the transaction of business at any meeting of shareholders is at least two persons who are, or who represent by proxy, shareholders who, in the aggregate, hold at least 5% of the issued Class A Shares entitled to be voted at the Meeting.

Pursuant to the *Business Corporations Act* (British Columbia) ("**BCBCA**") and the Articles, a simple majority of the votes cast at the Meeting (by person or proxy) is required to pass an ordinary resolution and a majority of two-thirds of the votes cast at the Meeting (by person or proxy) is required to pass a special resolution.

At the Meeting, shareholders will be asked to consider and, if thought advisable, to: (i) pass an ordinary resolution to set the number of directors of the Board at nine (9); (ii) pass an ordinary resolution to elect directors to the Board; (iii) pass an ordinary resolution to re-appoint auditors for the ensuing year and authorize the directors to fix their remuneration; and (iv) pass an ordinary resolution to re-approve the Restricted Share Unit Plan of the Company (as now amended) in accordance with Toronto Stock Exchange requirements.

### **INTEREST OF CERTAIN PERSONS OR COMPANIES IN MATTERS TO BE ACTED UPON**

The Company is unaware of any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, of any person who has been a director or executive officer of the Company or is a proposed nominee for election as a director of the Company (or an associate or affiliate of such director, director nominee or executive officer) at any time since the beginning of the Company's last financial year in any matter to be acted upon at the Meeting, other than the election of directors.

## SECTION 2 - MEETING MATTERS

ELECTION OF DIRECTORS	11
APPOINTMENT OF AUDITORS	13

## ELECTION OF DIRECTORS

The directors of the Company are elected annually and hold office until the next annual general meeting of the shareholders or until their successors are elected or appointed. Management of the Company proposes to nominate the persons listed below for election as directors of the Company to serve until their successors are elected or appointed:

Robert M. Friedland  
Egizio Bianchini  
Ian D. Cockerill  
William B. Hayden  
Oyvind Hushovd  
Livia Mahler  
Peter G. Meredith  
Kgalema P. Motlanthe  
Guy J. de Selliers

**Unless such authority is withheld, proxies given pursuant to the solicitation by the management of the Company will be voted FOR the nominees listed in this Management Proxy Circular.**

Management does not contemplate that any of the nominees will be unable to serve as a director.

The Board currently consists of nine (9) directors. The Company is requesting that the shareholders consider and, if thought advisable, approve an ordinary resolution at the Meeting to set the number of directors of the Board at nine (9) directors for the ensuing year.

On February 6, 2013, the Board adopted a majority voting policy (the “**Majority Voting Policy**”), as amended from time to time, required by the rules of the TSX. The Majority Voting Policy states that, in an uncontested election, any nominee who receives a greater number of votes “withheld” than “for” must submit his or her resignation to the Board immediately after the Meeting, failing which he or she will be deemed to have submitted his or her resignation (a “**Non-Supported Director**”) to the Board.

See Section 5 - “Corporate Governance” for a further description of the Majority Voting Policy.

The director tables in Section 3 – “Directors Disclosure” provide information on the nominees proposed for election to the Board. Included in these tables is information relating to each nominee’s committee memberships, meeting attendance, other public company directorships, ownership of Company securities, principal occupation, business or employment and the period of time during which each has been a director of the Company. The statement as to Class A Shares and other securities beneficially owned, directly or indirectly, or over which control or direction is exercised by the nominees is in each instance based upon information furnished by the nominee concerned and is as at May 8, 2018.



### **Summary of Board and Committee Meetings Held**

The following table summarizes the meetings of the Board and the committees held during 2017:

	<b>Number of Meetings</b>
Board of Directors	4
Audit Committee	4
Compensation and Human Resources Committee	3
Nominating and Corporate Governance Committee	4
Sustainability Committee	3
Technical Committee	3

During 2017, two (2) meetings of the Board were held by teleconference and two (2) meetings of the Board were held in person. Five (5) resolutions were passed in writing by the Board in lieu of a meeting. Resolutions in writing must be executed by all of the directors entitled to vote on a matter in order to be effective.

In addition to the above, three meetings of the independent directors and one meeting of the non-executive directors were held in 2017.

### **Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

To the knowledge of management, except as disclosed immediately below, no director or executive officer of the Company is, as of the date of this Management Proxy Circular, or was, within the 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including Ivanhoe) that was the subject of a cease trade order, an order similar to a cease trade order or an order that denied the company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days, that was issued: (i) while such person was acting in that capacity; or (ii) after such person was acting in such capacity and which resulted from an event that occurred while that person was acting in such capacity.

Robert Friedland served as the Executive Co-Chairman of Ivanhoe Energy Inc. ("**Ivanhoe Energy**") from May 2008 to October 2014 and was Deputy Chairman from June 1999 to May 2008, President from May 2008 to May 2010, and Chief Executive Officer from May 2008 to December 2011. Peter Meredith served as a director of Ivanhoe Energy from December 2007 to December 2014. Cease trade orders were issued against Ivanhoe Energy in Alberta (July 15, 2015), Quebec (May 7, 2015), Manitoba (May 6, 2015), Ontario (May 4, 2015) and British Columbia (April 14, 2015) in respect of the company failing to file its audited financial statements and associated filings for the year ending December 31, 2014, which cease trade orders remain in effect as at the date of this Management Proxy Circular.

To the knowledge of management, except as disclosed immediately below, no director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company is, as of the date of this Management Proxy Circular, or has been, within 10 years before the date hereof, a director or executive officer of any company that, while such person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Robert Friedland served as the Executive Co-Chairman of Ivanhoe Energy from May 2008 to October 2014 and was Deputy Chairman from June 1999 to May 2008, President from May 2008 to May 2010, and Chief Executive Officer from May 2008 to December 2011. Peter Meredith served as a director of Ivanhoe Energy from December 2007 to December 2014. On February 20, 2015, Ivanhoe Energy filed a Notice of Intention to Make a Proposal under subsection 50.4(1) of the *Bankruptcy and Insolvency Act* (Canada). On June 2, 2015, having failed to file a proposal, Ivanhoe Energy was assigned into bankruptcy. Ivanhoe Energy was dissolved on May 16, 2017.

Ian Cockerill was a non-executive director of Peterstow Holdings from August 2010 to March 2012. In August 2012, Peterstow Holdings applied for an order from the High Court in Swaziland to be placed under provisional liquidation. Mr. Cockerill is a minority shareholder of Peterstow Holdings, owning less than 1% of the issued and outstanding capital of the company. Mr. Cockerill was also a non-executive director and Vice Chairman of African Minerals Limited from July 2013 to December 2014. Subsequent to his resignation from the board of directors of African Minerals Limited, the High Court in London appointed joint administrators of African Minerals Limited on March 26, 2015 after it failed to make a scheduled bond payment.

To the knowledge of management, no director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

### **APPOINTMENT OF AUDITORS**

At the Meeting, shareholders will be asked to appoint an auditor for the ensuing year. If there is more than one nominee for appointment as the Company's auditor, the nominee receiving the greatest number of votes will be appointed.

PricewaterhouseCoopers Inc., Chartered Accountants, will be nominated at the Meeting for appointment as the Company's auditors at a remuneration to be fixed by the directors. PricewaterhouseCoopers Inc. has been the Company's auditor since March 2015.

**Unless such authority is withheld, the nominees identified on the proxy form intend to vote FOR the re-appointment of PricewaterhouseCoopers Inc. as the auditors of the Company to hold office for the ensuing year at the remuneration to be fixed by the Directors.**

### **OTHER BUSINESS**

Management of the Company is not aware of any matter to come before the Meeting other than the matters referred to in the Notice of Meeting.

### **DIRECTORS' APPROVAL**

The contents of this Management Proxy Circular and its distribution to shareholders have been approved by the Board.

## SECTION 3 - DIRECTORS DISCLOSURE

DIRECTORS PROFILES	15
RETAINERS AND FEES	25
DIRECTOR COMPENSATION PHILOSOPHY AND OBJECTIVES	25
DIRECTOR COMPENSATION TABLE	26
OPTION AWARDS	26
DEFERRED SHARE UNIT AWARDS TO NON-EXECUTIVE DIRECTORS	27

## DIRECTORS PROFILES



**Robert M. Friedland**

Singapore

Age: 67

**Director Since:** 2000

**Director Status:**  
Non-Independent<sup>(1)</sup>

**Areas of Experience:**  
CEO/Board  
International Finance  
Mining Industry  
Public Capital Markets  
Managing/Leading Growth

International financier Robert Friedland founded this Company in 1998 to advance mineral prospects in Southern Africa. He has served as Executive Chairman and a director of the Company, formerly named Ivanplats, since November 2000 and was President from June 2003 to May 2008.

For more than 25 years, Mr. Friedland has been recognized by leaders of the global financial sector and mineral resource industries as an entrepreneurial explorer, company builder and technology innovator. He has successfully developed a portfolio of respected public and private companies whose initiatives have led to several of the world's most significant mineral discoveries and mine developments, applications of disruptive technologies and contributions to significant economic growth in established and emerging markets in Asia, the Asia Pacific Region, Southern Africa and the Americas.

In January 2016, Mr. Friedland was inducted into the prestigious Canadian Mining Hall of Fame, which cited his company-building and exploration achievements, honouring him as "a dynamic, transformative force in the Canadian and international mining industries" and "one of the most recognized mining personalities and achievers in the world". In May 2017, he received a Lifetime Achievement Award from the Northern Miner, the century-old flagship of Canada's leading mining-industry media group. In 2016 and 2015, the U.K.-based Mining Journal ranked him as one of the Top 20 Most Influential People shaping the future of the world of mining, declaring him "the undisputed king of junior development".

Mr. Friedland founded Ivanhoe Capital Corporation in 1987, his family's private enterprise hub, which he leads from bases in Singapore, Beijing, London and Vancouver. Ivanhoe Capital specializes in the provision of venture capital and project financing for international business enterprises.

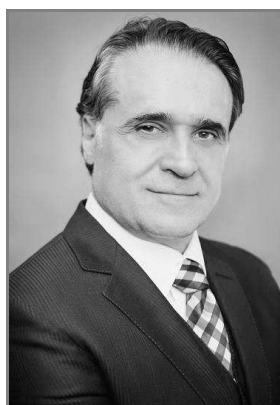
The original Ivanhoe Mines ("**Original Ivanhoe Mines**") was founded by Mr. Friedland in 1994, which he led as Executive Chairman and Chief Executive Officer through 18 years of exploration and mining ventures in Asia and Asia Pacific. Corporate achievements included the discovery of the Oyu Tolgoi chain of copper-gold-silver deposits in Mongolia and initial development of the mining complex. That company changed its name to Turquoise Hill Resources in 2012 after Rio Tinto acquired a controlling interest. The Ivanhoe Mines name subsequently was assumed by the former Ivanplats in a strategic corporate alignment in 2013.

Mr. Friedland holds an undergraduate degree in political science from Reed College, Oregon, USA.

### Principal Occupation, Business or Employment

Founder and Executive Chairman of Ivanhoe Mines Ltd. (November 2000 – present); Co-Chairman and Non-Executive Director of Clean TeQ Holdings Limited (September 2016 – present); Co-Chairman of SK Global (March 2017 – present); Executive Chairman (March 1994 – April 2012) and Chief Executive Officer (October 2010 – April 2012) of Original Ivanhoe Mines; Chairman (January 1991 – present), President and Chief Executive Officer (July 1988 – present) of Ivanhoe Capital Corporation; Founder and Executive Co-Chairman (May 2008 – October 2014) of Ivanhoe Energy Inc.; Chairman (January 2018 – present), Chief Executive Officer (December 2015 – present) and Co-Chairman (December 2015 – December 2017) of High Power Exploration Inc.; Chairman of I-Pulse Inc. (April 2008 – present).

Board/Committee Membership:		Attendance:		Other Public Board Membership:		
				Company:		Since:
Board of Directors		4	100%	Clean TeQ Holdings Limited (ASX)	2016	
Total:		4	100%			
Class A Shares Beneficially Owned, Controlled or Directed:				RSU Awards:		
Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required	Date Awarded	Number Awarded	Unvested RSUs
2018	168,999,707	\$376,075,048 <sup>(5)</sup>	See Note (6)	Feb. 3, 2018	253,343	253,343
2017	168,294,113	\$515,989,750 <sup>(4)</sup>	See Note (6)	Dec. 2, 2016	366,786	244,524 <sup>(7)</sup>
				Dec. 15, 2015	1,750,000 <sup>(8)</sup>	583,336 <sup>(9)</sup>
Options Held:						
See Section 4 – “Statement of Executive Compensation” - Outstanding Share – Based Awards and Option Based Awards on page 48.						



**Egizio Bianchini**  
Toronto, Canada  
Age: 58

**Director Since:** March 2018

**Director Status:** Non-Independent<sup>(1)</sup>

**Areas of Experience:**  
Banking  
International Finance  
Mining Industry  
Capital Markets

Egizio Bianchini became Executive Vice Chairman and a director in March 2018. He joined Ivanhoe Mines after a 29-year career at BMO Capital Markets, a member of Canada-based BMO Financial Group, where he served as Co-Head of the Global Metals & Mining Group, and as Vice Chairman from April 2011 to March 2018. With more than 30 years' experience in the metals and mining financial services sector, Mr. Bianchini has an extensive track record in advising a wide range of metals and mining companies around the world and in structuring and executing initial public offerings and other capital raisings.

Before joining BMO Capital Markets, Mr. Bianchini worked for Echo Bay Mines Ltd. – a major producer of precious metals.

Mr. Bianchini holds a Master of Business Administration degree from the University of British Columbia and a Bachelor of Science in Geology from the University of Toronto.

#### Principal Occupation, Business or Employment

Co-Head of the Global Metals & Mining Group (July 1989 – March 2018) and Vice Chairman (April 2011 – March 2018) of BMO Financial Group.

Board/Committee Membership:	Attendance:		Other Public Board Membership			
			Company:	Since:		
Technical Committee	N/A <sup>(12)</sup>	N/A	N/A	N/A		
Total:	N/A	N/A				
Class A Shares Beneficially Owned, Controlled or Directed:						
Year	Class A Shares <sup>(3)</sup>		Total Market Value of Class A Shares	Minimum Required		
2018	Nil		Nil	See Note (6)		
Options Held:						
Date Granted	Expiry Date	Number Granted	Vested / Unvested	Exercise Price	Total Unexercised	Value of Options Unexercised <sup>(15)</sup>
March 12, 2018	March 12, 2023	3,500,000	0 / 3,500,000	Cdn\$3.05 <sup>(10)</sup>	3,500,000	Nil



**Ian D. Cockerill**

Gauteng, South Africa  
Age: 63

**Director Since:** May 2011

**Director Status:**  
Independent<sup>(2)</sup>

**Areas of Experience:**

CEO/Board  
Governance  
Compensation  
Mining Industry  
International Project  
Management  
Public Capital Markets

Ian Cockerill has been a director of the Company since May 2011 and the Lead Independent Director since May 2012. Mr. Cockerill has over 40 years' experience in the global resources industry. In addition to Ivanhoe, Mr. Cockerill serves on the boards of Endeavour Mining Corporation, a gold producing company, Blackrock World Mining Trust plc, a United Kingdom-based investment trust company, of which he became Chairman in May 2016 and Orica Limited, a mining services company. Mr. Cockerill also acts as an advisor to several other companies in the mining field.

Mr. Cockerill is the Chairman of Conservation 360, a conservation NGO engaged in the application of surveillance technologies for anti-poaching initiatives specifically within Botswana. Mr. Cockerill is the former Chairman, and continues to serve as a director, of the Leadership for Conservation in Africa, a not-for-profit initiative engaged in promoting conservation and sustainable development across the African continent, in partnership with the South African Parks Board, global business leaders and the International Union for Conservation of Nature.

Mr. Cockerill's involvement in the mining industry began as a geologist in 1975. He commenced work with Anglo American Corporation ("Anglo") in January 1979, where he held various managerial positions before being promoted to Technical Director of the Gold and Uranium Division in September 1996. In September 1998, Mr. Cockerill became the Executive Director – Business Development and Executive Officer, African International Operations of AngloGold Limited, which was established upon the consolidation of certain Anglo gold mining interests. Subsequent to his work with AngloGold, Mr. Cockerill accepted the position of Managing Director and Chief Operating Officer with Gold Fields Limited in September 1999, a position he held until he was appointed President and Chief Executive Officer in May 2002. In June 2008, Mr. Cockerill joined Anglo American plc as Chief Executive Officer, Anglo Coal, responsible for all global operations until retiring from that position in December 2009.

Mr. Cockerill completed his Bachelor of Science (Hons) in Geology (Chelsea College, University of London), Master of Science in Mining-Mineral Production Management (Royal School of Mines), MDP – Unisa, and an Advanced Management Programme (Templeton College, Oxford University).


**Principal Occupation, Business or Employment**

Director (November 2013 – present) and Chairman (May 2016 – present) of Blackrock World Mining Trust plc; Director of Endeavour Mining Corporation (September 2013 – present); Executive Director (March 2010 – July 2010), Executive Chairman (July 2010 – February 2013) and Non-Executive Chairman (February 2013 – June 2017) of Petmin Limited; Non-Executive Director of Orica Limited (September 2010 – present); Non-Executive Director and Vice Chairman of African Minerals Limited (July 2013 – December 2014); Non-Executive Chairman of Hummingbird Resources Ltd. UK (October 2009 – November 2014).

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
Board of Directors	4	100%	Orica Limited (ASX)	2010
Nominating and Corporate Governance - Chair	4	100%	Endeavour Mining Corporation (TSX; ASX; OTCQX)	2013
Compensation and Human Resources	3	100%	Blackrock World Mining Trust plc (LSE)	2013
Technical – Chair	3	100%		
<b>Total:</b>	<b>14</b>	<b>100%</b>		

**Class A Shares Beneficially Owned, Controlled or Directed:**

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	76,700	\$170,681 <sup>(5)</sup>	See Note (6)
2017	66,700	\$204,502 <sup>(4)</sup>	See Note (6)
<b>Deferred Share Units Held:</b>	73,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		



**William B. Hayden**  
New South Wales, Australia  
Age: 66

**Director Since:** March 2007 and May 1998 - September 2002

**Director Status:**  
Independent<sup>(2)</sup>

**Areas of Experience:**  
CEO/Board  
Mining Industry  
International Project  
Public Capital Markets

William Hayden is a geologist with over 35 years' experience in the mineral exploration industry, much of which has been in Africa and the Asia-Pacific region. He has been involved with Ivanhoe since the amalgamation of African Mineral Corp. with China Industrial Minerals Company Ltd. in 1998, and served as its President from May 1998 to November 2001. Since 1986, Mr. Hayden has worked in a management capacity with several exploration and mining companies both in Australia and overseas. Mr. Hayden served as President of Ivanhoe Philippines, Inc. (which at the time was a subsidiary of Original Ivanhoe Mines) from July 2005 to December 2011.

Mr. Hayden currently serves as a director of the following publicly listed companies: Trilogy Metals Inc. (formerly NovaCopper Inc.) (since June 2015), Noble Metals Ltd. (formerly Condoto Platinum NL) (since February 2011) and Globe Metals and Mining Ltd. (since November 2009). He served as a Non-Executive director of Ivanhoe Australia Ltd. (now Chinova Resources Pty Limited) from November 2006 to May 2010 and director of China Polymetallic Mining Ltd. (from November 2011 to May 2016).

Mr. Hayden holds a Bachelor of Science (Hons) in Geology from Sierra Nevada College, Nevada.

Principal Occupation, Business or Employment

President and director of Ivanhoe Philippines, Inc. (July 2005 – December 2011); President of GoviEx Uranium Inc. (June 2010 – August 2011)

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
Board of Directors	4	100%	Globe Metals and Mining Ltd. (ASX)	2009
Sustainability	3	100%	Noble Metals Ltd. (ASX)	2011
Audit	1	100% <sup>(11)</sup>	Trilogy Metals Inc. (TSX; NYSE)	2015
<b>Total:</b>	<b>8</b>	<b>100%</b>		

Class A Shares Beneficially Owned, Controlled or Directed:

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	476,666	\$1,060,725 <sup>(5)</sup>	See Note (6)
2017	466,666	\$1,430,798 <sup>(4)</sup>	See Note (6)
<b>Deferred Share Units Held:</b>	73,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		





**Oyvind Hushovd**

Norway

Age: 68

**Director Since:** September 2007

**Director Status:**  
Independent<sup>(2)</sup>

**Areas of Experience:**

CEO/Board  
Mining Industry  
Compensation  
Governance  
International Project

Oyvind Hushovd joined the Board in September 2007. Mr. Hushovd served on the board of Nyrstar B.V. from December 2009 to April 2016, an integrated mining and metals business with positions in zinc and lead. He also served on the boards of Cameco Corporation, one of the world's largest uranium producers, from December 2003 to May 2013, and Inmet Mining Corporation from May 2002 to March 2013.

From March 2003 to May 2005, Mr. Hushovd was the Chief Executive Officer and Chairman of Gabriel Resources Ltd., a Canadian-based resources company. Mr. Hushovd served as the President and Chief Executive Officer of Falconbridge Limited from December 1996 to February 2002.

Mr. Hushovd earned a Master of Economics and Business Administration from the Norwegian School of Business (NHH) and subsequently achieved a Master of Law Degree from the University of Oslo.


**Principal Occupation, Business or Employment**

Director of Nyrstar B.V. (December 2009 – April 2016); director of Cameco Corporation (December 2003 – May 2013); director of Inmet Mining Corporation (May 2002 – March 2013)

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
Board of Directors	4	100%	N/A	N/A
Audit - Chair	4	100%		
Compensation and Human Resources	3	100%		
<b>Total:</b>	<b>11</b>	<b>100%</b>		

**Class A Shares Beneficially Owned, Controlled or Directed:**

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	1,000,000	\$2,225,300 <sup>(5)</sup>	See Note (6)
2017	1,000,000	\$3,066,000 <sup>(4)</sup>	See Note (6)
<b>Deferred Share Units Held:</b>	73,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		

	<p>Livia Mahler joined the Board in March 2015. She is the President and Chief Executive Officer of Computational Geosciences Inc., a company she co-founded in 2010. Computational Geosciences provides leading edge data processing solutions to maximize the value of geophysical exploration surveys and has worked with some of the world’s largest mining companies. Since February 2000, Ms. Mahler has served as the Managing Partner of Greenstone Venture Partners, a technology focused venture capital firm. Prior to this, she was the Senior Investment Manager, Venture Capital Division for the Business Development Bank of Canada.</p> <p>Ms. Mahler currently serves as a director of Endeavour Mining Corporation, a gold producing company. Ms. Mahler previously served as a board member of DuSolo Fertilizers Inc. (TSX-V:DSF) from February 2014 to August 2015, Turquoise Hill Resources Ltd. (NYSE/TSX:TRQ) from May 2009 to May 2013 and Diversified Royalty Corp. (TSX:DIV), formerly BENEV Capital Inc., from June 2011 to November 2014.</p> <p>Ms. Mahler obtained her B.Sc. from the Hebrew University of Jerusalem and her MBA from the University of British Columbia.</p>				
<p><b>Livia Mahler</b> British Columbia, Canada Age: 59</p> <p><b>Director Since:</b> March 2015</p> <p><b>Director Status:</b> Independent<sup>(2)</sup></p> <p><b>Areas of Experience:</b> CEO/Board International Finance Mining Industry Compensation Public Capital Markets</p>	<b>Principal Occupation, Business or Employment</b>				
	President and Chief Executive Officer, Computational Geoscience Inc. (December 2010 to present). Managing Partner and co-founder, Greenstone Venture Partners (February 2000 to present).				
	<b>Board/Committee Membership:</b>	<b>Attendance:</b>		<b>Other Public Board Membership</b>	
				<b>Company:</b>	<b>Since:</b>
	Board of Directors	4	100%	Endeavour Mining Corporation (TSX; ASX; OTCQX)	2016
	Audit	4	100%		
	Compensation and Human Resources – Chair	3	100%		
	Nominating and Corporate Governance <sup>(11)</sup>	1	100%		
	<b>Total:</b>	<b>12</b>	<b>100%</b>		
	<b>Class A Shares Beneficially Owned, Controlled or Directed:</b>				
	Year	Class A Shares <sup>(3)</sup>		Total Market Value of Class A Shares	Minimum Required
	2018	Nil		Nil	See Note (6)
2017	Nil		Nil	See Note (6)	
<b>Deferred Share Units Held:</b>	68,237 <sup>(14)</sup>				
<b>Options Held:</b>	Nil				



**Peter G. Meredith**  
British Columbia, Canada  
Age: 74

**Director Since:** May 1998

**Director Status:**  
Non-Independent<sup>(1)</sup>

**Areas of Experience:**  
CEO/Board  
International Finance  
Mining Industry  
Public Capital Markets

Peter Meredith has been a director of the Company since 1998.

Mr. Meredith is the former Deputy Chairman and Chief Financial Officer of the Original Ivanhoe Mines, where he was involved in overseeing business development and corporate relations. He also served as its Chief Financial Officer from May 2004 to May 2006, and from June 1999 to November 2001, and as its Deputy Chairman from May 2006 to April 2012. He served as a Director of the Original Ivanhoe Mines (now Turquoise Hill Resources Ltd.) from March 2005 to May 2013. He has served as Chairman of Cordoba Minerals Corp. since April 2016, Chairman of Great Canadian Gaming Corporation from June 2015 to present and served as Chairman of Kaizen Discovery Inc. from December 2013 to June 2016. Mr. Meredith was also Chairman of SouthGobi Resources Ltd. until September 2012. He also served as a Director of Peregrine Diamonds Ltd. from March 2013 to March 2018.

Prior to joining Ivanhoe Mines Ltd., Mr. Meredith spent 31 years with Deloitte LLP, chartered accountants, and retired as a partner in 1996. Mr. Meredith is a Chartered Professional Accountant and is a member of the Institute of Chartered Professional Accountants of British Columbia and the Institute of Chartered Professional Accountants of Ontario.

Mr. Meredith was certified as a Chartered Accountant by the Canadian Institute of Chartered Accountants (1968).

#### Principal Occupation, Business or Employment

Chairman of Cordoba Minerals Corp. (April 2016 – present); Chairman of Great Canadian Gaming Corporation (June 2015 – present); Chairman of Kaizen Discovery Inc. (December 2013 – June 2016); President and Chief Executive Officer, Global Mining Management Corporation (April 2006 – May 2013); Deputy Chairman of Original Ivanhoe Mines (May 2006 - April 2012); Director of Peregrine Diamonds Ltd. (March 2013 – March 2018).

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
Board of Directors	4	100%	Great Canadian Gaming Corporation (TSX)	2000
Nominating and Corporate Governance	4	100%	Cordoba Minerals Corp. (TSX-V)	2016
Sustainability	3	100%		
<b>Total:</b>	<b>11</b>	<b>100%</b>		

#### Class A Shares Beneficially Owned, Controlled or Directed:

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	1,304,825	\$2,903,627 <sup>(5)</sup>	See Note (6)
2017	1,304,825	\$4,000,593 <sup>(4)</sup>	See Note (6)
<b>Deferred Share Units Held:</b>	73,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		



**Kgalema P. Motlanthe**  
Johannesburg, South Africa  
Age: 68

**Director Since:** April 2018

**Director Status:** Independent<sup>(2)</sup>

**Areas of Experience:**

Government  
International Politics  
Trade Unions  
Governance  
Board  
International Projects

Mr. Motlanthe was President of the Republic of South Africa between 2008 and 2009. He was elected to the position of President by Parliament on September 25, 2008 and served until May 9, 2009.

During Mr. Motlanthe's Presidency, he was the Chairman of the Southern African Development Community (SADC). Working in collaboration with other leaders of the 15-nation regional body, Mr. Motlanthe oversaw the implementation of Zimbabwe's Global Political Agreement. He also engaged with other world leaders in the G20 to help minimise the impact of the global financial crisis on South Africa's economy.

Following his Presidency, Mr. Motlanthe was appointed by his successor, President Jacob Zuma, to serve as Deputy President of South Africa and served in that capacity from May 11, 2009 until May 24, 2014. He was also Deputy President of the ruling African National Congress (ANC) from 2007 until 2012, and Secretary-General of the ANC from 1997 to 2007.

In earlier years, Mr. Motlanthe's role in the international movement against South Africa's apartheid system led to a 10-year prison sentence on Robben Island, the same jail where Nelson Mandela was incarcerated. Following his release in 1987, he worked for the National Union of Mineworkers (NUM) and became the union's General Secretary in 1992, succeeding Cyril Ramaphosa (South Africa's newly-elected President) who had helped to build the union and make it one of the most powerful in the country at the time. During his 10 years with the NUM, Mr. Motlanthe was credited with helping to establish the Mineworkers Investment Company, which was wholly owned by the NUM and made investments in companies that did not pose a conflict of interest for the union. Mr. Motlanthe played a crucial role in forming the Mineworkers Development Agency, which dealt with the developmental and social needs of retrenched miners and their families. He also helped to form initiatives to provide bursaries to miners and their dependents, as well as education and skills training.

Mr. Motlanthe currently heads the Motlanthe Foundation that is dedicated to a range of public-benefit activities, including conflict resolution, the promotion of human rights and democracy and the provision of care for pre-school-age children, along with buildings, equipment and educational support for public primary schools. He also led the African Union's recent Election Observer Mission to Sierra Leone, which found that last month's Presidential run-off election was conducted in line with international standards. Mr. Motlanthe is a goodwill ambassador of the International Council of Ophthalmology and continues to play an active role in HIV and Aids awareness in Africa.

In addition, Mr. Motlanthe is a trustee to the following foundations and/or organizations:

1. Nelson Mandela Foundation
2. Ahmed Kathrada Foundation
3. Institute for African Alternatives
4. Lilliesleaf Foundation
5. The Brenthurst Foundation

**Principal Occupation, Business or Employment**

Deputy President (May 2009 – May 2014) and President (September 2008 – May 2009) of the Republic of South Africa; Secretary General of the African National Congress (ANC) (December 1997 – December 2007).

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
<b>Nominating and Corporate Governance Committee</b>	N/A <sup>(13)</sup>	N/A	N/A	N/A
<b>Total:</b>	N/A	N/A		

**Class A Shares Beneficially Owned, Controlled or Directed:**

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	Nil	Nil	See Note (6)
<b>Deferred Share Units Held:</b>	6,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		



**Guy J. de Selliers**  
England, United Kingdom  
Age: 65

**Director Since:** May 2011

**Director Status:**  
Non-Independent<sup>(1)</sup>

**Areas of Experience:**  
CEO/Board  
International Finance  
Mining Industry  
Public Capital Markets

Guy de Selliers has been a director since May 2011. He has more than 40 years' experience in international finance and business. He is President and co-founder of HCF International Advisers, a corporate finance advisory firm focused on the mining and metals industry.

Mr. de Selliers' corporate responsibilities include:

1. Member of the Board of Solvac SA, a holding company with a significant stake in Solvay S.A., a leading European chemical group (Euronext-listed);
2. Board Vice-Chairman and Chairman of the Risk and Capital Committee of Ageas S.A., a Europe-based insurance group with activities in Europe and Asia (Euronext-listed);
3. Chairman of the Board of AG Insurance, the leading insurance company in Belgium (Founded In 1824); and
4. Director of Cranemere Group Ltd., a privately held investment holding company (UK).

Mr. de Selliers began his career in the World Bank's mining division in June 1977, following which he worked at Lehman Brothers as Senior Vice President, International Investment Banking. In July 1990 he became part of the team responsible for creating the European Bank for Reconstruction and Development (EBRD). Mr. de Selliers was Vice Chairman of the Credit Committee and a member of the EBRD's Executive Committee.

In December 1997, Mr. de Sellier became Chief Executive of MC-BBL Eastern Holdings until its sale, following which he joined Robert Fleming and Co. as Board member and Chairman, Eastern Europe in September 1998. Following his retirement from Chase JP Morgan, which had purchased Robert Fleming and Co., he founded HCF International Advisers in 2005.

Mr. de Selliers is a member of Pamplona Private Equity's Advisory Board and serves as Chairman of the Board of Trustees of Partners in Hope (a United Kingdom-based charity). He also acted as an expert advisor to the European Commission on a number of matters.

Mr. de Selliers earned a Master's degree in Engineering and a Master's degree in Economics from the University of Louvain.

#### Principal Occupation, Business or Employment

President of HCF International Advisers Ltd. (March 2003 – present)

Board/Committee Membership:	Attendance:		Other Public Board Membership	
			Company:	Since:
Board of Directors	4	100%	Ageas S.A. (Euronext)	2009
Sustainability - Chair	3	100%	Solvac S.A. (Euronext)	2015
Technical	3	100%		
<b>Total:</b>	<b>10</b>	<b>100%</b>		

#### Class A Shares Beneficially Owned, Controlled or Directed:

Year	Class A Shares <sup>(3)</sup>	Total Market Value of Class A Shares	Minimum Required
2018	520,000	\$1,157,156 <sup>(5)</sup>	See Note (6)
2017	400,000	\$1,226,400 <sup>(4)</sup>	See Note (6)
<b>Deferred Share Units Held:</b>	73,918 <sup>(14)</sup>		
<b>Options Held:</b>	Nil		

**Notes:**

- (1) See Section 5 - "Corporate Governance" for a description of the reasons why the Company does not consider this nominee to be independent.
- (2) "Independent" refers to the standards of independence established under Canadian Securities Administrators' National Instrument 58-101 – Disclosure of Corporate Governance Practices.
- (3) "Class A Shares" refers to the number of Class A Shares beneficially owned, or over which control or direction is exercised, by the nominee as of May 8, 2018 and May 8, 2017, respectively. Unissued Class A Shares issuable upon the exercise or conversion of convertible securities of the Company may be deemed outstanding for certain purposes under securities laws, but are excluded from the "Class A Shares" reported.
- (4) "Total Market Value of Class A Shares" is calculated by multiplying the closing price of the Class A Shares on the TSX on May 8, 2017 (converted to "\$" using the Bank of Canada daily exchange rate – C\$1.00 to \$0.73), by the number of Common Shares held by the nominee as of that date, excluding any unissued Class A Shares issuable pursuant to the exercise of incentive stock options or other convertible securities of the Company.
- (5) "Total Market Value of Class A Shares" is calculated by multiplying the closing price of the Class A Shares on the TSX on May 8, 2018 (converted to "\$" using the Bank of Canada daily exchange rate – C\$1.00 to \$0.77), by the number of Common Shares held by the nominee as of that date, excluding any unissued Class A Shares issuable pursuant to the exercise of incentive stock options or other convertible securities of the Company.
- (6) The Company adopted a non-executive director stock ownership policy and an executive management stock ownership policy. See page 62 of Section 5 - "Corporate Governance" for a descriptions of those policies.
- (7) The RSUs awarded vest in three equal parts, 33<sup>1/3</sup>% on each of February 1, 2018, February 1, 2019 and February 1, 2020.
- (8) This includes 500,000 RSUs granted as part of the base long-term incentive component of 2015 compensation and 1,250,000 RSUs awarded as a special bonus (the "**Zijin Special Bonus**") for his contributions toward the successful completion of the US\$412 million investment in the Kamoa Copper Project (the "**Zijin Transaction**").
- (9) The RSUs awarded as part of the Zijin Special Bonus vest in three equal parts, each representing 33% of the RSUs, commencing on the one year anniversary of the date of grant and on each of the two anniversaries thereafter, subject to RSU Performance Condition. 583,332 RSUs vested on December 15, 2016 and 583,332 RSUs vested on December 15, 2017.
- (10) The exercise price is an amount equal to not less than 100% of the weighted average price of the Company's Class A Shares during the five day trading period preceding the date of grant.
- (11) Ms. Mahler and Mr. Hayden became members of the Nominating and Corporate Governance Committee and the Audit Committee respectively on October 17, 2017. The Nominating and Corporate Governance Committee and Audit Committee each held one (1) meeting during 2017 following the date of their appointments.
- (12) Mr. Bianchini became a member of the Technical Committee on March 19, 2018. Accordingly, he was not a member at the time that the 2017 meetings were held.
- (13) Mr. Motlanthe became a member of the Nominating and Corporate Governance Committee on March 19, 2018. Accordingly, he was not a member at the time that the 2017 meetings were held.
- (14) See "Deferred Share Unit Awards to Non-Executive Directors" on page 27.
- (15) The "Value of Unexercised Options" is calculated on the basis of the difference between the closing price of the Class A Shares on the TSX on May 8, 2018 (converted to "\$" using the Bank of Canada daily exchange rate – Cdn\$1.00 to \$0.77) and the exercise price of the options multiplied by the number of unexercised options on May 8, 2018, vested and unvested.

## COMPENSATION OF DIRECTORS

### RETAINERS AND FEES

Retainers and Fees	Amount
Annual Retainer for Non-Executive Directors (Cash Portion)	\$60,000
Annual Retainer for Non-Executive Directors (Deferred Share Units)	\$20,000
<i>Additional</i> Annual Retainer for Lead Director	\$40,000
<i>Additional</i> Annual Retainer for Audit Committee Chair	\$20,000
<i>Additional</i> Annual Retainer for Compensation and Human Resources Committee Chair	\$20,000 <sup>(1)</sup>
<i>Additional</i> Annual Retainer for Nominating and Corporate Governance Committee Chair	\$10,000
<i>Additional</i> Annual Retainer for Sustainability Committee Chair	\$10,000
<i>Additional</i> Annual Retainer for Technical Committee Chair	\$10,000
Board and Committee Per-Meeting Fees (paid annually)	\$1,500
Per-Day Travel Fees (paid annually)	\$1,500

**Notes:**

- <sup>(1)</sup> In March 2018 the additional annual retainer payable to the Compensation and Human Resources Committee Chair was increased from \$15,000 per annum to \$20,000 effective January 1, 2018.

### DIRECTOR COMPENSATION PHILOSOPHY AND OBJECTIVES

Non-executive director compensation is designed to attract and retain high-quality individuals with a broad range of experience, skills and expertise to satisfy the responsibilities of being a Board member and to align the interests of directors with those of shareholders. Recognizing the increasing responsibility, time commitments and accountability of non-executive directors, the Board reviews director compensation annually to ensure that such compensation program is appropriate and competitive, using the same peer group used to benchmark executive compensation. Detailed information on this peer group may be found in Section 4, Statement of Executive Compensation.

The Company's non-executive director compensation program includes an annual retainer, paid in a mix of cash and share-based awards consisting of deferred share units ("**DSUs**"), committee chair retainers, meeting attendance fees and travel fees. The above schedule summarizes the compensation payable to non-executive directors and the Director Compensation Table below shows the amounts actually paid in the financial year ending December 31, 2017. The Company does not compensate directors for services as directors if they are already compensated for services as executive officers. For compensation received by directors who also serve as executives, see "Summary Compensation Table" on page 46.

In 2012, the Company established a deferred share unit plan to provide DSUs to its non-executive directors, allowing them the opportunity to participate in the long-term success of the Company and promoting a greater alignment of interests between directors and shareholders. At such time, DSUs were notional shares that mirrored the market value of the Company's shares and where the value of each unit was equal to the whole value of the underlying security.

Beginning in January 2015, the portion of non-executive directors' annual retainer to be paid quarterly in DSUs was set at \$20,000 (the "**DSU Retainer**") and the number of DSUs awarded was determined by the 5-day volume-weighted average price of the Company's Class A Shares on the first day of each quarterly period. In December 2016, the Board determined that the DSU Retainer would be awarded once per annum, on January 1 of each year. In May 2017, the DSU Plan was amended to permit settlement of DSUs in either Common Shares or cash, at the election of the recipient.

For additional information on the DSU Plan, see "Summary of the Deferred Share Unit Plan" on page 73.



In late 2017 and early 2018, the Compensation Committee engaged Mercer Canada Ltd. (“**Mercer**”) to provide independent advice on director and executive compensation levels. Mercer conducted a market review on non-executive director compensation in respect of annual retainers, committee chair retainers and meeting attendance fees. Mercer also provided an overview of market trends, which the Compensation Committee considered in making decisions on director and executive compensation. Based on Mercer’s review, the Company’s director compensation levels (sum of cash and share-based awards) are positioned between the 25th and 50th percentiles of the peer group.

## **DIRECTOR COMPENSATION TABLE**

The following table sets forth the value of all compensation provided to non-executive directors, excluding those directors who are also executives, for the Company’s financial year ended December 31, 2017. Messrs. Friedland and Bianchini are executive directors and are not compensated for their services as directors of the Company. Mr. Motlanthe joined the Board on April 10, 2018 and thus is not included in the table below.

<b>Name</b>	<b>Year Ended Dec. 31</b>	<b>Fees Earned</b>	<b>Share-based awards</b>	<b>Option- Based Awards</b>	<b>All Other Compensation</b>	<b>Total Compensation</b>
Ian Cockerill	2017	\$142,065	\$20,000	—	\$305	\$162,370
Markus Faber <sup>(1)</sup>	2017	\$73,734	\$20,000	—	\$254	\$93,988
William Hayden	2017	\$82,500	\$20,000	—	\$305	\$102,805
Oyvind Hushovd	2017	\$105,500	\$20,000	—	\$305	\$125,805
Livia Mahler	2017	\$105,000	\$20,000	—	\$305	\$125,305
Peter Meredith	2017	\$84,000	\$20,000	—	\$305	\$104,305
Guy de Selliers	2017	\$89,500	\$20,000	—	\$305	\$109,805

### **Notes:**

<sup>(1)</sup> Markus Faber ceased being a director of the Company on October 17, 2017.

## **OPTION AWARDS**

### ***Outstanding Option-Based Awards***

No options were granted to non-executive directors to acquire securities of the Company in 2017 nor were any outstanding options held by non-executive directors at the end of the financial year ended December 31, 2017. Stock options have not been granted to non-executive directors since February 2011.

### ***Incentive Plan Awards – Value Vested or Earned during the Year***

The following table sets forth the value vested or earned during the year of option-based and share-based awards paid to non-executive directors, excluding directors who are also executives, during the most recently completed financial year.

<b>Name</b>	<b>Option-based awards – Value vested during the year</b>	<b>Share-based awards – Value vested during the year</b>	<b>Non-equity incentive plan compensation – Value earned during the year</b>
Ian Cockerill	—	\$20,000	—
William Hayden	—	\$20,000	—
Oyvind Hushovd	—	\$20,000	—
Livia Mahler	—	\$20,000	—
Peter Meredith	—	\$20,000	—
Guy de Selliers	—	\$20,000	—

### DEFERRED SHARE UNIT AWARDS TO NON-EXECUTIVE DIRECTORS

The following table sets forth the DSUs awarded to non-executive directors, which remain outstanding and unvested at the date of this Circular.

<b>Name</b>	<b>Year</b>	<b>DSUs Awarded</b>	<b>Settlement Date</b>	<b>Settlement</b>	
				<b>Cash</b>	<b>Common Shares</b>
Ian Cockerill	2018	5,849	Dec. 31, 2021		100%
	2017	10,837	Dec. 31, 2020		100%
	2016	28,611	Dec. 31, 2019		100%
	2015	28,621	Dec. 31, 2018		100%
William Hayden	2018	5,849	Dec. 31, 2021		100%
	2017	10,837	Dec. 31, 2020		100%
	2016	28,611	Dec. 31, 2019		100%
	2015	28,621	Dec. 31, 2018		100%
Oyvind Hushovd	2018	5,849	Dec. 31, 2021	100%	
	2017	10,837	Dec. 31, 2020	100%	
	2016	28,611	Dec. 31, 2019	100%	
	2015	28,621	Dec. 31, 2018	100%	
Livia Mahler	2018	5,849	Dec. 31, 2021	50%	50%
	2017	10,837	Dec. 31, 2020	50%	50%
	2016	28,611	Dec. 31, 2019		100%
	2015	22,940	Dec. 31, 2018		100%
Peter Meredith	2018	5,849	Dec. 31, 2021		100%
	2017	10,837	Dec. 31, 2020	100%	
	2016	28,611	Dec. 31, 2019	100%	
	2015	28,621	Dec. 31, 2018	100%	
Kgalema Motlanthe <sup>(1)</sup>	2018	6,918	Dec. 31, 2021		100%
Guy de Selliers	2018	5,849	Dec. 31, 2021	100%	
	2017	10,837	Dec. 31, 2020		100%
	2016	28,611	Dec. 31, 2019		100%

Name	Year	DSUs Awarded	Settlement Date	Settlement	
				Cash	Common Shares
	2015	28,621	Dec. 31, 2018		100%

**Notes:**

<sup>(1)</sup> Mr. Motlanthe joined the Board on April 10, 2018.

## SECTION 4 - STATEMENT OF EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS - INTRODUCTION	30
COMPENSATION PHILOSOPHY AND OBJECTIVES	30
COMPENSATION COMMITTEE	32
ANNUAL COMPENSATION PROCESS	34
PERFORMANCE ASSESSMENT	36
MANAGEMENT OF COMPENSATION RISK	38
EXECUTIVE COMPENSATION	40
2017 COMPENSATION DECISIONS	43
TERMINATION AND CHANGE OF CONTROL BENEFITS	49

# COMPENSATION DISCUSSION AND ANALYSIS

## INTRODUCTION

Mining is a highly cyclical industry that is characterized by capital-intensive and long-term development projects. Very few mineral discoveries become producing mines, and the process for those that do may take between 10 to 15 years. Therefore, it is imperative for the Company's success that it attracts and retains the best possible talent, who are incentivized for the long-term success of the Company. As such, the Company's compensation elements are structured to reward the appropriate corporate behaviours and business outcomes that align with the Company's long-term growth strategies and with the interests of long-term shareholders.

In accordance with the requirements of applicable securities legislation in Canada, the following executive compensation disclosure is provided in respect of each person who served as the Company's Chief Executive Officer (the "CEO") and Chief Financial Officer (the "CFO") during the 2017 fiscal year, and each of the three (3) other highest-compensated executive officers of the Company and its subsidiaries for the 2017 fiscal year, whose annual aggregate compensation exceeded C\$150,000 (collectively, the "NEOs").

## COMPENSATION PHILOSOPHY AND OBJECTIVES

Ivanhoe's overall compensation philosophy is to provide competitive compensation to executive talent that rewards individuals for their contributions to Ivanhoe's short and long-term success – simply, to pay for performance.

### *Compensation Objectives*

1. Attract, motivate and retain qualified and experienced executives
2. Align the interests of executives with those of shareholders
3. Provide transparent and defensible compensation

### *Oversight of Compensation*

The Board has the ultimate responsibility of overseeing the Company's compensation program. The Board has delegated certain responsibilities to the Compensation and Human Resources Committee (the "Compensation Committee") to assist in discharging this mandate, but retains final authority over the compensation program and process, including approval of material amendments to or the adoption of new equity-based compensation plans, and the review and approval of Compensation Committee recommendations.

The Compensation Committee oversees and sets the general guidelines and principles for the Company's executive compensation policies. The CEO makes recommendations to the Compensation Committee regarding the level and form of proposed compensation awards for the Company's executive officers other than himself. The Compensation Committee makes recommendations to the Board relating to the compensation of all executive officers. Based on these recommendations, the Board decides the nature and scope of the compensation to be paid to the Company's executive officers.

The Compensation Committee bases its recommendations to the Board on the Company's compensation philosophy, the Company's comparator peer group, the Compensation Committee's assessment of corporate and individual performance (against performance goals and targets where applicable), recruiting and retention needs, and objectives for specific business units related to each individual.

### Compensation Elements

In the normal course, the Company's total direct compensation for its executives is comprised of three principal elements: fixed pay in the form of base salaries and variable pay in the form of short-term incentive ("STI") awards (cash and / or shares) and long-term incentive ("LTI") awards (stock options and / or restricted share units "RSUs").

Element	Fixed Pay	Variable Pay	
	Base Salaries	Short-Term Incentives	Long-Term Incentives
Format	Cash	Cash and / or shares	Stock Options or RSUs
Purpose	To attract and retain talent	To recognize individuals' contributions	To align executives' and shareholders' interests
Key Factors	Comparator benchmarking to similar positions	Annual corporate objectives and individual performance objectives	Multi-year corporate objectives and individual performance objectives

#### Fixed Pay – Base Salaries

In establishing base salaries for the Company's executives, the Compensation Committee takes into account each executives' job responsibilities and the level of skill and experience required to perform a given role. The Compensation Committee considered the comparative data and recommendations of its compensation consultant, general market conditions and the CEO's recommendations in order to assess and establish executive pay levels for 2018. The Compensation Committee and Board also relied on their experience with and knowledge of market salaries for individuals in comparable positions.

#### Variable Pay – Incentive Awards

Incentive awards are made on the basis of individual performance objectives and pre-determined corporate performance objectives. Individual performance measures are based on specific short and long-term key performance areas ("KPAs") and key performance indicators ("KPIs") and the extent to which certain agreed upon individual performance measures were achieved.

##### Short-Term Incentives

STIs represent at-risk compensation, awarded on the achievement of certain individual and corporate performance objectives. They are a variable component of executive compensation and are designed to reward executives for delivering annual performance results. STI targets are expressed as a percentage of base salary, with payouts based on a performance multiplier dependent on both individual and corporate performance. The performance multiplier achieved can range between 0% and 125% of target.

##### Long-Term Incentives

Given its pre-production stage of development, the Company recognizes that LTI awards of stock options and RSUs can provide market-competitive compensation without using significant cash resources. With the establishment of the RSU Plan in 2015, the Company is less reliant on options as a component of LTI compensation, and more reliant on RSU awards. The Company has not granted stock options to executives since December 2015, with the exception of a grant of 4,000,000 stock options to two executives in 2018. For 2017, only RSUs were granted as LTI compensation.

RSUs are awarded on the achievement of individual and corporate performance objectives and the achievement of certain corporate objectives tied to a mix of financial, operational and strategic metrics. LTI targets are expressed as a percentage of base salary, with awards based on a performance multiplier dependent on both individual and corporate performance. The actual performance multiplier achieved can result in an actual award between 0% and 150% of target.

The Compensation Committee considers whether to apply performance conditions to the vesting of RSUs that are issued during the year. Due to the Company being a non-producer with three significant African projects and unique joint partnerships, the Compensation Committee determined that no appropriate performance metric could be reliably assessed, and thus no performance-vesting conditions were attached for awards made in respect of 2017. The Compensation Committee may consider introducing performance-vesting conditions to RSUs in subsequent years if a metric becomes appropriate in the future.

Details of the Stock Option and RSU Plans are set out in Section 6 – “Summary of Securities-Based Compensation Arrangements” beginning on page 65.

## COMPENSATION COMMITTEE

The Compensation Committee oversees and sets the general guidelines and principles for the Company’s executive compensation policies. The Compensation Committee has the following mandate relating to compensation matters:

- Enable the Company to attract, retain and motivate executive officers of the highest calibre in light of the strong competition in the mining industry for qualified personnel
- Provide strong incentive for management to contribute to the achievement of the Company’s short-term and long-term goals
- Ensure the interests of the Company’s executive officers and shareholders are aligned
- Provide fair, transparent, and defensible compensation

### *Compensation Committee Responsibilities*

Corporate Performance Goals	CEO Compensation	Executive Compensation	Equity Compensation
<ul style="list-style-type: none"> <li>➤ At the beginning of each year, review management’s recommendations of the qualitative and quantitative corporate performance objectives for the ensuing year.</li> <li>➤ In conjunction with the CEO, evaluate the Corporation’s performance pursuant to its performance goals.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Review and approve corporate goals and objectives for the CEO’s compensation</li> <li>➤ Evaluate the CEO’s performance in light of his annual objectives</li> <li>➤ Recommend the CEO’s compensation, based on his performance evaluation, to the Board</li> </ul>	<ul style="list-style-type: none"> <li>➤ Consider the CEO’s recommendation for the quantum and form of executive compensation and both STI and LTI bonuses.</li> <li>➤ Make recommendations to the Board on the adequacy and form of compensation, bonuses and benefits for all executive officers and directors</li> </ul>	<ul style="list-style-type: none"> <li>➤ Administer and make recommendations to the Board on the design of incentive compensation plans and equity-based plans</li> </ul>

### *Compensation Committee Members*

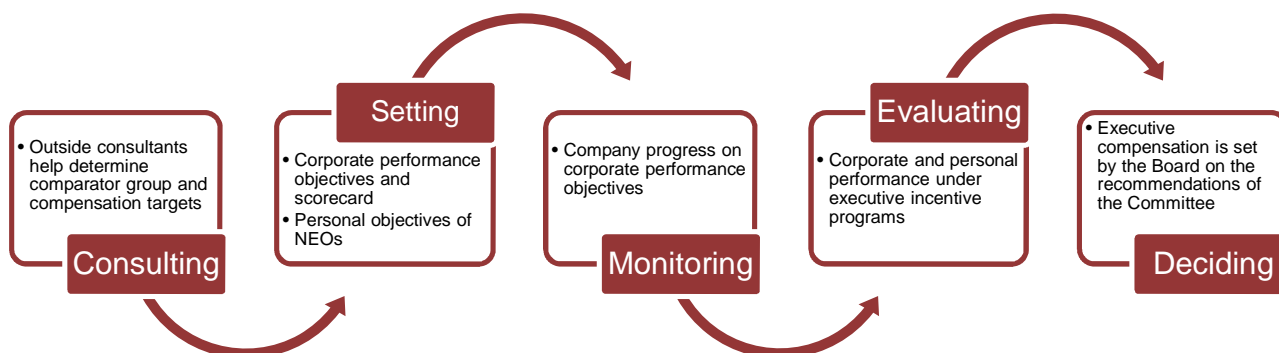
All Compensation Committee members are independent directors. The Compensation Committee is made up of the following members, all of whom have experience in dealing with compensation matters:



Member (Since)	Compensation Experience
<b>Livia Mahler, Chair</b> (Since May 2015, Chair since May 2016)	<p>Ms. Mahler served as a member of the compensation committees for a number of other private and public companies, including Computational Geoscience Inc., Turquoise Hill Resources Ltd. (the Original Ivanhoe Mines) and Diversified Royalty Corp. In these capacities, she worked with professional remuneration consultants on matters pertaining to executive and director compensation and has extensive experience developing and negotiating compensation packages for senior management personnel.</p>
<b>Oyvind Hushovd</b> (Since May 2012)	<p>Mr. Hushovd served on the compensation committees of international mining companies, Cameco Corporation and Inmet Mining Corporation, until 2013, and LionOre Mining International Limited and Western Oil Sands Inc. until 2007. He gained extensive experience as an executive of Falconbridge Limited and Gabriel Resources Ltd., collaborating with professional remuneration consultants on the establishment and implementation of a number of compensation programs including senior management compensation programs.</p>
<b>Ian Cockerill</b> (Since May 2012)	<p>During his 40-year career in the natural resources sector, Mr. Cockerill has held a variety of executive management and operational roles. Since 2002, he has acted as Chief Executive Officer of several publicly listed multi-national companies, as well as served on the boards and associated sub-committees of several of these companies. He has extensive experience with the design, motivation and implementation of compensation programs in various international organizations and has worked with external remuneration consultants across the globe.</p>

## ANNUAL COMPENSATION PROCESS

The annual compensation process includes:



The Compensation Committee Chair meets with the CEO at least annually to:

- Discuss the status of corporate performance objectives set for the current year, recognizing the need for flexibility so the Company can respond to changes in its external and internal circumstances
- Discuss management's corporate performance objectives for the coming year
- Complete the annual review of the CEO's performance

The Compensation Committee works with the CEO to evaluate the performance scorecards (against set performance goals and targets) for executive management and, with the CEO's recommendations taken into consideration, sets the compensation, including proposed salary adjustments and STI and LTI awards, for the NEOs and other members of executive and senior management.

Subsequent to its review, the Compensation Committee makes compensation recommendations to the Board and based on these recommendations, the Board makes decisions concerning the nature and scope of the compensation to be paid to the executive officers.

### *Outside Consultants and Comparator Peer Group*

In making decisions regarding compensation and the design of compensation programs in general, the Compensation Committee may consider it necessary or advisable to retain, at the Company's expense, outside consultants or advisors with expertise in this area to provide assistance, input or advice on any matter within its mandate, as needed. The Compensation Committee has the sole authority to retain and terminate such consultants and the consulting fees are paid by the Company.

In late 2017 and early 2018, the Compensation Committee engaged Mercer to provide independent advice on director and executive compensation levels (the "**Mercer Study**"). Mercer conducted a market assessment of executive pay levels, including base salary, target total cash compensation and target total direct compensation for members of executive management. In conjunction with the Compensation Committee, Mercer developed a comparator peer group and provided an evaluation of executive pay levels for benchmarking purposes and made recommendations to the Compensation Committee for potential adjustments to compensation levels and pay mix between compensation components. Mercer also provided input toward the development of the executive incentive program. Information on the executive incentive program can be found on page 36.

The Compensation Committee and Mercer faced a number of issues in identifying a suitable peer group:

- Few companies in the mining industry have three world-class projects in the pre-production stage without also having significant ongoing mining operations.

- For companies that are in pre-production, few have comparable market capitalization levels.
- Many pre-production companies also lack the geographic and commodity diversification of Ivanhoe; they are typically confined to one or perhaps two major projects.

It is important to have a comparator peer group that contains enough companies to provide meaningful and reasonable statistical information for comparison purposes. In reviewing the existing peer group and assessing whether other peers should be included, consideration was given to the following criteria:

- Mining companies with operating and development activity in similar regions as Ivanhoe (i.e., Africa) with a preference given to organizations that are based or traded in Canada;
- Mining companies with comparable market capitalization and assets; and
- Mining companies with no / low revenue but with relatively higher capitalization and asset values.

Given these factors, the Compensation Committee considers the 15-company comparator peer group identified below as being a reasonable comparator group that is defensible to shareholders, given the relative market capitalizations, African asset bases and commodities represented by the group.

To conduct its review, Mercer sourced market data from a combination of information circulars, annual reports and compensation survey data. The comparator peer group consisted of the following companies:

All values in CAD million <sup>(1)</sup>						
Company Name	Mkt Cap <sup>(2)</sup> C\$'000	Revenue <sup>(3)</sup> C\$'000	Total Assets <sup>(3)</sup> C\$'000	GICS Description <sup>(4)</sup>	Home Office	Projects in Africa
B2Gold Corp.	\$3,470	\$3,844	\$3,226	Gold	Canada	√
Katanga Mining Ltd.	\$3,357	\$23	\$7,424	Copper	Canada	√
IAMGOLD Corp.	\$3,112	\$1,404	\$4,965	Gold	Canada	√
Endeavour Mining Corp.	\$2,466	\$837	\$2,120	Gold	Canada	√
Hudbay Minerals Inc.	\$2,383	\$1,741	\$5,819	Diversified Metals & Mining	Canada	
Impala Platinum Holding Ltd.	\$1,947	\$3,509	\$7,055	Precious Metals & Minerals	South Africa	√
Northam Platinum Limited	\$1,819	\$660	\$2,082	Precious Metals & Minerals	South Africa	√
NovaGold Resources Ltd.	\$1,798	\$0	\$514	Gold	Canada	
Pretium Resources Inc.	\$1,561	\$223	\$2,092	Gold	Canada	
SEMAFO Inc.	\$1,206	\$346	\$1,273	Gold	Canada	√
Trevali Mining Corp.	\$1,077	\$421	\$1,477	Diversified Metals & Mining	Canada	√
Acacia Mining PLC	\$982	\$977	\$2,226	Gold	United Kingdom	√
Nevsun Resources Ltd.	\$928	\$371	\$1,360	Copper	Canada	√
Capstone Mining Corp.	\$479	\$694	\$1,763	Diversified Metals & Mining	Canada	
Lonmin PLC	\$292	\$1,534	\$1,153	Precious Metals & Minerals	United Kingdom	√
75 <sup>th</sup> Percentile	\$2,425		\$4,095			
Median	\$1,800		\$2,090			
25 <sup>th</sup> Percentile	\$1,030		\$1,420			
<b>Ivanhoe Mines Ltd.</b>	<b>\$2,151</b>	<b>\$0</b>	<b>\$1,591</b>	<b>Diversified Metals &amp; Mining</b>	<b>Canada</b>	<b>√</b>
<i>Percentile Ranking</i>	<i>65%</i>		<i>34%</i>			

**Notes:**

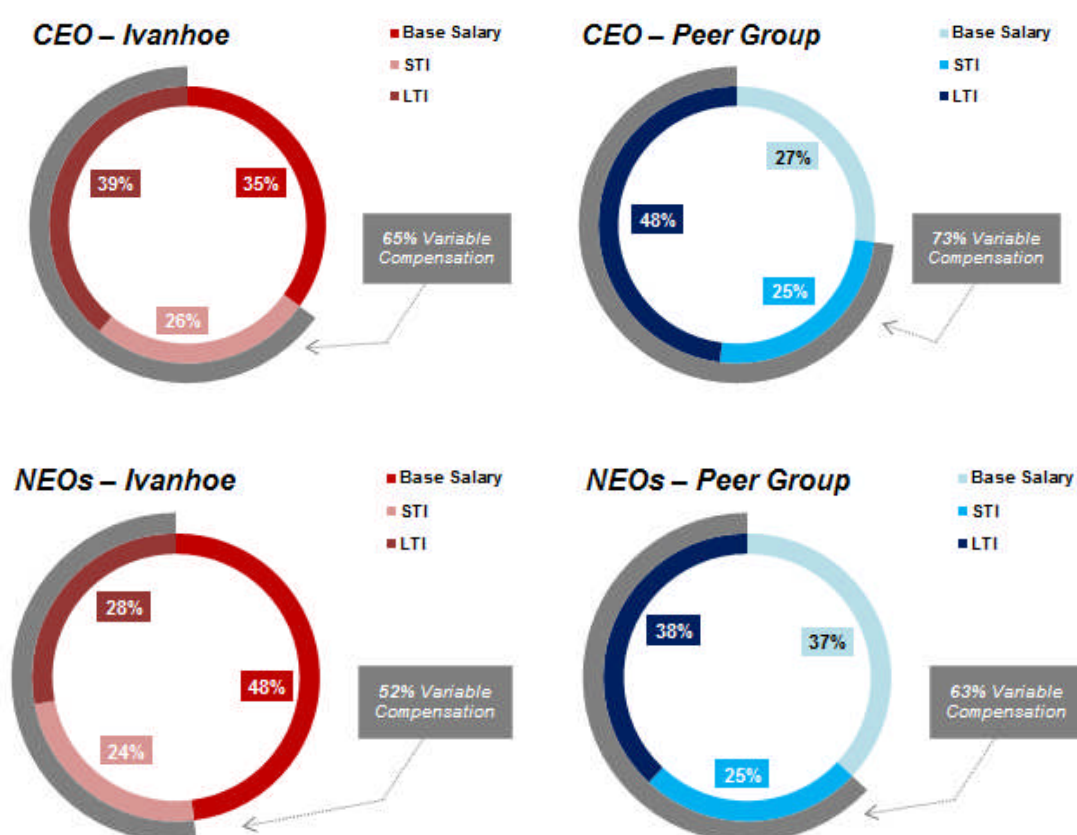
- (1) All values were converted to Canadian dollars using the 2017 annual average exchange rate of \$1.00 CAD = 0.598 GBP and 10.239 ZAR.
- (2) Market capitalization as at March 31, 2018.
- (3) Trailing-twelve months revenue and most recently reported financial assets.
- (4) S&P/JP Morgan Chase Global Industry Classification Code ("GICS").

The Compensation Committee reviews and benchmarks executive compensation against the comparator peer group in order to align the Company's compensation with peers and to ensure market-competitiveness. The benchmark data, along with other relevant factors, are used to develop a target compensation mix and aggregate compensation package for each executive management position.

### Compensation Mix

The following charts demonstrate the target total direct compensation mix for the Company's NEOs and compares the Company to the average pay mix of the comparator peer group, as determined through the Mercer Study. A large portion of the Company's NEO compensation is variable in the form of short-term annual incentive bonuses and long-term incentives.

Due to the uniqueness of the Company's Executive Chairman role, his pay mix has been excluded from these charts.



With certain exceptions, LTI compensation awarded since 2016 has been delivered solely through RSUs; the transition away from stock options was part of an evolution to ensure greater alignment with market practices and designed to increase linkage with the shareholder experience. As part of the next stage of evolution, the Compensation Committee may explore introducing performance-vesting conditions to RSU grants (essentially granting performance share units "PSUs") in the future, if an appropriate performance metric is identified.

## PERFORMANCE ASSESSMENT

### Executive Incentive Program

In late 2017, the Company refined its incentive programs by establishing a corporate performance scorecard with performance measures, weightings and thresholds to better demonstrate its executive

pay-for-performance alignment. In developing this executive incentive program, the Company identified the behaviors and results to be rewarded and designed the formulas that funded and distributed incentive payouts.

The Compensation Committee believes that performance measures should be comprehensive of the executives' area of accountability and also be aligned with the business strategy. The program establishes a number of performance objectives based on Ivanhoe's strategic goals, and emphasizes sustaining a high-performing organization that drives the long-term success of the business.

The following sections explain the components of the executive incentive program.

#### *Corporate Performance Scorecard*

At the beginning of each fiscal year, individual performance objectives are established for each executive. These objectives are developed alongside company-wide key corporate performance objectives for the upcoming year in light of the Company's broader operating and strategic plans. Upon the recommendation of the Compensation Committee, the Board also adopts a corporate performance scorecard that sets out key objectives and relevant performance measures that guide executives to execute on the strategy for the ensuing year.

In setting the key objectives and their respective weightings, the Compensation Committee considers the importance and impact of completing each individual and corporate objective in the coming year. The STI and LTI awards to be paid out are then subsequently assessed against both these individual and corporate objectives.

Following the completion of the financial year, and in conjunction with the CEO, the Compensation Committee assesses the Company's performance against each specific measure and makes its recommendations to the Board on the corporate performance scores for each KPI. The Compensation Committee and the CEO also assesses the achievement (or not) of individual performance objectives.

The Board may, at times, exercise informed judgment in its assessment of performance and apply discretion to adjust individual or corporate performance scores away from the scorecard formula result. The Board makes all final decisions with respect to executive compensation and retains full discretion over all executive compensation matters.

#### *Performance Rating Thresholds*

Thresholds are established for each individual and corporate objective, according to the following four-point performance scale:

Rating	Definition
0.0 to 2.0	Performance did not meet expectations
2.0 to 3.0	Performance partially met expectations
3.5	Performance met expectations
3.5 to 4.0	Performance exceeded expectations

#### *Performance Weighting*

Executive performance is measured in accordance with corporate and individual weightings that are agreed upon with the CEO. Executives and senior employees receive a higher weighting on corporate performance. The following table sets forth the weightings for NEOs in 2017:

Principal Position	Corporate Performance Weighting	Individual Performance Weighting
Executive Chairman	100%	0%
President and Chief Executive Officer	90%	10%
Chief Financial Officer	75%	25%
Executive Vice President, Operations	75%	25%
Managing Director, Platreef Project	50%	50%

#### *Impact of Performance on Actual Incentive Awards*

Both the Company's STI and LTI awards are differentiated from target levels, based on executives' corporate and individual performance and subject to the weighting on each performance scope. Four-point performance scores are rounded to the nearest 0.10 and interpolated between 0% – 125% of target for STIs and between 0% – 150% of target for LTIs.

The following table sets forth the actual awards to be paid or granted, based on total performance for 2017.

Total Performance ( / 4.00)	≤ 2.00	2.50	3.00	3.50	4.00
Actual STI Award (% of Target)	0%	25%	50%	100%	125%
Actual LTI Grant (% of Target)	0%	25%	50%	100%	150%

## **MANAGING COMPENSATION RISK**

The Compensation Committee and the Board periodically assess the risks associated with the Company's compensation philosophy, and the implementation and operation of its practices.

### ***Board and Committee Oversight***

The Compensation Committee has discretion and flexibility in making compensation recommendations so that it can minimize unintended consequences affecting executive compensation. The Board maintains full discretion over all executive compensation decisions to ensure that the aggregate compensation received matches both the contributions and performance of the individual executive, achievement of corporate objectives and the intentions of the Board.

Board discretion ensures that pay aligns with performance given or despite the current operating environment. For example, the Board can appropriately award officers when critical strategic objectives are met in a low commodity price environment or ensure that rewards are not excessive in a high commodity price environment.

### ***Monitoring***

Planned performance is measured against actual achievements on a continuous basis, enabling the Board to react to any significant unanticipated risks.

### ***Balancing Short and Long-Term Incentives***

In 2017, the Company introduced the current executive incentive structure which focuses on a number of performance objectives based on Ivanhoe's short and long-term strategic goals. These diverse objectives

ensure that the Company does not have metrics that could distort either the intended compensation or executive behaviour.

The Board will consider the overall compensation, including both STIs and LTIs, and adjust its final awards against the targets for those compensation elements to ensure that an appropriate level of total direct compensation is provided.

### ***Incentive Targets***

Individual targets, as a percentage of salary, are reviewed annually for both short and long-term incentives. Together with the weighted corporate objectives, these targets enable the Compensation Committee to objectively evaluate performance before making its recommendations to the Board.

### ***Hedging Prohibition***

The Corporate Disclosure, Confidentiality and Securities Trading Policy prohibits executives and directors from engaging in short-term or speculative transactions involving the Company's securities.

NEOs and directors are not permitted to purchase financial instruments, including, for greater certainty, prepaid variable forward contracts, equity swaps or collars, or units of exchange funds that are designed to hedge or offset a decrease in market value of equity securities granted as compensation or held, directly or indirectly, by the NEO or director in accordance with the Company's Corporate Disclosure, Confidentiality and Securities Trading Policy.

### ***Outside Consultants***






The Compensation Committee engages outside consultants on a regular basis to assist with determining appropriate peer groups, pay levels and mix and program types. This external advice ensures that compensation remains competitive yet reasonable, while providing sufficient alignment with shareholders.



## EXECUTIVE COMPENSATION

### 2017 Named Executive Officers

In 2017, the CEO, CFO, and three next highest-compensated executive officers were:

NEO					
	Robert M. Friedland	Lars-Eric Johansson	Marna Cloete	Mark Farren	Patricia Makheshia
Position Held	Executive Chairman	President and Chief Executive Officer	Chief Financial Officer	Executive Vice President, Operations	Managing Director, Platreef Project

### 2017 Corporate Performance Objectives

For 2017, the key corporate objectives, weightings, and specific measures were set as follows:

Corporate Performance Objective (Weighting)	Scope and Measures (note – some scopes / measures do not apply to executives only focused on a specific project)	
<b>Business Development</b> (30%)	<i>Kamoa-Kakula</i>	<ul style="list-style-type: none"> <li>Ensure adequate financial resources to meet operational objectives for next 12 months</li> <li>Expand resources above the level as at December 31, 2016 and identify new targets on license area</li> <li>Alignment and effective functioning of joint venture partners</li> <li>Commence pre-feasibility study for Kakula</li> <li>Advance power project on schedule and in line with project implementation plan</li> </ul>
	<i>Kipushi</i>	<ul style="list-style-type: none"> <li>Ensure adequate financial resources to meet operational objectives for next 12 months</li> <li>Advance concentrate transportation solution</li> <li>Advance refurbishment of underground structure</li> </ul>
	<i>Platreef</i>	<ul style="list-style-type: none"> <li>Ensure adequate financial resources to meet operational objectives for next 12 months by commencing project financing</li> <li>Completion of feasibility study by the end of 2017</li> <li>Advance bulk water supply solution</li> <li>Advance the surface lease agreement and livelihood restoration process</li> <li>Commence with the Box Cut for Shaft 2 by the end of Q2</li> </ul>
<b>Operating and Capital Projects</b> (20%)	<i>Corporate / Project</i>	<ul style="list-style-type: none"> <li>Manage cash flow within or below set corporate and project budgets</li> </ul>
<b>Shareholder Return</b> (20%)	<i>Corporate</i>	<ul style="list-style-type: none"> <li>IVN Total Shareholder Return relative to the comparator group</li> <li>IVN Total Shareholder Return relative to S&amp;P / TSX Global Mining Index</li> </ul>
<b>Health and Safety</b> (20%)	<i>Project</i>	<ul style="list-style-type: none"> <li>Project safety measuring recordable injuries</li> </ul>
	<i>Corporate</i>	<ul style="list-style-type: none"> <li>Number of operations related fatalities</li> </ul>
<b>Corporate Social Responsibility</b> (10%)	<i>Corporate</i>	<ul style="list-style-type: none"> <li>Undertake stakeholder outreach initiatives and strengthen stakeholder relations</li> </ul>
	<i>Kamoa-Kakula</i>	<ul style="list-style-type: none"> <li>Develop and implement social strategy</li> <li>Commence economic relocation at Kakula</li> </ul>
	<i>Kipushi</i>	<ul style="list-style-type: none"> <li>Develop and implement social strategy</li> </ul>
	<i>Platreef</i>	<ul style="list-style-type: none"> <li>Fulfill Social and Labour plan commitments</li> <li>Conclude next-of-kin agreements for Phase 2 of the grave relocation process and file license application</li> </ul>



## 2017 Corporate Performance Highlights

The following summarizes the Company NEOs' performance against the corporate scorecard, and describes the Company's operational highlights at each of the three projects:

Corporate Performance Objective (Weighting)	Scope	Threshold Performance Level	Target Performance Level	Performance Score ( / 4.00)	Friedland, Johansson, Cloete, and Farren	Makhesha
Business Development (30%)	Kamoa-Kakula	Overall Rating Above 2.00	Overall Rating Of 4.00	Overall Rating of 3.90	✓	
	Kipushi			Overall Rating of 3.88	✓	
	Platreef			Overall Rating of 3.92	✓	✓
Operating and Capital Projects (20%)	Corporate / Kamoa-Kakula / Kipushi / Platreef	10% – 20% Variance from Budget	Below 10% Variance from Budget	4.00 – 0% Variance from Budget	✓	
	Platreef			3.18 – 12% Variance from Budget		✓
Shareholder Return (20%)	Corporate	Peer Group P25	Peer Group P50	4.00 – Above Peer Group P50	✓	✓
		5% Below Index TSR	2% Above Index TSR	4.00 – More Than 2% Above Index TSR	✓	✓
Health and Safety (20%)	Kamoa-Kakula / Kipushi / Platreef	TRIR of 6.0	TRIR of Below 4.0	0.00 – TRIR of 6.89	✓	
	Platreef			0.00 – TRIR of 15.16		✓
	Corporate	N/A	Zero Fatalities	4.00 – Zero Fatalities	✓	✓
Corporate Social Responsibility (10%)	Corporate / Kamoa-Kakula / Kipushi / Platreef	Overall Rating Above 2.00	Overall Rating Of 4.00	Overall Rating of 3.83	✓	
	Platreef			Overall Rating of 3.75		✓
Corporate Performance Score ( / 4.00)					3.55	3.39

Ivanhoe's corporate objectives resulted in strong operational success and achievement in 2017:

### *Development of Kamoa-Kakula's Two Mines & Expansion of Resources*

**Service and Conveyor Declines Completed for Kansoko Mine.** Development of the twin declines to access the deposit for Kamoa's Kansoko Mine was completed in September 2017. Approximately 13,500 tonnes of development ore were stockpiled at surface.

**Underground Development for Kakula Mine Ahead of Plan.** Underground development for the planned Kakula Mine advanced ahead of plan in 2017. Construction of the 18-metre-deep Kakula box cut was completed in October 2017. Development of the twin declines to access the Kakula Deposit began in November 2017; approximately 150 metres of underground development was completed by the end of 2017.

**Updated Estimate for Kakula's Mineral Resources Completed.** In May 2017, the Company announced an increased estimate of Indicated and Inferred Mineral Resources estimate at Kakula. At a 3% cut-off, Kakula's *Indicated* Mineral Resources increased to 116 million tonnes at 6.09% copper, plus *Inferred* Resources of 12 million tonnes at 4.45% copper.

**Indicated Resources for Combined Kamo-Kakula Deposits Exceed 1 Billion Tonnes.** The May 2017 estimate increased the combined Kamo-Kakula Indicated Mineral Resources to 1.1 billion tonnes at a grade of 2.85% copper – and also increased *Inferred* Mineral Resources to 244 million tonnes at a grade of 2.12% copper, at a 1% copper cut-off.

**Preliminary estimate of Resources completed on Kakula West.** Work commenced in 2017 resulted in the Company's announcement in February 2018 of an updated Resource for Kamo-Kakula which for the first time included the Kakula West Discovery. The expansion boosted Kakula's Indicated Mineral Resources to 174 million tonnes at grade of 5.62% copper at a cut-off grade of 3%. Kakula's inferred resources were estimated at 9.0 million tonnes at 3.66% copper at a 3% cut-off. Globally, Kamo-Kakula Project Indicated Mineral Resources increased to over 1 Billion tonnes 3.17% copper at a 1.5% copper cut-off.

**Preliminary Economic Assessment Completed.** In November 2017, Ivanhoe completed an updated, independent, preliminary economic assessment of several development scenarios for the Kakula Deposit and the adjacent Kamo Deposit (Kakula 2017 PEA). The initial option is for a six-million tonnes per annum (Mtpa) mine and concentrator at Kakula, reporting an after-tax net present value, at an 8% discount rate, of US\$4.2 billion and an IRR of 36%.

**Two-Stage, Two-Mine Scenario Evaluated.** The Kakula 2017 PEA also considered a two-stage, modular development of an initial six Mtpa mine at Kakula, followed by a six Mtpa mine at Kamo, for a combined production rate of 12 Mtpa, producing 370,000 tonnes of copper per year for the first 10 years of operations. This expanded scenario delivers an after-tax net present value, at an 8% discount rate, of US \$7.2 billion and an IRR of 33%, over a 44-year mine life. In conjunction with the Kakula 2017 PEA, Ivanhoe completed an updated pre-feasibility study of the Kamo Project (Kamo 2017 PFS), at an expanded mining rate of six Mtpa. The Kamo 2017 PFS reported an after-tax net present value, at an 8% discount rate, of US\$2.1 billion and an IRR of 24%.

**Sustainable Livelihoods: Economic Empowerment for People in 14 Communities.** A range of food-production initiatives are introducing skills and techniques to help establish sustained and resource-efficient agriculture, replant harvested forests and supply food for the Kamo-Kakula camp kitchen. Programs include production of corn, other vegetables and fruits; fish farming; a poultry project supplying chickens and eggs; and management of 50 honey-producing bee hives.

**Malaria Control: Testing Thousands of Children & Adults So They "Know For Sure".** An innovative and effective initiative, sponsored by Ivanhoe and Zijin in the DRC provinces hosting the Kamo-Kakula and Kipushi projects, has equipped 248 health facilities with automated, hand-held devices that ensure fast, accurate testing for malaria, avoiding prescription of unnecessary medication. More than 600 workers have been trained to use the devices. The ongoing Know for Sure campaign tested 85,000 patients in an initial, 20-month period in 2016-17; 69% tested negative.

**Hydro Power Line Completed.** A 12-kilometre, 120kV power line between the Kansoko and Kakula deposits was completed in December 2017, enabling Kakula to be energized with power from the DRC's hydroelectric power grid.

**Successful Drilling Program.** Drilling at the Kamo-Kakula Project in 2017 focused on expanding and upgrading copper resources at the Kakula Deposit. A total of 121,899 metres, in 239 holes, was drilled.

#### *Kipushi Mine Upgrading and Resource Expansion*

**Continuing Advancement of Mine Upgrading & Drilling Programs.** Ivanhoe made significant progress with its ongoing upgrading of underground mining infrastructure at the Kipushi Project in 2017, advancing the historic mine toward the start of a planned, new era of production. Ivanhoe also completed 58 holes totalling 9,706 metres in its underground drilling program at Kipushi in 2017.

**Agreement Secured to Rebuild Railway Spur Line.** In October 2017, Ivanhoe secured an agreement to rebuild 34 kilometres of inactive track to connect the Kipushi Project with the DRC national railway at Munama, south of the mining capital of Lubumbashi. The region's railway network is capable of delivering Kipushi zinc concentrates to international markets through existing seaports on Africa's Atlantic Ocean and Indian Ocean coasts.

**Completion of Pre-Feasibility Study.** An independent, pre-feasibility study of the Kipushi Project (Kipushi PFS) was completed in December 2017. The Kipushi PFS reported an after-tax net present value, at an 8% discount rate, of US\$683 million and an IRR of 35%. The development plan envisages an 11-year mine life and a life-of-mine average production of 225,000 tonnes of zinc per year.

#### *Platreef's Ongoing Mine Development & Community Initiatives*

**Ongoing Success with Sinking of Planned Mine's Shaft 1.** Ivanhoe advanced the sinking of Shaft 1 for its planned Platreef Mine to a depth of 584 metres at the end of 2017. 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 completed in September 2017.

**Feasibility Study Completed.** In July 2017, an independent definitive feasibility study of the Platreef Project (Platreef FS) was completed. The Platreef FS reported an after-tax net present value, at an 8% discount rate, of US\$916 million and an IRR of 14%. The first phase of development – a four Mtpa concentrator case – is expected to reach an average, annual, life-of-mine production of 476,000 ounces of platinum, palladium, rhodium and gold, plus 21 million pounds of nickel and 13 million pounds of copper.

**Area Residents to Share in Platreef's Economic Benefits.** An estimated 150,000 residents of 20 local Platreef area communities will participate as equity partners in the project's development through an established broad-based, black economic empowerment structure.

**Relocation of Informal Graves.** In 2017, 75 informal graves were successfully relocated – in consultation with affected families and following court approval – from land outside the perimeter of the active Platreef Project development site to new burial plots in a formal cemetery. An additional 19 locations were investigated and found not to contain human remains. Support programs included assistance in providing new burial plots in a formal cemetery, tombstones and related services.

**12,500 Area Residents Accessing Internet Through Free Wi-Fi Service.** An innovative, digital stakeholder engagement program launched in June 2017 established eight free Wi-Fi hotspots in the Platreef Project's host communities and a digital engagement portal, titled Maru a Mokopane (Clouds of Mokopane). Local residents can access the internet; view and apply for the latest job and development opportunities at the Platreef Project, as well as other job opportunities in the region; read local news stories; and engage with the Company.

**Additional Initial Mandated Lead Arrangers Appointed.** In July 2017, Ivanhoe announced the appointment of two additional mine-financing institutions – KfW IPEX-Bank, a German government-owned institution, and the Swedish Export Credit Corporation (SEK) – as Initial Mandated Lead Arrangers (the IMLAs) to arrange debt financing for the ongoing development of the Platreef Project. 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 in April 2017. The five IMLAs will make best efforts to arrange a total debt financing of up to US\$1 billion for the development of Platreef's first-phase, four Mtpa mine.

#### **2017 COMPENSATION DECISIONS**

In late 2017 and early 2018, the Compensation Committee reviewed the compensation levels, including base salaries, of the Company's senior executives. The recommendations made by the Compensation Committee to the Board were supported by the market data and advice provided by Mercer.

Based on the recommendations of the Compensation Committee, the Board adjusted various elements of compensation for relevant executive personnel, where appropriate, to align with Ivanhoe's compensation

philosophy and objectives. The compensation decisions impacting the named executive officers are described below.

### **Base Salaries**

In February 2018, the Board approved increases to the 2018 base salaries of three NEOs.

<b>Name and Principal Position</b>	<b>2017 Salary</b>	<b>Increase</b>	<b>2018 Salary</b>
Robert M. Friedland Executive Chairman and Director	\$650,000	-	\$650,000
Lars-Eric Johansson President and Chief Executive Officer	\$650,000	-	\$650,000
Marna Cloete Chief Financial Officer	R5,544,000 <sup>(1)</sup>	10%	R6,098,400
Mark Farren Executive Vice President, Operations	R6,612,500 <sup>(2)</sup>	7%	R7,075,375
Patricia Makhsha Managing Director, Platreef Project	R4,554,000 <sup>(3)</sup>	7%	R4,872,780

#### **Notes:**

- (1) This amount was received in South African Rand (ZAR) and is equivalent to \$416,520 when converted from "R" to "\$" using the average monthly exchange rate in the month of receipt.
- (2) This amount was received in South African Rand (ZAR) and is equivalent to \$496,796 when converted from "R" to "\$" using the average monthly exchange rate in the month of receipt.
- (3) This amount was received in South African Rand (ZAR) and is equivalent to \$342,142 when converted from "R" to "\$" using the average monthly exchange rate in the month of receipt.

### **Short-Term Incentive Awards**

2017 STI awards were paid out in cash and are expressed below as a percentage of executives' base salary, with actual payouts based on corporate and individual performance results.

<b>Name and Principal Position</b>	<b>STI Target (% of base salary)</b>	<b>Corp. Perf. Score ( / 4.00)</b>	<b>Ind. Perf. Score ( / 4.00)</b>	<b>Total Perf. Score ( / 4.00)</b>	<b>STI Awarded (% of target)</b>	<b>STI Awarded (% of base salary)</b>	<b>STI Awarded (\$)</b>
Robert M. Friedland Executive Chairman and Director	75%	3.55	N/A	3.55	105%	79%	\$511,875
Lars-Eric Johansson President and Chief Executive Officer	75%	3.55	4.00	3.60	105%	79%	\$511,875
Marna Cloete Chief Financial Officer	50%	3.55	4.00	3.66	110%	55%	\$257,387
Mark Farren Executive Vice President, Operations	50%	3.55	4.00	3.66	110%	55%	\$306,993
Patricia Makhsha Managing Director, Platreef Project	50%	3.39	4.00	3.54	100%	50%	\$192,204

### Long-Term Incentive Awards

LTI awards for 2017 bonuses, consisting of RSUs, were approved by the Board in February 2018, and are expressed below as a percentage of executives' base salary, with actual award values based on corporate and individual performance results. Four NEOs received above-target grants.

In recommending RSU awards to the Board, the Compensation Committee also considered the level of authority and responsibility of the NEO, the NEO's contribution to the Company's business, the number of RSUs already granted and outstanding to the NEO, retention considerations and other relevant factors.

Name and Principal Position	LTI Target (% of base salary)	Corp. Perf. Score ( / 4.00)	Ind. Perf. Score ( / 4.00)	Total Perf. Score ( / 4.00)	LTI Awarded (% of target)	LTI Awarded (% of base salary)	Value of RSUs Awarded <sup>(1)</sup>	Number of RSUs Awarded <sup>(2)</sup>
Robert M. Friedland Executive Chairman and Director	100%	3.55	N/A	3.55	110%	110%	\$715,000	253,343
Lars-Eric Johansson President and Chief Executive Officer	100%	3.55	4.00	3.60	110%	110%	\$715,000	253,343
Marna Cloete Chief Financial Officer	50%	3.55	4.00	3.66	120%	60%	\$280,178	99,274
Mark Farren Executive Vice President, Operations	50%	3.55	4.00	3.66	120%	60%	\$334,177	118,407
Patricia Makhesha Managing Director, Platreef Project	50%	3.39	4.00	3.54	100%	50%	\$191,788	67,955

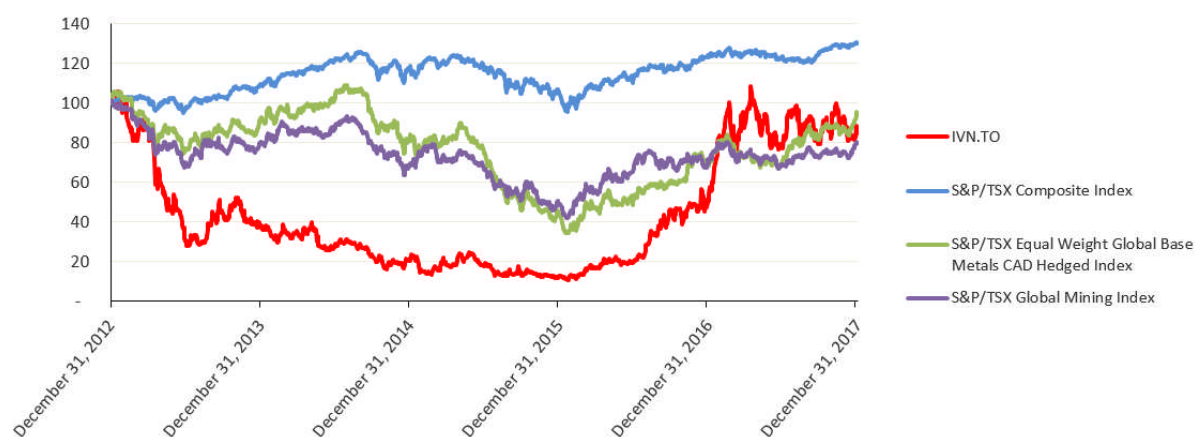
#### Notes:

<sup>(1)</sup> The amounts shown represents RSU awards granted in February 2018. The value attributed to RSU awards was determined with reference to the fair market value at the date of grant. For accounting purposes, the fair value is expensed over the vesting period based on the number of RSUs estimated to vest, however the table includes the full fair market value of RSUs in the period granted.

<sup>(2)</sup> The RSUs were granted in accordance with the provisions of the RSU Plan and vest in three equal parts, each representing 33% of the RSUs, on each of March 1, 2019, March 1, 2020 and March 1, 2021.

### Performance Graph

The following graph shows the change in a C\$100 investment in Ivanhoe Class A Shares since Ivanhoe's initial public offering in October 2012, compared to the S&P/TSX Composite Index, the S&P/TSX Equal Weight Global Base Metals CAD Hedged Index and the S&P/TSX Global Mining Index as at December 31, 2017.



The trend in overall compensation paid to the Company's executive officers over the period has not specifically tracked the performance of the market price of the Company's Class A Shares, or the S&P/TSX Composite Index.

### Summary Compensation Table

The following table sets forth the total compensation paid to, or earned by, the NEOs for the Company's most recently completed three financial years. All dollar figures set out in the following table are in U.S. dollars, unless otherwise specified.

Name and Principal Position	Year Ended Dec. 31	Salary	Share -Based Awards	Option -Based Awards <sup>(2)</sup>	All Other Compensation	Total Compensation
Robert M. Friedland Executive Chairman and Director	2017	\$650,000	\$715,000 <sup>(1)</sup>	\$221,629	\$514,839 <sup>(3)(4)</sup>	\$2,101,468
	2016	\$650,000	\$650,000 <sup>(1)</sup>	\$435,412	\$490,392 <sup>(3)(4)</sup>	\$2,225,804
	2015	\$650,000	\$857,500 <sup>(1)</sup>	\$646,931	\$927,932 <sup>(3)(5)</sup>	\$3,082,363
Lars-Eric Johansson President and Chief Executive Officer	2017	\$650,000	\$715,000 <sup>(1)</sup>	\$280,559	\$516,881 <sup>(6)(7)</sup>	\$2,162,440
	2016	\$650,000	\$650,000 <sup>(1)</sup>	\$494,342	\$502,294 <sup>(6)(7)</sup>	\$2,296,636
	2015	\$650,000	\$500,208 <sup>(1)</sup>	\$914,248	\$589,211 <sup>(7)(8)</sup>	\$2,653,667
Marna Cloete Chief Financial Officer	2017	\$416,520 <sup>(12)</sup>	\$280,178 <sup>(1)</sup>	\$133,078	\$277,546 <sup>(9)(10)(12)</sup>	\$1,107,322
	2016	\$314,599 <sup>(12)</sup>	\$248,209 <sup>(1)</sup>	\$268,006	\$182,590 <sup>(9)(10)(12)</sup>	\$1,013,404
	2015	\$285,484 <sup>(12)</sup>	\$225,604 <sup>(1)</sup>	\$397,859	\$241,654 <sup>(10)(11)(12)</sup>	\$1,150,601
Mark Farren Executive Vice President, Operations	2017	\$496,796 <sup>(12)</sup>	\$334,177 <sup>(1)</sup>	\$94,850	\$333,178 <sup>(12)(13)(14)</sup>	\$1,259,001
	2016	\$391,546 <sup>(12)</sup>	\$308,918 <sup>(1)</sup>	\$178,594	\$228,171 <sup>(12)(13)(14)</sup>	\$1,107,229
	2015	\$366,068 <sup>(12)</sup>	\$199,063 <sup>(1)</sup>	\$214,824	\$195,508 <sup>(12)(14)(15)</sup>	\$975,463



Name and Principal Position	Year Ended Dec. 31	Salary	Share -Based Awards	Option -Based Awards <sup>(2)</sup>	All Other Compensation	Total Compensation
Patricia Makhesha	2017	\$342,142 <sup>(12)</sup>	\$191,788 <sup>(1)</sup>	\$105,481	\$212,363 <sup>(12)(16)(17)</sup>	\$851,774
Managing Director, Platreef Project	2016	\$258,421 <sup>(12)</sup>	\$190,294 <sup>(1)</sup>	\$199,683	\$152,873 <sup>(12)(16)(17)</sup>	\$801,271
	2015	\$260,463 <sup>(12)</sup>	\$85,750 <sup>(1)</sup>	\$290,555	\$105,105 <sup>(12)(16)(17)</sup>	\$741,873

**Notes:**

- (1) The amounts shown represent RSU awards granted in February 2018 (in relation to bonus decisions for the year ended December 2017), December 2016 and December 2015. The value attributed to RSU awards was determined with reference to the fair market value at the date of grant. For accounting purposes, the fair value is expensed over the vesting period based on the number of RSUs estimated to vest, however the table includes the full fair market value of RSUs at the date of grant.
- (2) The value attributed to option based awards represent options granted in prior financial years and which vested in the period and was determined using the Black Scholes Model in accordance with the International Financial Reporting Standards ("IFRS") and the following assumptions: an estimated volatility equal to 63%; an estimated dividend yield of \$nil, a risk free rate of return equal to the rate currently available on federal government zero-coupon bonds with a term equal to the expected life of the option and an expected life approximating the term of the option. No options have been granted since 2015, other than to Mr. Egizio Bianchini in March 2018.
- (3) Canada Pension Plan contributions and Employment insurance premiums to the value of \$2,964 were paid on behalf of Mr. Friedland in 2017 (2016: \$2,892; 2015: \$2,932).
- (4) Mr. Friedland received a bonus of \$511,875 to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations (2016: \$487,500).
- (5) In 2015, Mr. Friedland received a bonus of \$925,000, of which \$600,000 was the Zijin Special Bonus for his contributions toward the successful completion of the Zijin Transaction and the additional bonus of \$325,000 was to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations.
- (6) Mr. Johansson received a bonus of \$511,875 to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations (2016: \$487,500).
- (7) In 2017, Mr. Johansson received \$4,910 in health benefits (2016: \$4,533; 2015: \$3,950), \$96 (2016: \$96; 2015: \$96) in Accidental Death and Dismemberment insurance and \$Nil (2016: \$10,165; 2015: \$10,165) in life cover.
- (8) In 2015, Mr. Johansson received a bonus of \$575,000, of which \$250,000 was the Zijin Special Bonus for his contributions toward the successful completion of the Zijin Transaction and the additional bonus of \$325,000 was to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations.
- (9) For 2017, Ms. Cloete received a bonus of \$257,387 to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations (2016: \$166,411).
- (10) In 2017, Ms. Cloete received \$20,025 in health benefits (2016: \$16,057; 2015: \$17,210) and insurance benefits of \$134 (2016: \$122; 2015: \$141).
- (11) In 2015, Ms. Cloete received a bonus of \$224,303, of which \$125,000 was the Zijin Special Bonus for the conclusion of the Zijin Transaction and the additional bonus of \$99,303 was to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations.
- (12) This amount was received in South African Rand (ZAR) and has been converted from "ZAR" to "\$" using the average monthly exchange rate in the month of receipt.
- (13) For 2017, Mr. Farren received a bonus of \$306,993 to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations (2016: \$207,113).
- (14) In 2017, Mr. Farren received \$26,050 in health benefits (2016: \$20,937; 2015: \$22,321) and insurance benefits of \$134 (2016: \$122; 2015: \$141).
- (15) In 2015, Mr. Farren received a bonus of \$173,046, of which \$75,000 was the Zijin Special Bonus for the conclusion of the Zijin Transaction and the additional bonus of \$98,046 was to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations.
- (16) For 2017, Ms. Makhesha received a bonus of \$192,204 to reflect the respective role and achievements, with a view to market levels of compensation and retention considerations (2016: \$136,694; 2015: \$88,148).
- (17) In 2017, Ms. Makhesha received \$20,025 in health benefits (2016: \$16,057; 2015: \$16,816) and insurance benefits of \$134 (2016: \$122; 2015: \$141).

## Incentive Plan Awards

### Outstanding Share – Based Awards and Option Based Awards

The following table sets forth the options previously granted to the NEOs to purchase or acquire securities of the Company and which were outstanding at the end of the financial year ended December 31, 2017.

Name	Number of Class A Shares underlying unexercised options	Option exercise price	Option expiration date	Option-Based Awards			
				Value of unexercised in-the-money options <sup>(1) (2)</sup>	Number of shares or units of shares that have not vested	Market or payout value of share-based awards that have not vested <sup>(1) (3)</sup>	Market or payout value of share-based awards that have vested <sup>(1) (4)</sup>
Robert M. Friedland Executive Chairman and Director	1,000,000	\$1.57 <sup>(1)</sup>	December 13, 2018	\$1,797,074	-	-	\$1,797,074
	1,700,000	\$0.79 <sup>(1)</sup>	December 8, 2019	\$4,393,289	425,000	\$1,098,322	\$3,294,967
	1,100,000	\$0.51 <sup>(1)</sup>	December 15, 2020	\$3,148,855	550,000	\$1,574,427	\$1,574,427
Lars-Eric Johansson President and Chief Executive Director	1,000,000	\$1.57 <sup>(1)</sup>	December 13, 2018	\$1,797,074	-	-	\$1,797,074
	1,700,000	\$0.79 <sup>(1)</sup>	December 8, 2019	\$4,393,289	425,000	\$1,098,322	\$3,294,967
	1,100,000	\$0.51 <sup>(1)</sup>	December 15, 2020	\$3,148,855	550,000	\$1,574,427	\$1,574,427
Marna Cloete Chief Financial Officer	50,000	\$3.96 <sup>(1)</sup>	January 11, 2018	-	-	-	-
	100,000	\$1.57 <sup>(1)</sup>	December 13, 2018	\$179,707	-	-	\$179,707
	250,000	\$1.15 <sup>(1)</sup>	August 15, 2019	\$554,628	125,000	\$277,314	\$277,314
	350,000	\$0.79 <sup>(1)</sup>	December 8, 2019	\$904,501	175,000	\$452,250	\$452,250
	375,000	\$0.51 <sup>(1)</sup>	December 15, 2020	\$1,073,473	250,000	\$715,649	\$357,824
Mark Farren Executive Vice President, Operations	250,000	\$1.03 <sup>(1)</sup>	June 16, 2019	\$584,447	125,000	\$292,223	\$292,223
	250,000	\$0.79 <sup>(1)</sup>	December 8, 2019	\$646,072	125,000	\$323,036	\$323,036
	450,000	\$0.51 <sup>(1)</sup>	December 15, 2020	\$1,288,168	300,000	\$858,779	\$429,389
Patricia Makhesha Managing Director, Platreef Project	50,000	\$1.38 <sup>(1)</sup>	March 31, 2019	\$99,396	50,000	\$99,396	-
	125,000	\$1.15 <sup>(1)</sup>	August 15, 2019	\$277,314	125,000	\$277,314	-
	125,000	\$0.79 <sup>(1)</sup>	December 8, 2019	\$323,036	125,000	\$323,036	-
	200,000	\$0.51 <sup>(1)</sup>	December 15, 2020	\$572,519	200,000	\$572,519	-



**Notes:**

- (1) Options are issued in "C\$". This amount has been converted from "C\$" to "\$" using the prevailing exchange rate on 31 December 2017 of 1.2576.
- (2) Calculated as the difference between the closing market price of the Class A Shares on the TSX on December 31, 2017 being \$3.37, and the exercise price of the options, multiplied by the number of unexercised options.
- (3) Calculated as the difference between the closing market price of the Class A Shares on the TSX on December 31, 2017 being \$3.37, and the exercise price of the options, multiplied by the number of unvested options.
- (4) Calculated as the difference between the closing market price of the Class A Shares on the TSX on December 31, 2017 being \$3.37, and the exercise price of the options, multiplied by the number of vested options.

***Incentive Plan Awards – Value Vested or Earned during the Year***

The following table sets forth the value vested or earned during the year of option-based awards, share based awards and non-equity incentive plan compensation paid to NEOs, during the most recently completed financial year.

<b>Name</b>	<b>Option-based awards – Value vested during the year<sup>(1)</sup></b>	<b>Share-based awards – Value earned during the year<sup>(2)</sup></b>	<b>Non-equity incentive plan compensation – Value earned during the year</b>
Robert M. Friedland	\$2,254,095	\$1,915,749	\$511,875
Lars-Eric Johansson	\$2,254,095	\$1,098,303	\$511,875
Marna Cloete	\$1,253,379	\$495,727	\$257,387
Mark Farren	\$984,017	\$444,727	\$306,993
Patricia Makhesha	\$997,933	\$188,281	\$192,204

**Notes:**

- (1) The value vested during the year is calculated as the aggregate Canadian dollar value that would have been realized if the options under the option-based award had been exercised on the vesting date by determining the difference between the market price of the underlying securities at exercise and the exercise or base price of the options under the option-based award on the vesting date.
- (2) The value vested during the year is calculated as the aggregate dollar value of the RSUs under the RSU award on the vesting date.

**TERMINATION AND CHANGE OF CONTROL BENEFITS**

Ivanhoe has employment arrangements with each of its NEOs which may include letter agreements, employment agreements, and option and RSU agreements.

The following summary sets out the circumstances when termination payments would be payable to the Company's NEOs, during which time periods and in what circumstances. The table further below provides an estimate of these payments if termination had occurred at the end of the last financial year.

Termination payments become payable to the Company's NEOs under their employment agreements:

- (a) if Ivanhoe terminates the NEO's employment for cause, in which case the NEO is not entitled to notice, payment in lieu of notice, severance payments, damages or any other sums. In the case of termination for cause all unexercised vested and unvested stock options or unvested RSUs will immediately terminate at the date of termination; or
- (b) if Ivanhoe terminates the NEO's employment on notice, by giving six months' notice or by making a payment equal to six months' base salary, plus one additional month's notice, or payment in lieu, for each year of service from the date of commencement of employment to a maximum of 20 months' notice, or payment in lieu, to the NEO. In the case of termination by notice, all of the NEO's unvested stock options are deemed to have vested, and all of such NEOs unexercised stock options remain exercisable until the earlier of twelve months following the date of such

termination and the expiry date of such options. Unvested RSUs for which performance conditions shall have been satisfied shall vest; or

- (c) if an NEO terminates the employment agreement by resignation on six months' notice to Ivanhoe, in which case no payment will be made to the NEO and vested stock options will remain exercisable until the earlier of twelve months follow the date of such termination and the expiry date of such options. Any unvested stock options and unvested RSUs will immediately terminate; or
- (d) if a change of control occurs and, within 12 months one of the following occurs: (i) the NEOs employment is terminated by the Company, except for cause, or (ii) NEO resigns employment for good reason (as defined in his or her employment agreements), then, in lieu of termination payments otherwise due under the employment agreement, each NEO is entitled to receive a lump sum payment equal to his or her annual base salary and an additional cash payment equal to 2 months' pay for each whole or part year of service commencing with the sixth year of continuous service; all of his or her unvested stock options and unvested RSUs will be deemed to have vested, and all his or her unexercised stock options remain exercisable until the earlier of twelve months after termination or the expiry date of the options.

For purposes of the NEO employment agreements, a change of control occurs if, among other things:

- There is a merger, arrangement, amalgamation or similar transaction, after which the holders of Ivanhoe's Class A Shares prior to completion of the transaction, hold less than 50% of the outstanding voting securities of the successor corporation or entity after the transaction; or
- There occurs the direct or indirect acquisition by any person or persons, acting jointly or in concert, of more than 50% of the voting rights attached to all outstanding voting securities of the Company (currently only the Class A Shares are outstanding); or
- The Company sells or otherwise disposes all or substantially all of its assets, other than a sale or other disposition to an affiliate or subsidiary; or
- A person comes to have the enforceable legal right, directly or indirectly, to appoint a majority of the Board; or
- The Board determines that a change of control has occurred or is imminent.

For purposes of the NEO employment agreements what constitutes good reason includes:

- A material adverse change in the NEO's position as to that in effect immediately prior to a change of control; or
- A material failure by the Company to continue in effect any employee benefit program in which the NEO is participating at the time of a change of control, other than as a result of normal expiration; or
- The Company requiring the NEO to move and be based at any location other than that where the NEO was based at the time of a Change of Control; or
- The Company requiring the NEO to report to a person of lower apparent or ostensible authority; or
- Matters constituting constructive dismissal at law.

The following is an estimate of incremental payments to the NEOs under the foregoing scenarios as at December 31, 2017:

Name	Payment of Severance	Benefits	In-the-money Value of Accelerated Options	Value of Accelerated RSUs	Total
<b>(a) Termination by the Company for cause</b>					
Robert M. Friedland	-	-	-	-	-
Lars-Eric Johansson	-	-	-	-	-
Marna Cloete	-	-	-	-	-
Mark Farren	-	-	-	-	-
Patricia Makhesha	-	-	-	-	-
<b>(b) Termination by the Company by notice or payment in lieu of notice</b>					
Robert M. Friedland	\$650,148	-	\$2,672,750	\$3,203,338	\$6,526,236
Lars-Eric Johansson	\$903,322	\$6,957	\$2,672,750	\$2,383,871	\$5,966,899
Marna Cloete	\$655,510	\$31,726	\$1,445,213	\$989,657	\$3,122,106
Mark Farren	\$424,811	\$22,390	\$1,474,038	\$1,044,275	\$2,965,514
Patricia Makhesha	\$301,464	\$17,763	\$1,272,265	\$558,705	\$2,150,196
<b>(c) Termination by the NEO on six months' notice<sup>(1)</sup></b>					
Robert M. Friedland	-	-	-	-	-
Lars-Eric Johansson	-	-	-	-	-
Marna Cloete	-	-	-	-	-
Mark Farren	-	-	-	-	-
Patricia Makhesha	-	-	-	-	-
<b>(d) Termination following Change of Control</b>					
Robert M. Friedland	\$758,333	-	\$2,672,750	\$3,203,338	\$6,634,421
Lars-Eric Johansson	\$1,191,667	-	\$2,672,750	\$2,383,871	\$6,248,287
Marna Cloete	\$895,271	-	\$1,445,213	\$989,657	\$3,330,141
Mark Farren	\$533,908	-	\$1,474,038	\$1,044,275	\$3,052,222
Patricia Makhesha	\$367,700	-	\$1,272,265	\$558,705	\$2,198,670

**Notes:**

- <sup>(1)</sup> Although no severance is payable if an NEO terminates the employment agreement on six months' notice, the NEO will still continue to receive the required compensation under his or her employment arrangement during the notice period.

## SECTION 5 - CORPORATE GOVERNANCE

CORPORATE GOVERNANCE	53
BOARD OF DIRECTORS	53
ETHICAL BUSINESS CONDUCT	58
COMMITTEES	58
POLICIES	61

## CORPORATE GOVERNANCE

National Instrument 58-101 – *Disclosure of Corporate Governance Practices* (the “**Disclosure Instrument**”) requires the Company to annually disclose its corporate governance practices with reference to a series of corporate governance practices outlined in National Policy 58-201 – *Corporate Governance Guidelines* (the “**Guidelines**”).

The following is a discussion of each of the Company’s corporate governance practices for which disclosure is required by the Disclosure Instrument. Unless otherwise indicated, the Board believes that its corporate governance practices are consistent with those described in the Guidelines.

### BOARD OF DIRECTORS

#### *Director Independence*

For the purposes of the Disclosure Instrument, a director is independent if he or she has no direct or indirect material relationship with the Company. A “material relationship” is one which could, in the view of the Board, reasonably be expected to interfere with the exercise of the director’s independent judgment. Certain specified relationships will, in all circumstances, be considered, for the purposes of the Disclosure Instrument, to be material relationships and render the director non-independent.

As of the date of this Management Proxy Circular, the Board consists of five (5) individuals who are independent and four (4) individuals who are currently considered not independent, when applying the criteria prescribed by the Disclosure Instrument. If all of management’s nominees are elected as directors at the Meeting, the Board will consist of five (5) individuals who are independent and four (4) individuals who are not independent.

The current independent directors are: Ian Cockerill, William Hayden, Oyvind Hushovd, Livia Mahler and Kgalema Motlanthe. Mr. Ian Cockerill has been appointed as the Lead Independent Director of Ivanhoe, whose mandate in this regard is to act in a leadership role on behalf of all independent directors.

Robert M. Friedland (the Executive Chairman of the Board), Egizio Bianchini, Peter Meredith, and Guy de Selliers are not independent for the purposes of the Disclosure Instrument. Mr. Friedland is the founder and Executive Chairman of the Company. Mr. Bianchini is the Executive Vice Chairman of the Company. Mr. Meredith has been determined to be not independent at this time by virtue of his historical business relationship with Mr. Friedland. Finally, Mr. de Selliers is not independent as a result of his material interest in HCF International Advisors, a firm who provides financial advisory services to the Company.

The Board considers the independence of its members from time to time.

#### *Other Directorships*

For information respecting those companies that are reporting issuers in Canada or elsewhere (or the equivalent), in which any of the directors of the Company also act as directors, please see Section 3 – “Directors Disclosure” in this Management Proxy Circular.

#### *Meetings of Independent Directors*

Meetings of the independent directors are held to update the independent directors on corporate developments since the last Board meeting. There were three (3) meetings of the independent directors held in 2017.

The Compensation Committee and the Nominating and Corporate Governance Committee are comprised solely of independent directors. Any committee member can request that any part of a committee meeting be held on an in camera basis at any time. Accordingly, the Board believes that the committee meetings provide an adequate forum in which to facilitate open and candid discussion among the Company’s independent directors. Each of the Nominating and Corporate Governance Committee and the Compensation Committee met four (4) and three (3) times, respectively, during 2017.

### ***Independence of Board Chair and Lead Director***

Robert M. Friedland, the Executive Chairman, is a non-independent director. However, Ian Cockerill, the Independent Lead Director of the Board, is an independent director. Mr. Cockerill's responsibilities include:

- providing a source of Board leadership;
- ensuring that the Board functions effectively and independently of management;
- overseeing the quality of the information sent to directors;
- acting as a facilitator with respect to interaction among the independent directors and between management and the independent directors;
- chairing any meetings of the independent directors held from time to time; and
- overseeing the governance obligations of the Board and its committees generally.

### ***Meeting Attendance Records***

For information concerning the number of Board and committee meetings held in 2017 and the attendance record of each director in respect of those meetings, please see "Election of Directors" in Section 2 – "Meeting Matters" starting on page 11 of this Management Proxy Circular and Section 3 – "Directors Disclosure" starting on page 14.

### ***Mandate of the Board***

Under the BCBCA, the directors of the Company are required to manage the Company's business and affairs, and in doing so to act honestly and in good faith with a view to the best interests of the Company. In addition, each director must exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.

The Board recognizes its overall responsibility for corporate governance, and discharges that responsibility through the establishment and operation of its standing Nominating and Corporate Governance Committee, which is tasked with developing and implementing the Company's overall corporate governance approach.

As required by the BCBCA, the Board is responsible for supervising the conduct of the Company's affairs and the management of its business, including setting long-term goals and objectives for the Company, formulating the plans and strategies necessary to achieve those objectives, supervising senior management in their implementation, and reviewing the principal risks inherent in the Company's business. Although the Board delegates the responsibility for managing the day to day affairs of the Company to senior management personnel, the Board retains a supervisory role in respect of, and ultimate responsibility for, all matters relating to the Company and its business. The obligations of the Board must be performed continuously, and not merely from time to time, and in times of crisis or emergency the Board may assume a more direct role in managing the affairs of the Company.

The Board strives to ensure that actions taken by the Company are in the best interest of the Company's shareholders. The Board's strategic planning process includes annual and quarterly budget reviews and approvals and reviews of the operations and risk issues at each Board meeting which are required to carry out the Company's growth strategy and to achieve its objectives. In addition to those matters that must, by law, be approved by the Board, the Board is required to approve annual operating and capital budgets, any material dispositions, acquisitions and investments outside of the ordinary course of business or not provided for in the approved budgets, long-term strategy, organizational development plans, the appointment of officers and non-delegatable matters prescribed by the BCBCA. The Board periodically reviews its mandate and supplements it as required from time to time.

The Board fulfills its statutory obligations through direct and indirect oversight, setting and monitoring policy, appointing committees and appointing officers of the Company. Specific responsibilities under the written mandate include the following:

1. Approving the issuance of any securities of the Company.
2. Approving the incurrence of any debt by the Company outside the ordinary course of business.
3. Reviewing and approving the annual and quarterly capital and operating budgets.
4. Reviewing and approving major deviations from the capital and operating budgets.
5. Approving the annual audited consolidated financial statements and interim consolidated financial statements, including the management discussion & analysis, information circulars, annual information forms, annual reports, offering memorandums and prospectuses.
6. Approving material investments, dispositions and joint ventures, and approving any other major initiatives outside the scope of approved budgets.
7. Reviewing and approving the Company's strategic plans, adopting a strategic planning process and monitoring the Company's performance.
8. Reviewing and approving the Company's incentive compensation plans.
9. Determining the composition, structure, processes, and characteristics of the Board and the terms of reference of committees of the Board, and establishing a process for monitoring the Board and its directors on an ongoing basis.
10. Appointing a Nominating and Corporate Governance Committee, an Audit Committee, a Compensation and Human Resources Committee, and any other committees from time to time, and delegating to any such committees powers of the Board as appropriate and legally permissible.
11. Nominating the candidates for the Board to the shareholders, based on recommendations from the Nominating and Corporate Governance Committee.
12. Providing an appropriate orientation and education program for new directors.
13. Determining whether individual directors meet the requirements for independence under applicable regulatory requirements, separately or following a review by the Nominating and Corporate Governance Committee.
14. Monitoring the ethical conduct of the Company and ensuring that it complies with applicable legal and regulatory requirements.
15. Ensuring that the directors that are independent of management have the opportunity to meet regularly.
16. Reviewing its mandate and other Board and Company policies and the terms of reference for committees of the Board in place from time to time and propose modifications as applicable.
17. Appointing and monitoring the performance of senior management, formulating succession plans for senior management and the Board and, with the advice of the Compensation Committee, approving the compensation of senior management.
18. Ensuring policies and processes are in place for identifying principal business risks and opportunities for the Company, addressing the extent to which such risks are acceptable to the Company, and ensuring that appropriate systems are in place to manage risks.

19. Ensuring policies and processes are in place to ensure the integrity of the Company's internal control, financial reporting and management information systems.
20. Ensuring appropriate policies and processes are in place to ensure the Company's compliance with applicable laws and regulations, including timely disclosure of relevant corporate information and regulatory reporting.
21. Exercising direct control during periods of crisis.
22. Serving as a source of advice to senior management, based on directors' particular backgrounds and experience.
23. Ensuring that the directors have direct access to management and, as necessary and appropriate, independent advisors.
24. Ensuring evaluations of the Board and its committees are carried out at least annually.

### **Position Descriptions**

#### *Executive Chairman*

The Board has not adopted a written position description for the Executive Chairman, Mr. Friedland, as his role has historically been unique and challenging to properly articulate in a written position description. To date the scope of duties of the Executive Chairman has been tailored to the unique skills, talents and mining business experience that Mr. Friedland possesses and includes strategic planning, corporate and business development, fundraising and value creation.

#### *Executive Vice Chairman*

Mr. Bianchini, Executive Vice Chairman, joined the Company in March 2018. A written position description is being developed at this time.

#### *Committee Chairs and Lead Director*

The Board has adopted a position description for the Chair of each of the Audit Committee, the Nominating and Corporate Governance Committee, the Compensation Committee, and the Sustainability Committee. The Board also has adopted a position description for the Lead Director. The Board has not adopted a position description for the Chair of the Technical Committee at this time.

#### *CEO*

The Board has adopted a written position description for the CEO. The CEO is responsible for the day-to-day operations of the Company, and, with the management team, pursues Board approved strategic initiatives within the context of authorized business, capital plans and corporate policies. The CEO is expected to report to the Board on a regular basis on short-term results and long-term business development activities.



## ***Orientation and Continuing Education***

### ***Board Orientation***

The Board is responsible for providing for the orientation and education of new members of the Board and all new directors are provided with copies of the Company's policies, although a formal orientation and education process has not been adopted. Prior to joining the Board, each new director is briefed by management of the Company. This briefing includes an outline of the business and prospects of the Company, both positive and negative, with a view to ensuring that such director is properly informed to commence his or her duties as a director. Each new director is also given the opportunity to meet with the auditors and counsel to the Company, and to make site visits to the Company's properties.

### ***Continuing Education***

Management and outside advisors provide information to the Board and its committees to keep the directors up-to-date with the Company, its business and the legal, regulatory and financial environments in which it operates, as well as with developments in the responsibilities of directors. In addition, directors are encouraged to take courses relevant to the Company and its business, particularly with respect to corporate governance and the mining industry.

## ***Assessments***

In 2014, the Nominating and Corporate Governance Committee established a formal process for assessing the effectiveness of the Board as a whole, its committees and individual directors. As part of this annual process, directors complete a detailed questionnaire which provides for quantitative and qualitative ratings of their and the Board's performance in key areas and seeks subjective comment in each of those areas. The Chairman of the Nominating and Corporate Governance Committee reviews a summary report consolidating individual responses. The Nominating and Corporate Governance Committee also reviews the results of the self-assessment process, identifies areas requiring follow-up, and reports to the Board on the results of the assessment process. Action plans to follow up on specific issues are monitored by the Nominating and Corporate Governance Committee.

Notwithstanding the foregoing, the Nominating and Corporate Governance Committee will, as part of its mandate: (i) examine the size and composition of the Board and recommend adjustments from time to time to ensure that the Board is of a size and composition that facilitates effective decision-making; (ii) identify and assess the necessary and desirable competencies and characteristics for the Board and the extent to which those competencies and characteristics are represented thereon; (iii) ensure that the Board has appropriate structures and procedures in order to function with the proper degree of independence from management; (iv) review practices and procedures of the Board in light of ongoing developments in securities law, stock exchange and regulatory requirements, and industry best practices, relating to matters of corporate governance; (v) consider the Board composition in light of the Diversity Policy and its goals and objectives, and (vi) review and reassess the adequacy of the Company's corporate governance policies, practices and procedures annually and recommend to the Board any changes deemed appropriate by it.

## ETHICAL BUSINESS CONDUCT

The directors encourage and promote a culture of ethical business conduct through communication and supervision as part of their overall stewardship responsibility. In addition, the Company has adopted a Code of Business Conduct and Ethics (the “**Code**”) which addresses the Company’s continuing commitment to integrity and ethical behaviour. The Code establishes procedures that allow directors, officers and employees of the Company to confidentially address their concerns regarding questionable ethical, moral, accounting or auditing matters, without fear of retaliation. The Audit Committee oversees and administers the Company’s policies for the receipt and review of complaints or concerns, made in writing, by telephone or online using the Company’s confidential and anonymous whistleblower reporting system, with respect to questionable accounting, internal accounting controls or auditing matters.

Compliance with the Code is maintained primarily through the reporting process within the Company’s organizational structure.

A copy of the Code may be obtained upon request to the Vice President, Compliance and Corporate Secretary, 654 - 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone 1-604-688-6630. In addition, the Code is available at [www.sedar.com](http://www.sedar.com) and on the Company’s website at [www.ivanhoemines.com](http://www.ivanhoemines.com).

The Company uses a confidential and anonymous reporting system that allows individuals to report suspected illegal, unethical or improper conduct that may be in violation of the Code through the Internet or a toll-free telephone number. The reporting system is run by an independent third party and generates reports for the Company’s Corporate Secretary and the Audit Committee. The Corporate Secretary reviews the reports with the Chair of the Audit Committee as they are received and investigates any alleged breaches of the Code and certain other Company policies on behalf of the Audit Committee and in consultation with the Audit Committee Chairman.

Certain members of the Board are directors or officers of, or have significant shareholdings in, other mineral resource companies and, to the extent that such other companies may participate in ventures in which the Company may participate, the directors of the Company may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. Where such a conflict involves a particular Board member (i.e. where a Board member has an interest in a material contract or material transaction involving the Company), such Board member will be required to disclose his or her interest to the Board and refrain from voting at the Board meeting of the Company considering such contract or transaction in accordance with applicable law. It is not always easy to determine whether a conflict of interest exists, so any potential conflicts of interest are encouraged to be reported promptly to a member of senior management who is independent of the potential conflict and who will assess the issue with the advice of legal counsel. In rare instances, if deemed appropriate, the Company may establish a special committee of independent directors to review a matter in which one or more directors, or management, may have a conflict.

## COMMITTEES

### *Audit Committee*

The Audit Committee is comprised of Oyvind Hushovd (Chair), William Hayden and Livia Mahler, each of whom is “financially literate” within the meaning of National Instrument 52-110 – *Audit Committees* (“**NI 52-110**”) of the CSA. All Audit Committee members are “independent” within the meaning of NI 52-110.

The Company has adopted an Audit Committee charter which codifies the mandate of the Audit Committee, and specifically defines the relationship with, and expectations of, the external auditors, including the establishment of the independence of the external auditor and the approval of any non-audit mandates of the external auditor; the engagement, evaluation, remuneration and termination of the external auditor; its relationship with, and expectations of, the internal auditor function and its oversight of internal control; and the disclosure of financial and related information. The Board will review and reassess the adequacy of the Audit Committee charter on an annual basis.

The Audit Committee meets as frequently as circumstances require, but not less frequently than four times per year to fulfill its mandate. In 2017, the Audit Committee met four (4) times.

A copy of the Audit Committee's charter may be obtained upon request to the Vice President, Compliance and Corporate Secretary, 654 - 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone 1-604-688-6630. In addition, the Audit Committee charter is included in each Annual Information Form filed by the Company and available at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.ivanhoemines.com](http://www.ivanhoemines.com).

The Company has complied with Section 5.1 of NI 52-110, and the disclosure required by Form 52-110F1 is included in the Company's Annual Information Form under the heading "Audit Committee Information".

### ***Nominating and Corporate Governance Committee***

The Board's mandate includes monitoring the ethical conduct of the Company, ensuring that it complies with applicable legal and regulatory requirements and that appropriate policies and processes are in place to ensure the Company's compliance with applicable laws and regulations, including timely disclosure of relevant corporate information and regulatory reporting. The Board recognizes its overall responsibility for corporate governance, and discharges that responsibility through the establishment and operation of its standing Nominating and Corporate Governance Committee.

The Board established the Nominating and Corporate Governance Committee to assist with the nomination of directors and to develop, monitor and implement the Company's approach to corporate governance. The Nominating and Corporate Governance Committee, is comprised of Ian Cockerill (Chair), Livia Mahler and Kgalema Motlanthe, each of whom is independent. Mr. Motlanthe became a member of the Nominating and Corporate Governance Committee in April 2018, replacing Peter Meredith who served as a member of such committee since August 2013.

The role of the Nominating and Corporate Governance Committee is to, amongst other things: (i) identify individuals qualified to become members of the Board and Board committees, and recommend that the Board select such persons as nominees for appointment or election to the Board; (ii) develop and recommend to the Board corporate governance policies, practices and guidelines for the Company and to make recommendations to the Board with respect to such corporate governance policies, practices and guidelines; (iii) establish such permanent or ad hoc committees as it deems necessary for the purposes of assisting in the corporate governance of the Company, and (iv) monitor the Company's Diversity Policy. All members have a working familiarity with the Company's corporate governance policies, practices and guidelines.

In fulfilling its responsibilities to identify individuals qualified to become members of the Board, the committee will consider: (i) the independence of each nominee; (ii) the experience and background of each nominee; (iii) the skill set of each nominee relative to the balance of skills required by the Board and its committees to meet their respective mandates; (iv) the past performance of directors being considered for election; (v) applicable regulatory requirements; (vi) the Diversity Policy and its objectives, and (vii) such other criteria as may be established by the Board or the Nominating and Corporate Governance Committee from time to time.

The Nominating and Corporate Governance Committee meets as many times as it deems necessary, but not less frequently than two times per year to fulfill its mandate. In 2017, the Nominating and Corporate Governance Committee met four (4) times.

A copy of the Nominating and Corporate Governance Committee's charter may be obtained upon request to the Vice President, Compliance and Corporate Secretary, 654 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone 1-604-688-6630 and is available on the Company's website at [www.ivanhoemines.com](http://www.ivanhoemines.com).

### **Compensation and Human Resources Committee**

The Board's mandate includes reviewing and approving compensation for the directors and officers of the Company. The Board has established the Compensation Committee, which is currently comprised of Livia Mahler (Chair), Ian Cockerill and Oyvind Hushovd, each of whom is independent.

The individuals comprising the Compensation Committee have acted as directors and executive officers for a variety of publicly listed and private companies. As a group, such directors have considerable directorship experience. The Company believes that the directors' experiences in this regard are relevant to their responsibilities in considering and determining executive compensation and assists them to make informed decisions on the suitability of the Company's compensation policies and practices in light of the Company's business, its objectives and comparative market practices.

For a complete description of the Compensation Committee's mandate, please refer to page 32. The Compensation Committee's mandate includes establishing an overall compensation policy for the Company and monitoring its implementation, with special attention devoted to executive management. In particular, the Compensation Committee is responsible for reviewing and making recommendations to the Board periodically regarding the Company's remuneration and compensation policies, including short and long-term incentive compensation plans and equity-based plans (including the Amended and Restated Employees' and Directors' Equity Incentive Plan (the "**Equity Incentive Plan**"), the DSU Plan and the RSU Plan), bonus plans, and benefit plans (including the group life and health program). In this regard, the Compensation Committee has the authority to retain such independent advisors as it may deem necessary or advisable for its purposes.

The Compensation Committee meets as many times as it deems necessary, but not less frequently than two times per year to fulfill its mandate. In 2017, the Compensation Committee met three (3) times.

A copy of the Compensation Committee's charter may be obtained upon request to the Vice President, Compliance and Corporate Secretary, 654 – 999 Canada Place, Vancouver, British Columbia, V6C 3E1, telephone 1-604-688-6630 and is available on the Company's website at [www.ivanhoemines.com](http://www.ivanhoemines.com).

### **Other Board Committees**

In addition to the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, the roles of which have been discussed above, the Board has also created the Sustainability Committee and the Technical Committee.

#### *Sustainability Committee*

The Sustainability Committee consists of two non-independent directors in Guy de Selliers (Chair) and Peter Meredith, and one independent director in William Hayden. The Board has determined that the input of management is important in reviewing the environmental affairs of the Company and the Sustainability Committee liaises with the management of Ivanhoe on an as needed basis.

The Sustainability Committee is responsible for establishing and reviewing the Company's safety, health and environmental policies; monitoring effectiveness of, and compliance with, such policies; and receiving audit results and reports from management regarding sustainability performance.

#### *Technical Committee*

The Technical Committee consists of one independent director Ian Cockerill (Chair) and two non-independent directors in Guy de Selliers and Egizio Bianchini. The Technical Committee was formed to assist the Board in fulfilling its oversight responsibilities in respect of monitoring and reviewing any matters of significance affecting mineral resources and reserves, project development, asset operations and other operational activities in respect of the exploration, permitting, construction and development of its mineral properties and projects.

## POLICIES

### *Majority Voting Policy*

In 2013, the Board adopted a majority voting policy, which requires that, in an uncontested election, any nominee for director with respect to whom a majority of the votes represented by proxies validly deposited prior to the Meeting are “withheld” from his or her election (a “**Majority Withheld Vote**”), submit his or her resignation to the Board immediately following the Meeting. The Board will meet to consider the resignation and absent exceptional circumstances, the Board will accept the resignation of the Non-Supported Director. In determining whether exceptional circumstances exist the Board may consider:

- (a) whether the Company would cease to be in compliance with corporate or securities law requirements if the Board accepts the resignation of the Non-Supported Director;
- (b) whether the Company would be breaching the terms of any commercial agreement if the Board accepts the resignation of the Non-Supported Director;
- (c) whether the Non-Supported Director is a key member of an established and active special committee and whether accepting the resignation of the Non-Supported Director would jeopardize the achievement of the special committee’s mandate; and
- (d) whether majority voting was used for a purpose inconsistent with the policy objectives set forth by the TSX.

Information which is generally available to shareholders at the time of their vote does not constitute exceptional circumstances, including:

- (a) the Non-Supported Director’s length of service;
- (b) the Non-Supported Director’s qualifications and experience;
- (c) the Non-Supported Director’s attendance at meetings; and
- (d) the Non-Supported Director’s contributions to the Company.

An exceptional circumstance can also not be a recurring event.

Within ninety (90) days of the date of the meeting of shareholders at which the election of directors took place:

- (a) the Board will meet to consider if there are exceptional circumstances, failing which the Board will accept the Non-Supported Director’s resignation not later than such 90th day, and
- (b) the Company will issue a press release announcing the accepted resignation of the Non-Supported Director or explaining the reasons justifying the Board’s decision not to accept the resignation, a copy of which will be delivered to TSX.

If the Board determines that exceptional circumstances do exist, and the Board does not accept the resignation of the Non-Supported Director, the Company will take the necessary steps to resolve the exceptional circumstance prior to the next shareholder meeting at which directors are elected. In addition, TSX will contact the Company to discuss the Board’s determination.

Subject to applicable law, the Board may (1) leave a vacancy in the Board unfilled until the next annual meeting of shareholders, (2) fill the vacancy by appointing a new director whom the Board considers to merit the confidence of the shareholders, or (3) call a special meeting of shareholders to consider new board nominee(s) to fill the vacant position(s).

No Non-Supported Director may attend (unless attendance is strictly required for quorum purposes) or participate in any deliberations of the Board respecting whether or not to accept his or her resignation pursuant to the operation of this policy.

In a contested election, where the number of director nominees exceeds the number of directors to be elected, a plurality vote standard will continue to apply.

No director has received a Majority Withheld Vote since the implementation of the policy.

### ***Minimum Stock Ownership Policy***

The Company has adopted a corporate policy to encourage non-executive directors to invest in the Class A Shares of the Company by requiring each non-executive director to hold Class A Shares having an aggregate market value equal to not less than one (1) times the basic annual retainer non-executive directors. Each non-executive director is expected to meet this minimum threshold by December 31 of the third year following his or her initial appointment or election to the Board.

Recognizing that the market value of publicly traded equity securities fluctuates over time, this policy does not require a director to “top up”. Once a director attains the minimum ownership threshold for the first time, he or she is considered to be in compliance with the policy for as long as he or she continues to hold at least the number of shares that he or she was required to hold as of the date that he or she first met the minimum threshold. Presently, the non-executive directors’ basic annual retainer is \$60,000 and each non-executive director has met the current minimum market value threshold and is in compliance with the policy with the exception of Ms. Mahler, who, having joined the Board of Directors in March 2015, has until December 31, 2018 to meet the minimum ownership threshold and Mr. Motlanthe, who having joined the Board on April 10, 2018, has until December 31, 2021 to meet the minimum ownership threshold.

The Company has also adopted a corporate policy to align the interests of the Company’s executive management with the interests of its shareholders by requiring the executive officer to hold Class A Shares having an aggregate market value equal to not less than one (1) times his annual base salary within five years of the later of (i) the date of commencement of his or her employment as executive officer or (ii) the adoption of the policy by the Company. The Company adopted such policy in December 2013 and executive management is required to meet the ownership threshold by the later of (i) December 2018, or (ii) five years from the date of commencement of his or her employment as an executive officer.

### ***Diversity***

#### ***Diversity Policy***

The Board has adopted a written diversity policy (“**Diversity Policy**”), which includes the identification and nomination of women directors, as well as diversity generally.

The Diversity Policy has as its objectives, the advancement of the representation of women and other minority groups on the Board, and the advancement and facilitation of a range of diversity initiatives throughout the Company.

The Diversity Policy requires that senior management implement steps throughout the organization to examine and implement the goals of the Diversity Policy, and to report periodically to the Board on its efforts to do so. The Board, through the Nominating and Corporate Governance Committee, is required to assess its composition in light of the Diversity Policy, and must consider potential candidates from all backgrounds when there is the need to fill vacancies on the Board.

The Diversity Policy permits the development of measurable objectives and diversity targets throughout the organization. These will be considered by the Board and Nomination and Corporate Governance Committee. Senior management is expected to develop measurable objectives and diversity targets at the project level.



The Nominating and Corporate Governance committee is required to review the effectiveness of the Diversity Policy on an annual basis.

#### *Director Identification and Selection Process*

The Diversity Policy requires the Board and the Nominating and Corporate Governance Committee to consider diversity, including the representation of women, on the Board, in identifying and nominating candidates for election or re-election to the Board.

#### *Representation of Women in Executive Officer Appointments*

Ivanhoe considers the level of representation of women in executive officer positions when making executive officer appointments.

#### *Targets Regarding the Representation of Women on the Board and in Executive Officer Positions*

Ivanhoe and the Board have not developed “targets” for the representation of women on the Board and in executive officer positions. The Diversity Policy permits the setting of such targets, and Ivanhoe continues to examine the appropriateness of establishing a “target” at all levels throughout the organization, and if so, what target would be appropriate in light of its jurisdiction of operations, industry, and organizational structure.

#### *Number of Women on the Board and in Executive Officer Positions*

The Board includes one woman director, representing 11% of the total number of directors. If all of management’s nominees for election as a director are elected, women will represent 11% of the total number of the then nine (9) directors.

Ivanhoe has one woman who is an executive officer of the Company, its Chief Financial Officer. Including all of its major subsidiaries, Ivanhoe has two (2) female executive officers out of seven (7) constituting 29% of the executive officers. When all senior managers of the organization are considered, Ivanhoe has 10 female senior managers out of a total senior management staff of 60, representing 16.7% of senior management.

#### ***Director Term Limits and Board Renewal***

The Company has not adopted term limits for its directors. The Board considers that given the nature of the business of the Company (the development of mines), and that mine development can routinely take more than a decade from discovery to first production, that the Company and its shareholders benefit from the experience brought to projects by Board members with significant experience and continuity of time serving the Company and its shareholders.

## SECTION 6 – SUMMARY OF SECURITIES-BASED COMPENSATION ARRANGEMENTS

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS	65
SUMMARY OF THE EQUITY INCENTIVE PLAN	65
SUMMARY OF THE RESTRICTED SHARE UNIT PLAN	69
SUMMARY OF THE DEFERRED SHARE UNIT PLAN	73



## SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

Equity participation is accomplished through the Company's Equity Incentive Plan dated May 5, 2014, as amended from time to time. The Company also established its RSU Plan (as defined herein) in 2015 which provides for the issuance of Class A Shares upon the vesting of restricted share units. Prior to the adoption of the Equity Incentive Plan, options were granted to certain directors, officers, employees and consultants pursuant to Option Agreements.

The following information is as at May 8, 2018:

Plan Category	Number of securities to be issued upon exercise of outstanding options, DSUs, RSUs and rights (a)	Weighted-average exercise price of outstanding options, and rights <sup>(3)</sup> (b)	Number of securities remaining available for future issuance under equity compensation plans <sup>(1)(2)</sup>
Equity compensation plans approved by the securityholders	29,507,793	\$1.11 <sup>(4)</sup>	44,109,911
Equity compensation plans not approved by the securityholders	N/A	N/A	N/A
Total	29,507,793	\$1.11 <sup>(4)</sup>	44,109,911

### Notes:

- (1) Excludes bonus shares and the Purchase Plan.
- (2) Includes Class A Shares issuable upon vesting of RSUs and DSUs and Class A Shares issued in connection with vested RSUs and DSUs.
- (3) Does not include DSUs or RSUs.
- (4) Converted to "\$" using the Bank of Canada daily exchange rate as at May 8, 2018 – C\$1.00 to \$0.77.

## SUMMARY OF THE EQUITY INCENTIVE PLAN

### *Purpose*

Pursuant to the EIP, the Board may from time to time, grant, by resolution, to eligible participants: (i) non-transferable options; (ii) Class A Shares by way of a bonus-in-kind; and (iii) the right to participate in a common share purchase plan (the "**Purchase Plan**"). The purpose of the EIP is to secure for the Company and its shareholders the benefits of incentives inherent in share ownership by the employees and directors of the Company and its affiliates who, in the judgment of the Board, will be largely responsible for the Company's future growth and success. Eligible participants include directors, employees and service providers of the Company and any of its affiliates.

### *Limits of Issuance*

The aggregate number of Class A Shares that may be reserved for issuance as options under the EIP (excluding those allocated for issuance as bonus shares and under the Purchase Plan, as described below), together with any other security based compensation arrangements of the Company outstanding from time to time, shall not exceed 10% of the issued and outstanding Class A Shares from time to time. The EIP is a "rolling plan" and, in accordance with the rules of the Toronto Stock Exchange (the "**TSX**") options that have been cancelled, have expired or have been exercised will be available to be re-granted under the EIP and, will not reduce the aggregate number of Class A Shares that may be subject to issuance under the EIP.

### *Insider Participation Limit*

The aggregate number of Class A Shares: (i) that may be reserved for issuance to insiders under the EIP (or when combined with all of the Company's other security based compensation arrangements) shall not exceed 10% of the outstanding Class A Shares from time to time; (ii) that may be issued to insiders under the EIP (or when combined with all of the Company's other security based compensation arrangements) within any one-year period shall not exceed 10% of the Company's outstanding Class A Shares from time to time; and (iii) that may be issued to any one insider and his or her associates under the EIP within any one-year period shall not exceed 5% of the Company's outstanding Class A Shares from time to time. The number of Class A Shares at any time reserved for issuance to any one participant under all securities based compensation arrangements shall not exceed 5% of the Company's outstanding Class A Shares from time to time. In addition, non-executive directors may not be issued options with a fair market value in excess of C\$100,000 in any one calendar year.

### *Options Terms and Exercise Price*

The Board may at any time authorize the granting of options to such eligible participants as it may select, for the number of Class A Shares that it shall designate subject to the provisions of the EIP. The term of any options granted shall be five years from the date such option is granted (or such greater or lesser duration as the Board, on the recommendation of the Compensation and Human Resources Committee of the Board, may determine at the date of grant, but subject to any applicable TSX requirements), provided that if the expiry date should be determined to occur during a "blackout period" or within ten days following the expiry of such a period, the expiry date of such option shall be deemed to be the tenth business day following expiry of the blackout period. Each option shall have an exercise price equal to the volume-weighted average price of the Class A Shares on the TSX for the five days on which the Class A Shares were traded immediately preceding the date of grant.

### *Option Vesting*

Unless otherwise determined by the Board or as otherwise set forth in the EIP, options shall vest and may be exercised (in each case to the nearest full Class A Share) in four equal parts, representing 25% of the options, commencing on the one year anniversary of the date of grant and on each of the three anniversaries thereafter. Subject to the termination provisions of the EIP, any options previously vested but not yet exercised are exercisable until the end of the option period.

### *Cashless Exercise*

Eligible participants may elect to, in lieu of the exercise of a vested option by cash payment, receive that number of Class A Shares which is equal to the quotient obtained by: (i) subtracting the option exercise price per Class A Share from the volume-weighted average price of the Class A Shares on the TSX for the five trading days immediately preceding the date of such election and multiplying that amount by the number of Class A Shares issuable on exercise of the vested option subject to election; and (ii) dividing the product obtained from (i) by the volume-weighted average price of the Class A Shares on the TSX for the five trading days immediately preceding the date of such election.

### *Effect of Termination of Employment or Death*

Unless otherwise determined by the Board, if an eligible participant ceases to be employed by, or act as a director of, the Company or an affiliate: (i) as a result of death, any vested options held by such eligible participant at the date of death shall be exercisable, by the person or persons whom the deceased's rights under the option shall pass by the deceased's will or operation of law, only to the extent that the eligible participant was entitled to exercise the option at the date of their death and only for 12 months after such date or the expiration of the option, whichever is sooner; (ii) for cause, no option held by such eligible participant, whether vested or unvested, will be exercisable following the date on which such eligible participant ceased to be employed or to be a director, as the case may be; or (iii) for any reason other than death or cause, any vested option held by such eligible participant at the effective date thereof shall be and become exercisable for a period of up to 90 days thereafter or the expiration of the option,

whichever is sooner. In the case of (i) and (iii), any unvested options shall not vest and shall terminate at the date of death or the date of cessation of employment or directorship, as the case may be.

#### *Effect of Takeover Bid*

If an offer, which constitutes a formal take-over bid under applicable Canadian securities law, for Class A Shares is made to a holder of an option or to shareholders generally or to a class of shareholders which includes the holder of an option, and such offer, if accepted in whole or in part, would result in the offeror becoming a control person of the Company within the meaning of the Ontario *Securities Act*, then the Company shall notify each holder of an option of the particulars of the offer and such options may be conditionally exercised by the holder thereof so as to permit the holder to tender the Class A Shares received upon such exercise pursuant to the offer. If the conditions of the offer are not satisfied and the offeror does not take up those Class A Shares, the conditional exercise shall terminate and the option shall be reinstated on the same terms and conditions that prevailed immediately prior to the conditional exercise.

#### *Effect of Amalgamation, Arrangement, or Merger*

If the Company amalgamates or merges with or into another corporation, or participates in any arrangement with any other corporation, any Class A Shares receivable on the exercise of an option shall be converted into the securities, property or cash which a participant would have received upon such amalgamation, arrangement or merger if such participant had exercised their option immediately prior to the record date of such amalgamation, arrangement or merger, and the option price shall be adjusted appropriately by the Board. The Company will take such steps as are required to bind the other corporation to the foregoing.

#### *Loans to Employees*

Subject to applicable law, the Board may at any time authorize the Company to loan money to an eligible participant (excluding any director or executive officer or equivalent thereof), on such terms and conditions as the Board may reasonably determine, to assist such eligible participant to exercise an option by cash payment held by them.

#### *Bonus Share Issuances*

The Board has the right to issue or reserve for issuance, for no cash consideration, to any eligible participant, any number of Class A Shares as a discretionary bonus subject to such provisos and restrictions as the Board may determine and applicable law. The aggregate maximum number of Class A Shares that may be issued in the form of a bonus will be limited to 5,000,000 Class A Shares (equal to 0.63% of the Class A Shares issued and outstanding), of which 2,868,308 Class A Shares have been issued in the form of bonus shares, as at May 8, 2018.

#### *Purchase Plan*

Eligible participants who are eligible employees and who have been continuously employed by the Company or any of its affiliates on a full-time basis for at least 12 consecutive months may, at the Board's discretion, contribute an amount equal to not more than 10% of their basic annual salary towards the purchase of Class A Shares. In addition to the amount contributed by an eligible participant, the Company will contribute an additional amount determined by the Board, which shall not exceed the amount contributed by an eligible participant. On March 31, June 30, September 30 and December 31 in each calendar year the Company will issue to each contributing eligible participant, provided that they are an eligible employee on any such date, that number of Class A Shares, rounded down to the nearest whole Class A Share, which is equal to the aggregate amount of an eligible participant's contribution and the Company's contribution divided by the volume-weighted average price of the shares on the TSX for the 90-day period immediately preceding the date of issuance. The aggregate maximum number of shares that may be issued pursuant to this Purchase Plan will be limited to 3,000,000 Class A Shares (which represents approximately 0.38% of the total issued and outstanding Class A Shares as of the date of this Management Proxy Circular).

If an eligible participant dies or otherwise ceases to be employed by the Company or any affiliate for any reason or receives notice from the Company of the termination of his or her employment, any amounts contributed by that eligible participant but not yet applied to the purchase of Class A Shares shall be paid to that eligible participant or their estate or successor, as the case may be. If the Company amalgamates or merges with or into another corporation, or participates in any arrangement with any other corporation, eligible participants to whom Class A Shares are to be issued will receive the securities, property or cash which such participant would have been entitled to upon such amalgamation, arrangement or merger had the Class A Shares been issued immediately prior to the record date of such amalgamation, arrangement or merger.

To date, the Board has not made the Purchase Plan available for participation by its eligible employees.

#### *Amendments*

The Board may amend the terms of the EIP without shareholder approval, including for the purposes of: changes of a clerical or grammatical nature; changes regarding the persons eligible to participate in the EIP; changes to the exercise price, vesting (including to accelerate the vesting of any outstanding option), term and termination provisions of options; changes to the cashless exercise right provisions; changes to the share bonus plan provisions (other than the maximum number of Class A Shares issuable under the bonus share plan); changes to the authority and role of the Compensation and Human Resources Committee under the Plan; changes to the acceleration and vesting of options in the event of a takeover bid or arrangement; and any other matter relating to the EIP and the options and awards granted thereunder, except in those circumstances set forth in the EIP as requiring shareholder approval and as required by applicable securities regulatory authorities or any stock exchange upon which the Class A Shares are then listed. If the EIP or any option is amended, such amendment will not have a retroactive effect, unless specifically stated in the amendment.

#### ***Securities Issued and Unissued under the Equity Incentive Plan***

As at May 8, 2018, there are 791,347,897 Class A Shares of the Company issued and outstanding. Pursuant to the EIP and based on the current outstanding Class A Shares of the Company, Class A Shares reserved for issuance under the EIP are as follows:

	<b>Number of Class A Shares</b>	<b>% of Issued and Outstanding Class A Shares<sup>(1)</sup></b>
Outstanding Securities Awarded: Class A Shares reserved for future issuance pursuant to issued and unexercised options under the EIP	23,943,500	3.03%
Remaining Securities Available for Grant: Unissued Class A Shares available for future option grants under the EIP <sup>(2)</sup>	22,626,996	2.86%
Plan Maximum: Maximum number of Class A Shares available for issuance under the EIP <sup>(3)</sup>	68,053,411	8.60% <sup>(4)</sup>

#### **Notes:**

- <sup>(1)</sup> Based on 791,347,897 outstanding Class A Shares of the Company.
- <sup>(2)</sup> This number is reduced by the balance of Class A Shares issuable under the RSU and DSU plans and outstanding options and excludes the bonus shares and the Purchase Plan.
- <sup>(3)</sup> Excluding the bonus shares and the Purchase Plan.
- <sup>(4)</sup> The aggregate number of Class A Shares that may be reserved for issuance under the EIP, together with any other securities based compensation arrangement of the Company in effect from time to time, in this case the RSU Plan and the DSU Plan, shall not exceed 10% of the issued and outstanding Class A Shares from time to time.

### *Burn Rate*

Year	Options Granted	Weighted Average Number of Common Shares Outstanding <sup>(1)</sup>	Annual Burn Rate <sup>(2)</sup>
2017	—	785,895,643	0%
2016	—	779,119,108	0%
2015	6,350,000	755,701,320	0.84%

**Notes:**

- <sup>(1)</sup> The weighted average number of Common Shares outstanding during the period is the number of Common Shares outstanding at the beginning of the period, adjusted by the number of Common Shares issued during the period multiplied by a time-weighted factor. The time-weighting factor is the number of days that the Common Shares are outstanding as a proportion of the total number of days in the year.
- <sup>(2)</sup> The Burn Rate for a given year is calculated by dividing the number of options granted during that year by the weighted average number of Common Shares outstanding during the year.

## **SUMMARY OF THE RESTRICTED SHARE UNIT PLAN**

### *History*

The RSU Plan was originally implemented on May 21, 2015, and was subsequently amended on March 23, 2016, December 2, 2016 May 2, 2017 and May 7, 2018, in each case in a manner that did not require shareholder approval under the requirements of the TSX or the amending provisions of the RSU Plan.

### *Purpose*

The purpose of the RSU Plan is to secure for the Company and its shareholders the benefits of incentives inherent in share ownership by the employees and directors of the Company and its affiliates who, in the judgment of the Board and the Compensation and Human Resources Committee, will be largely responsible for the Company's future growth and success.

Pursuant to the RSU Plan, the Board may, from time to time, grant to eligible participants unit awards, with each unit award granted entitling an eligible participant to receive one (1) restricted share unit ("RSU"). Each RSU represents the right of an eligible participant to receive one (1) Common Share or a cash payment.

### *Eligible Participants*

Eligible participants under the RSU Plan include directors, employees (which includes officers) and service providers of the Company and any of its affiliates who participate in the RSU Plan voluntarily.

### *Limits of Issuance*

The aggregate maximum number of Common Shares that may be issued pursuant to the RSU Plan is limited to 25,000,000 Common Shares (which represents approximately 3.16% of the total issued and outstanding Common Shares as of the date of this Management Proxy Circular). In addition, the aggregate number of Common Shares that may be reserved for issuance under the RSU Plan on the grant of unit awards (excluding those allocated for issuance as bonus shares and under the Purchase Plan), together with any other securities based compensation arrangements of the Company in effect from time to time, shall not exceed 10% of the issued and outstanding Common Shares from time to time.

### *Insider Participation Limit*

The aggregate number of Common Shares (together with any other securities based compensation arrangements of the Company in effect from time to time): (i) that may be reserved for issuance to insiders under the RSU Plan (or when combined with all of the Company's other security based compensation arrangements) shall not exceed 10% of the outstanding Common Shares from time to time; (ii) that may be issued to insiders under the RSU Plan (or when combined with all of the Company's

other security based compensation arrangements) within any one-year period shall not exceed 10% of the Company's outstanding Common Shares from time to time; and (iii) that may be issued to any one insider and their associates under the RSU Plan within any one-year period shall not exceed 5% of the Company's outstanding Common Shares from time to time.

#### *RSU Terms*

The Board, or if authority is delegated to the Compensation and Human Resources Committee, that committee, may at any time authorize the grant of unit awards to such eligible participants as it may select for the number of unit awards that it shall designate subject to the provisions of the RSU Plan. Each grant of a unit award shall specify the performance period and may (but is not required to) specify performance conditions attaching to it, with such conditions to be set by the Board or the Compensation and Human Resources Committee. Performance conditions are additional conditions that may be imposed on a unit award that are required to be satisfied or discharged before a unit award shall vest. Unit awards must expire not more than three (3) years after their grant date.

#### *Vesting*

Except as otherwise provided in the RSU Plan or unless otherwise determined by the Board or the Compensation and Human Resources Committee at the time of the grant of the unit award and subject to satisfaction of any performance conditions which may be attached to the unit award during the relevant performance period, unit awards shall vest in one-third increments, commencing on the one year anniversary of the date of grant and on each of the two anniversaries thereafter, but provided that the participant has continuously been an eligible participant from the grant date to through to the relevant date of vesting.

#### *Settlement*

Provided a "blackout period" is not then in effect, and that the eligible participant does not otherwise have knowledge of a material fact or material change pertaining to the Company at the time of election, the eligible participant shall, within five (5) business days of the date of grant, notify the Company of their election to settle their unit awards on (i) a cash-basis, (ii) share-basis, or (iii) both a cash-basis and share-basis. If a "black out period" is in effect or the eligible participant has knowledge of a material fact or material change at the time of election, this settlement election shall be made on the first business day after the blackout is lifted or the material fact or material change has been generally disclosed.

If cash settlement is elected, the Company would issue that number of vested Common Shares to which the eligible participant is entitled to a licensed securities broker, who would then sell such shares in the public market and deliver the net proceeds thereof to the eligible participant.

If share settlement is elected, the Company will cause the vested Common Shares to be issued in certificated form to the eligible participant within five (5) business days of vesting.

If an eligible participant fails to make an election as described above, the eligible participant will be deemed to have elected to settle their RSU awards on a share-basis.

All settlement elections are irrevocable once made and may not be modified, amended or varied by either the eligible participant or the Company (unless the election becomes subsequently unlawful).

#### *Effect of Termination*

If an eligible participant ceases to be employed by, or act as, a director of the Company or its affiliates for any reason (including death, termination for cause, termination without cause, resignation or retirement): (i) any unvested unit awards held by such eligible participant at the date the eligible participant ceases to be an employee or director of the Company or its affiliates shall be terminated as of such date; and (ii) any vested unit awards held by such eligible participant at the date the eligible participant ceases to be an employee or director of the Company or its affiliates and which has not yet been settled, shall be settled within thirty (30) days of such date. If a unit award has performance conditions attached to it which remain



unsatisfied at the date an eligible participant ceases to be an employee or director of the Company or its affiliates, then such unit awards shall be deemed to not have vested.

#### *Transferability*

Any unit awards or RSUs accruing to any eligible participant shall not be transferable except by will or by the laws of descent and distribution. All benefits and rights granted under the RSU Plan may only be exercised by the eligible participant during their lifetime.

#### *Effect of Take-over Bid; Arrangements*

The RSU Plan provides for conditional participation by participants in a take-over bid. In connection with a take-over bid that is a formal bid for at least 50% plus one Common Shares, eligible participants are entitled to tender to such take-over offer the *pro rata* number of Common Shares determined to have conditionally vested by the Board or the Compensation and Human Resources Committee based on its assessment of the satisfaction of performance conditions to the date of the take-over bid. If the take-over bid is not completed, including if the conditions to the take-over bid are not met, the conditional vesting of unit awards shall terminate and the unit awards shall be reinstated with the same terms and conditions that prevailed immediately prior to the take-over bid.

The RSU Plan also provides that in connection with an amalgamation or arrangement, that in lieu of Common Shares that would be received on vesting of a unit award, following an amalgamation or arrangement, the participant shall instead receive the securities, property or cash that the participant would have received had the unit award vested immediately prior to the record date for such amalgamation or arrangement, except for unit awards that are to be settled in cash, which shall also continue to be settled in cash following the amalgamation or arrangement.

In 2018, the RSU Plan was amended to clarify that the take-over bid provisions only apply to a formal bid for at least 50% plus one Common Share and to permit the *pro rata* conditional tendering to such offer, both as described above. Both amendments are permitted within the amending provisions of the RSU Plan (described below under “Amendments”), in each case without shareholder approval.

#### *Taxes and Withholdings*

The RSU Plan provides that the Company (or a broker in the case of cash settlement) may withhold from amounts payable to a participant any amounts required to be withheld for taxes of any kind as a consequence of participation in the RSU Plan.

#### *Amendments*

The Board may amend the terms of the RSU Plan without shareholder approval either prospectively or retrospectively, including for the purposes of: changes of a clerical or grammatical nature; changes regarding the persons eligible to participate in the RSU Plan; changes to the vesting, provisions of unit awards, performance conditions or performance period; changes to the authority and role of the Compensation and Human Resources Committee under the RSU Plan; changes to the acceleration and vesting of unit awards in the event of a takeover bid or change of control; and any other matter relating to the RSU Plan and the unit awards granted thereunder.

The Compensation and Human Resources Committee also has the power to amend the terms of the RSU Plan without shareholder approval either prospectively or retrospectively, for the purposes of: changes of a clerical or grammatical nature; changes regarding the persons eligible to participate in the RSU Plan; and changes to the vesting, provisions of unit awards, performance conditions or performance period.

Notwithstanding the foregoing, the powers of the Board and the Compensation and Human Resources Committee shall be limited in those circumstances set forth in the RSU Plan as requiring shareholder approval and as required by applicable securities regulatory authorities or any stock exchange upon which the Common Shares are then listed. Shareholder approval is required for:



- (i) amendment to the any amendment to the aggregate maximum number of Common Shares issuable under the RSU Plan;
- (ii) any amendment to the aggregate percentage of Common Shares that may be reserved for issuance under the RSU Plan or issued to insiders under the RSU Plan;
- (iii) any amendment which would accelerate the vesting of any unit awards held by insiders, except as contemplated under the RSU Plan; and
- (iv) any amendment provision under the RSU Plan.

If the RSU Plan is terminated, its provisions and any other guidelines, rules and regulations adopted by the Board or the Compensation and Human Resources Committee in respect of it will continue in effect as long as any unit awards or rights thereto remain outstanding.

### ***Securities Issued and Unissued under the Restricted Share Unit Plan***

As at May 8, 2018, there are 791,347,897 Class A Shares of the Company issued and outstanding. Pursuant to the RSU Plan, Class A Shares reserved for issuance under the RSU Plan would be as follows:

	<b>Number of Class A Shares</b>	<b>% of Issued and Outstanding Class A Shares</b>
Outstanding Securities Awarded: Class A Shares reserved for future issuance pursuant to issued and unvested RSUs	5,275,727	0.67%
Class A Shares issued pursuant to vested RSUs	5,487,085	0.69%
Remaining Securities Available for Grant: Unissued Class A Shares available for future RSU grants under the RSU Plan <sup>(1)</sup>	14,237,188	1.80%
Plan Maximum: Maximum number of Class A Shares available for issuance under the RSU Plan <sup>(1)</sup>	25,000,000	3.16%

**Notes:**

- <sup>(1)</sup> The aggregate number of Class A Shares that may be reserved for issuance under the RSU Plan, together with any other securities based compensation arrangement of the Company in effect from time to time, in this case the EIP and DSU Plan, shall not exceed 10% of the issued and outstanding Class A Shares from time to time.

### ***Burn Rate***

<b>Year</b>	<b>RSUs Granted</b>	<b>Weighted Average Number of Common Shares Outstanding<sup>(1)</sup></b>	<b>Annual Burn Rate<sup>(2)</sup></b>
2017	43,683	785,895,643	0.01%
2016	2,013,539	779,119,108	0.26%
2015	7,277,081	755,701,320	0.96%

**Notes:**

- <sup>(1)</sup> The weighted average number of Common Shares outstanding during the period is the number of Common Shares outstanding at the beginning of the period, adjusted by the number of Common Shares issued during the period multiplied by a time-weighted factor. The time-weighting factor is the number of days that the Common Shares are outstanding as a proportion of the total number of days in the year.
- <sup>(2)</sup> The Burn Rate for a given year is calculated by dividing the number of RSUs granted during that year by the weighted average number of Common Shares outstanding during the year.

## SUMMARY OF THE DEFERRED SHARE UNIT PLAN

### *Purpose*

Pursuant to the proposed Deferred Share Unit Plan (the “**DSU Plan**”), the Company may grant on one or more occasions in each calendar year vested Deferred Share Units (“**DSUs**”) to non-executive directors (being any member of the Board not otherwise an officer of, or employed by, the Company or any of its subsidiaries or affiliates) (“**Non-Executive Directors**”), each DSU granted being a unit equivalent to a Class A Share, credited by means of a bookkeeping entry in the books of the Company. The purpose of the DSU Plan is to provide Non-Executive Directors of the Company with the opportunity to acquire deferred share units in order to allow them to participate in the long-term success of the Company and to promote a greater alignment of interests between its Non-Executive Directors and shareholders. Participants in the DSU Plan include current and former Non-Executive Directors.

### *Limits of Issuance*

The aggregate maximum number of Class A Shares that may be issued pursuant to the DSU Plan is limited to 2,000,000 Class A Shares (which represents approximately 0.25% of the total issued and outstanding Class A Shares as of the date of this Management Proxy Circular).

### *Insider Participation Limit*

The aggregate number of Class A Shares (together with any other securities based compensation arrangements of the Company in effect from time to time): (i) that may be reserved for issuance to insiders under the DSU Plan (or when combined with all of the Company's other security based compensation arrangements) shall not exceed 10% of the outstanding Class A Shares from time to time; (ii) that may be issued to insiders under the DSU Plan (or when combined with all of the Company's other security based compensation arrangements) within any one-year period shall not exceed 10% of the Company's outstanding Class A Shares from time to time; and (iii) that may be issued to any one insider and their associates under the DSU Plan within any one-year period shall not exceed 5% of the Company's outstanding Class A Shares from time to time. The number of Class A Shares at any time reserved for issuance to any one participant under all securities based compensation arrangements shall not exceed 5% of the Company's outstanding Class A Shares from time to time. In addition, non-executive directors shall not be granted DSUs with a market value in excess of C\$150,000 in any one calendar year, but excluding DSUs granted in lieu of cash retainers.

### *DSU Terms*

The Company may grant vested DSUs to Non-Executive Directors as part of the retainer payable to such persons for service as a member of the Board, including any additional retainer paid to such persons for serving as the chair, or a member of any standing committee of the Board, either by identifying a fixed number of DSUs to be granted or by identifying a cash amount to be allocated to a grant of DSUs. Additionally, the Board may from time to time approve a grant of DSUs to a participant as a discretionary award in addition to such aforementioned retainer.

DSUs received by a participant shall be credited to an account maintained for such participant on the books of the Company as of the Award Date, unless such DSU is granted as a discretionary award, then same shall be credited according to a vesting schedule approved by the Board at its discretion. “Award Date” means: (i) in respect of DSUs granted as part of a retainer payable, the first day of each interval or period for the advanced grant of each instalment of such retainer, on which dates relevant DSUs shall be deemed to be awarded; or (ii) in respect of a discretionary award of DSUs, on such date as determined by the Board. The number of DSUs (including fractional DSUs) to be credited as part of the aforementioned retainer shall be determined by dividing: (i) the amount of the retainer to be paid in DSUs, by (ii) the volume weighted average trading price of the Class A Shares on the TSX on the five trading days immediately preceding the Award Date, with fractions computed to three decimal places.

### *Vesting*

DSUs granted to Non-Executive Directors as part of the retainer payable to such persons for service as a member of the Board, including any additional retainer paid to such persons for serving as the chair, or a member of any standing committee of the Board, shall be vested DSUs. If DSUs are granted to a participant by way of discretionary grant, the DSUs shall vest according to a vesting schedule approved by the Board at its discretion.

### *Distribution and Settlement*

Each DSU shall be settled on December 31<sup>st</sup> of the calendar year that is three years following its Award Date.

Provided a "blackout period" is not then in effect, and that the Non-Executive Director does not otherwise have knowledge of an undisclosed material fact or material change pertaining to the Company at the time of election, a Non-Executive Director shall, within ten business days of the date of grant, notify the Company of their election to settle their DSUs on (i) a cash-basis, (ii) share-basis, or (iii) both a cash-basis and share-basis. If a blackout period is in effect at the time the Non-Executive Director would otherwise make the election, or the Non-Executive Director has knowledge of a material fact or material change that has not been generally disclosed, such election shall be made on the first business day after the date that the blackout period is lifted or the material fact or change is generally disclosed.

Notwithstanding any of the foregoing, each Non-Executive Director will have a one-time right, exercisable within thirty days of the date on which shareholders of the Company first approve the DSU Plan to elect that any DSUs granted prior to the foregoing date and which remain outstanding and unvested be settled in Class A Shares on its respective settlement date.

Each participant shall receive on each applicable settlement date based on their election, either (i) a lump sum cash payment equal to the number of DSUs recorded in the respective participant's account having such settlement date multiplied by the volume weighted average trading price of the Class A Shares on the TSX for the five trading days immediately preceding such settlement date, or (ii) a number of whole Class A Shares from treasury equal to the number of DSUs recorded in the respective participant's account having such settlement date (disregarding fractions), in each case, less any applicable withholding taxes. All settlement elections are irrevocable once made and may not be modified, amended or varied by either an eligible participant or the Company (unless the election becomes subsequently unlawful).

### *Effect of Termination*

If a participant has retired from all positions or ceases to hold any and all positions with the Company and its subsidiaries, the Company will settle all outstanding vested DSUs on the date the participant has retired or ceases to hold any and all positions credited to the account of such participant under the DSU Plan by making a cash payment equivalent to the amount which would have been paid to the participant in cash pursuant to the DSU's settlement terms, calculated on the basis of the applicable settlement date.

In the case of the death of a participant, the Company will settle all outstanding vested DSUs of the Participant as at the date of death on or about the thirtieth day after the Company is notified of the death of the Participant by making a cash payment to the Participant's estate on that date equivalent to the amount which would have been paid to the Participant in cash pursuant to the DSU's settlement terms, calculated on the basis that the day of death is the applicable settlement date.

Any unvested DSUs at the date of death or the date the Participant retires or ceases to hold any and all positions with the Company shall not vest and instead shall be cancelled as at such date and the Company will not make and will not have any obligation to make any payment in respect of such unvested DSUs.

### *Effect of Takeover Bid*

If an offer, which constitutes a formal take-over bid under applicable Canadian securities law, for Class A Shares is made to a participant or to shareholders generally or to a class of shareholders which includes a participant, and such offer, if accepted in whole or in part, would result in the offeror becoming a control person of the Company within the meaning of the Ontario *Securities Act*, then the Company shall notify each participant currently holding a DSU of the particulars of the offer and such DSUs shall be considered conditionally settled and any conditions shall have been conditionally waived so as to permit the holder to tender the Class A Shares to be received upon settlement pursuant to the offer (if share election has been made). If the conditions of the offer are not satisfied and the offeror does not take up those Class A Shares, the conditional settlement and conditional waiver shall terminate and the DSU shall be reinstated on the same terms and conditions that prevailed immediately prior to the offer. If the offer is completed, all DSUs shall settle and shall be deemed to have settled and all conditions shall be deemed to have been satisfied, such that upon consummation of the offer, all DSUs shall settle in accordance with the settlement method chosen by a participant and any Class A Shares issued and tendered to the offer will be taken up in accordance with the terms of the offer.

### *Effect of Amalgamation, Arrangement, or Merger*

If the Company amalgamates or merges with or into another corporation, or participates in any arrangement with any other corporation, any Class A Shares receivable on the settlement of a DSU shall become the right to receive the securities, property or cash which a participant would have received upon such amalgamation, arrangement or merger if the DSU had been settled immediately prior to the record date applicable to such amalgamation, arrangement or merger, and shall be adjusted appropriately by the Board. DSUs which are elected to be settled in cash shall be settled in cash at the effectiveness of such amalgamation, arrangement or merger. The Company will take such steps as are required to bind the other corporation to the foregoing.

### *Transferability*

Any DSUs shall not be assignable or transferable except to a participant's estate as provided by the section of the DSU Plan regarding death of a participant.

### *Amendments, Suspensions or Termination*

The Board may from time to time amend or suspend the DSU Plan in whole or in part and may at any time terminate the DSU Plan without prior notice or any shareholder approval. However, any such amendment, suspension or termination shall not adversely affect the DSUs previously granted to a participant at the time of such amendment, suspension or termination, without the consent of the affected participant. If the Board terminates this DSU Plan, no new DSUs will be credited to the account of a participant, but previously credited and vested DSUs shall be paid out in accordance with the terms and conditions of this DSU as at the time of termination.

### ***Securities Issued and Unissued under the Deferred Share Unit Plan***

As at May 8, 2018, there are 791,347,897 Class A Shares of the Company issued and outstanding. Pursuant to the DSU Plan, Class A Shares reserved for issuance under the DSU Plan are as follows:

	Number of Class A Shares	% of Issued and Outstanding Class A Shares
Outstanding Securities Awarded: Class A Shares reserved for future issuance pursuant to outstanding DSUs <sup>(2)</sup>	288,566	0.04%
Class A Shares issued pursuant to previously settled DSUs	30,000	0.00%
Remaining Securities Available for Grant: Unissued Class A Shares available for future DSU grants under the DSU Plan <sup>(1)</sup>	1,681,434	0.21%

	Number of Class A Shares	% of Issued and Outstanding Class A Shares
Plan Maximum: Maximum number of Class A Shares available for issuance under the DSU Plan <sup>(1)</sup>	2,000,000	0.25%

**Notes:**

- <sup>(1)</sup> The aggregate number of Class A Shares that may be reserved for issuance to all participants under the DSU Plan (which constitutes only Non-Executive Directors), together with any other securities based compensation arrangement of the Company in effect from time to time, in this case the EIP and RSU Plan, shall not exceed 10% of the issued and outstanding Class A Shares from time to time.
- <sup>(2)</sup> Reflects the number of outstanding DSUs to be settled in Class A Shares.

*Burn Rate*

Year	DSUs Granted	Weighted Average Number of Common Shares Outstanding <sup>(1)</sup>	Annual Burn Rate <sup>(2)</sup>
2017	75,859	785,895,643	0.01%
2016	231,539	779,119,108	0.03%
2015	251,908	755,701,320	0.03%

**Notes:**

- <sup>(1)</sup> The weighted average number of Common Shares outstanding during the period is the number of Common Shares outstanding at the beginning of the period, adjusted by the number of Common Shares issued during the period multiplied by a time-weighted factor. The time-weighting factor is the number of days that the Common Shares are outstanding as a proportion of the total number of days in the year.
- <sup>(2)</sup> The Burn Rate for a given year is calculated by dividing the number of DSUs granted during that year by the weighted average number of Common Shares outstanding during the year.