



Q1 2020 RESULTS

MAY 13, 2020

WWW.OSISKOGR.COM | NYSE&TSX:OR

FORWARD LOOKING STATEMENTS

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking information and forward-looking statements (together, “forward-looking statements”) within the meaning of applicable Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995. All statements in this presentation, other than statements of historical fact, that address future events, developments or performance that Osisko expects to occur including management’s expectations regarding Osisko’s growth, results of operations, estimated future revenue, carrying value of assets, requirements for additional capital, production estimates, production costs and revenue, business prospects and opportunities are forward-looking statements. In addition, statements relating to gold equivalent ounces (“GEOs”) are forward-looking statements, as they involve implied assessment, based on certain estimates and assumptions, and no assurance can be given that the GEOs will be realized. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words “expects”, “is expected”, “plans”, “anticipates”, “believes”, “intends”, “estimates”, “projects”, “potential”, “scheduled” and similar expressions or variations (including negative variations of such words and phrases), or may be identified by statements to the effect that certain actions, events or conditions “will”, “would”, “may”, “could” or “should” occur including, without limitation, the performance of the assets of Osisko, that sufficient funding will be available to fund work on the Cariboo Gold Project, that significant value will be created within the accelerator group of companies and Osisko’s ability to seize future opportunities. Although Osisko believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements involve known and unknown risks, uncertainties and other factors and are not guarantees of future performance and actual results may accordingly differ materially from those in forward-looking statements. Factors that could cause the actual results deriving from Osisko’s royalties, streams and other interests to differ materially from those in forward-looking statements include, without limitation: the impact of the COVID-19 pandemic on Osisko’s business, influence of political or economic factors including fluctuations in the prices of the commodities and in value of the Canadian dollar relative to the U.S. dollar, continued availability of capital and financing and general economic, market or business conditions; regulations and regulatory changes in national and local government, including permitting and licensing regimes and taxation policies; whether or not Osisko is determined to have “passive foreign investment company” (“PFIC”) status as defined in Section 1297 of the United States Internal Revenue Code of 1986, as amended; potential changes in Canadian tax treatments of offshore streams or other interests, litigation, title, permit or license disputes; risks and hazards associated with the business of exploring, development and mining on the properties in which Osisko holds a royalty, stream or other interest including, but not limited to development, permitting, infrastructure, operating or technical difficulties, unusual or unexpected geological and metallurgical conditions, slope failures or cave-ins, flooding and other natural disasters or civil unrest, rate, grade and timing of production differences from mineral resource estimates or production forecasts or other uninsured risks; risk related to business opportunities that become available to, or are pursued by Osisko and exercise of third party rights affecting proposed investments. The forward-looking statements contained in this presentation are based upon assumptions management believes to be reasonable, including, without limitation: the ongoing operation of the properties in which Osisko holds a royalty, stream or other interest by the owners or operators of such properties in a manner consistent with past practice; the accuracy of public statements and disclosures made by the owners or operators of such underlying properties; no material adverse change in the market price of the commodities that underlie the asset portfolio; Osisko’s ongoing income and assets relating to the determination of its PFIC status, no material changes to existing tax treatments; no adverse development in respect of any significant property in which Osisko holds a royalty, stream or other interest; the accuracy of publicly disclosed expectations for the development of underlying properties that are not yet in production; and the absence of any other factors that could cause actions, events or results to differ from those anticipated, estimated or intended. However, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance. Osisko cannot assure investors that actual results will be consistent with these forward-looking statements and investors should not place undue reliance on forward-looking statements due to the inherent uncertainty therein.

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements made in this presentation, see the section entitled “Risk Factors” in the most recent Annual Information Form of Osisko which is filed with the Canadian securities commissions and available electronically under Osisko’s issuer profile on SEDAR at www.sedar.com and with the U.S. Securities and Exchange Commission on EDGAR at www.sec.gov. The forward-looking information set forth herein reflects Osisko’s expectations as at the date of this presentation and is subject to change after such date. Osisko disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

SAFE HARBOUR STATEMENT

This presentation has been prepared for informational purposes only in order to assist prospective investors in evaluating an investment in Osisko Gold Royalties Ltd. Inquiries regarding this confidential presentation can be made to the senior management of the Corporation.

CAUTIONARY NOTE TO U.S. INVESTORS REGARDING MINERAL RESERVE AND MINERAL RESOURCE ESTIMATES

Osisko is subject to the reporting requirements of the applicable Canadian securities laws, and as a result, reports its mineral resources and reserves according to Canadian standards. Canadian reporting requirements for disclosure of mineral properties are governed by National Instrument 43-101 (“NI 43-101”). The definitions of NI 43-101 are adopted from those given by the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”). U.S. reporting requirements are governed by the Industry Guide 7 (“Guide 7”) of the Security and Exchange Commission (“SEC”). This presentation includes estimates of mineral reserves and mineral resources reported in accordance with NI 43-101. These reporting standards have similar goals in terms of conveying an appropriate level of confidence in the disclosures being reported, but embody different approaches and definitions. For example, under Guide 7, mineralization may not be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Consequently, the definitions of “Proven Mineral Reserves” and “Probable Mineral Reserves” under CIM standards differ in certain respects from the standards of the SEC. Osisko also reports estimates of “mineral resources” in accordance with NI 43-101. While the terms “Mineral Resource,” “Measured Mineral Resource,” “Indicated Mineral Resource” and “Inferred Mineral Resource” are recognized by NI 43-101, they are not defined terms under standards of the SEC and, generally, U.S. companies are not permitted to report estimates of mineral resources of any category in documents filed with the SEC. As such, certain information contained in this presentation concerning descriptions of mineralization and estimates of mineral reserves and mineral resources under Canadian standards is not comparable to similar information made public by United States companies subject to the reporting and disclosure requirements of the SEC. Readers are cautioned not to assume that all or any part of Measured Mineral Resources or Indicated Mineral Resource exists, or is economically or legally mineable. Further, an “Inferred Mineral Resource” has a great amount of uncertainty as to its existence and as to its economic and legal feasibility, and a reader cannot assume that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies.

Mr. Luc Lessard is the qualified person for this presentation as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects and has reviewed and verified the technical information contained herein. Mr. Luc Lessard is an employee of Osisko Gold Royalties and is non-independent.



HIGHLIGHTS Q1 2020

- ◆ 18,159 GEOs¹ earned
- ◆ Revenues from royalties and streams of C\$37.8 million
- ◆ Cash flow from operating activities of C\$23.8 million
- ◆ Net loss of C\$13.3 million
C\$0.09 per basic share

Reflecting an impairment charge of C\$26.3 million (C\$19.3 million, net of income taxes) on the Renard diamond stream

- ◆ Adjusted earnings² of C\$7.5 million
C\$0.05 per basic share
- ◆ Withdrew the 2020 production guidance as a result of the uncertainties related to the COVID-19 pandemic impact
- ◆ Mining activities were affected by the COVID-19 pandemic, including our cornerstone asset, the Canadian Malartic mine, which was placed on care and maintenance from March 25 to April 15

- ◆ Cash operating margin³ of 91% from royalties and streams interests
- ◆ Acquired for cancellation 429,722 common shares for \$3.9 million (average acquisition cost of C\$9.15 per share)
- ◆ Declared a quarterly dividend of C\$0.05 per common share paid on April 15, 2020 to shareholders of record as of the close of business on March 31, 2020

SUBSEQUENT TO Q1

- ◆ Closed a non-brokered private placement of C\$85.0 million with Investissement Québec
- ◆ Improved the silver stream on the Gibraltar mine by investing C\$8.5 million to reduce the transfer price from US\$2.75 per ounce of silver to nil
- ◆ Declared a quarterly dividend of C\$0.05 per common share payable on July 15, 2020 to shareholders of record as of the close of business on June 30, 2020



BUSINESS CONTINUITY AND EMPLOYEE HEALTH AND SAFETY

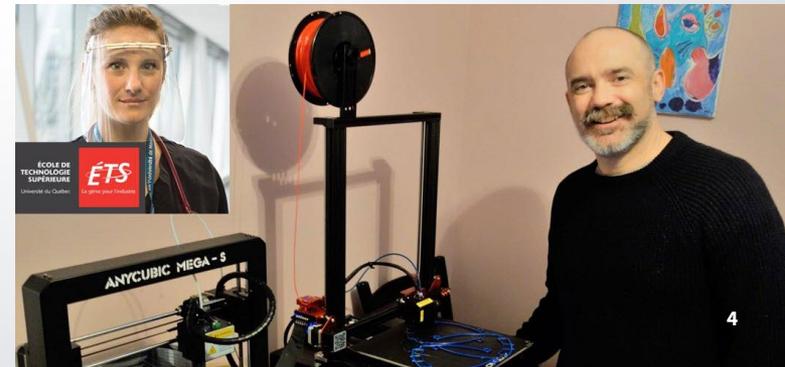
- ◆ The health and safety of our employees and partner's employees and communities is of paramount importance
- ◆ Osisko has closed its corporate office and employees have been working remotely for two months
- ◆ The transition has been seamless and our staff continues to be highly effective working from home
- ◆ We support all measures and do everything possible to "flatten the curve"

PARTNER OPERATIONS

- ◆ Several of our assets were temporarily closed by our partners and have now resumed operations
- ◆ As a result, we have withdrawn our 2020 guidance until we have a better sense of the impact
- ◆ Short-term revenue deferral for Osisko as resources remain in the ground

Fundraising campaign for MOISSON MONTREAL, Canada's largest food bank. The company will match its employees donations up to **C\$50,000**.

Osisko supports one of it's employees' initiative of 3D printing plastics pieces needed for protective visors distributed in Montreal's hospitals. Osisko is proud to finance all the material.





ACTIVE DESPITE THE CRISIS



Non-brokered private placement of C\$85.0 million, announced on March 30, 2020



Bolstering balance sheet in a context of volatility and adding flexibility for acquisitions of new royalties and streams



Improvement of the silver stream on the Gibraltar mine by investing C\$8.5 million, announced April 29, 2020

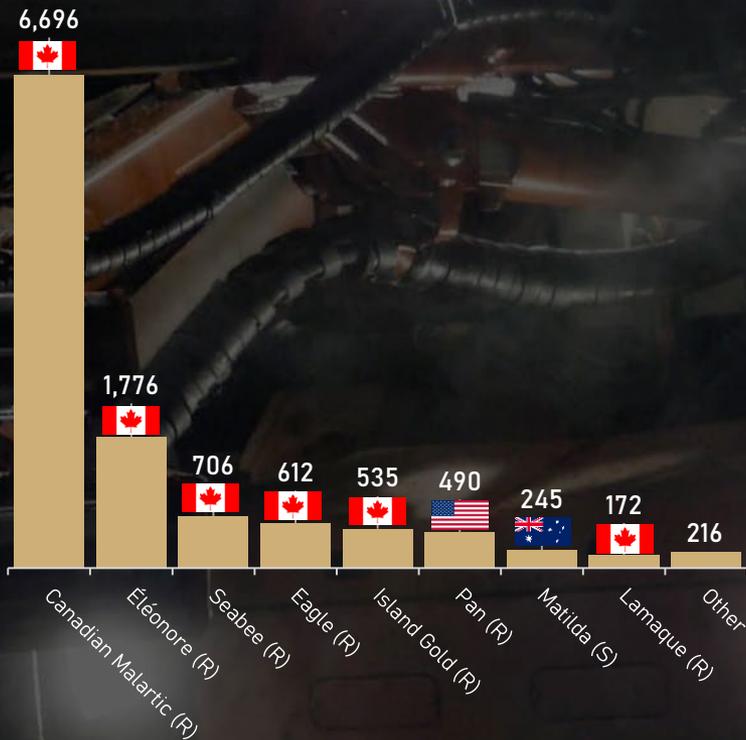


Improving one of our high-quality Canadian precious metal assets while increasing operating margin on this silver stream to 100% from 80%

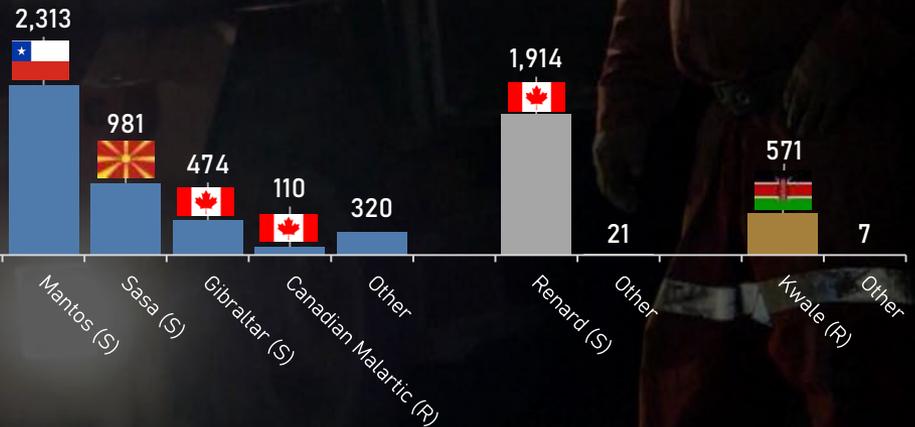
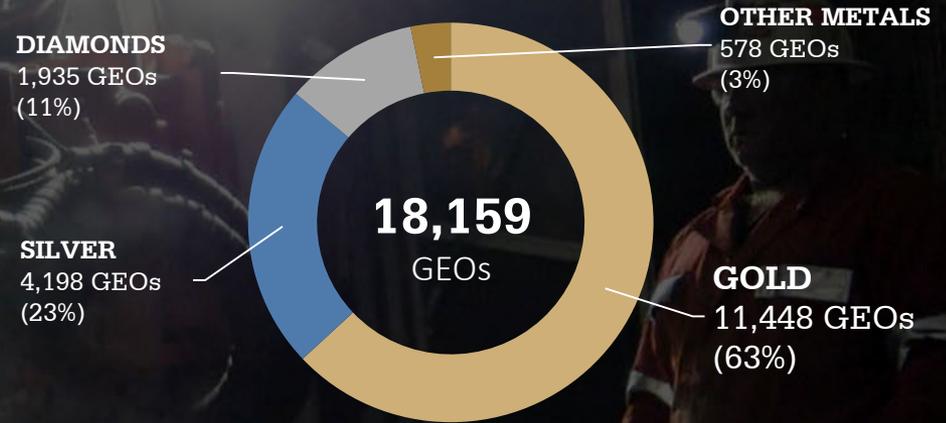


PRODUCING ROYALTIES AND STREAM

Q1 2020 GEOs BY ASSET



Q1 2020 GEOs BY PRODUCT



GOLD

SILVER

DIAMONDS

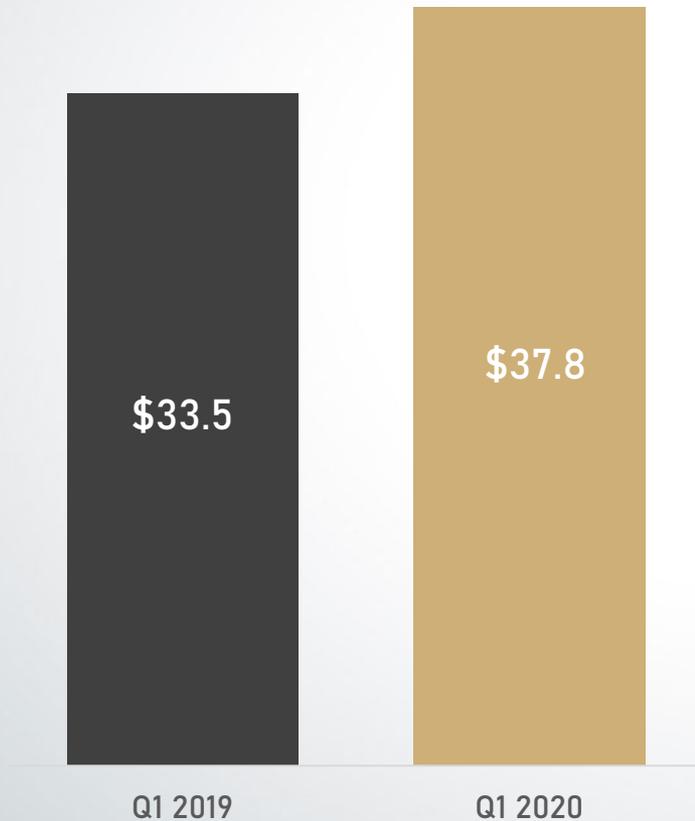
OTHER

(R) = Royalty, (S) = Stream, (O) = Offtake

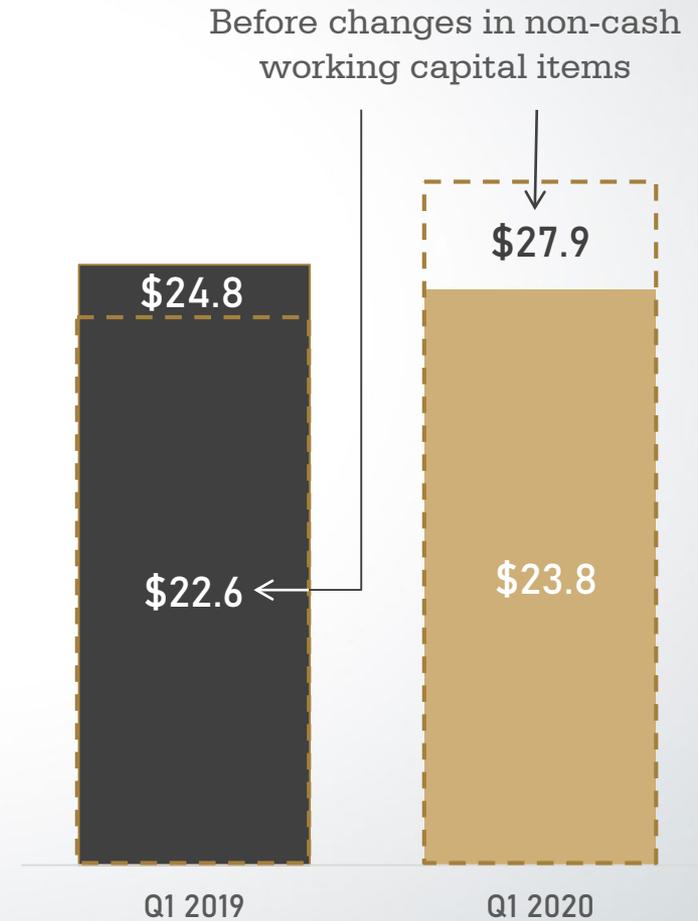


Q1 2020 FINANCIAL PERFORMANCE

REVENUES FROM ROYALTIES AND STREAMS (C\$ M)⁴



CASH FLOW FROM OPERATING ACTIVITIES (C\$ M)





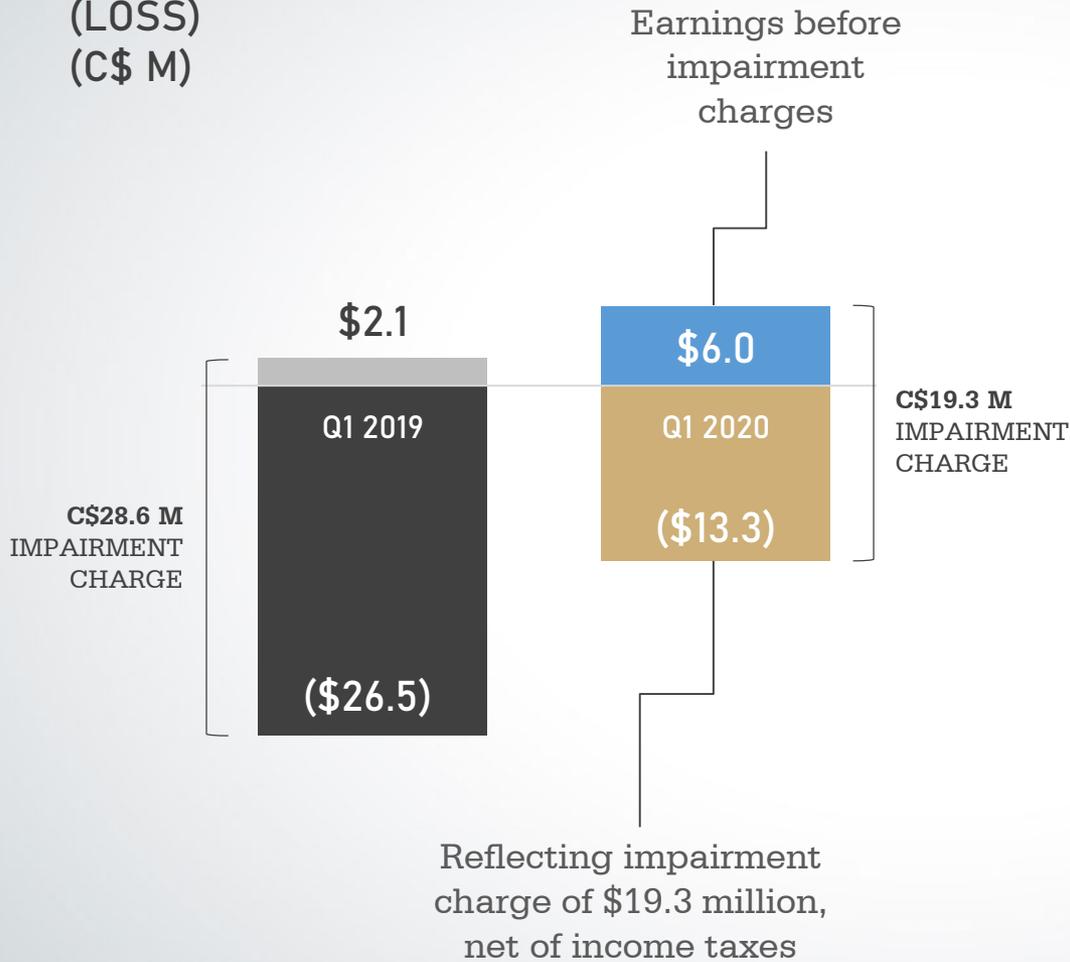
Q1 2020 REVENUE BREAKDOWN

(C\$ 000)	3 MONTHS ENDED	
	Mar. 31, 2020	Mar. 31, 2019
ROYALTIES:		
Revenues	\$25,804	\$23,445
Cost of Sales	(\$168)	(\$101)
CASH MARGIN:	\$25,636	\$23,344
STREAMS:		
Revenues	\$12,030	\$10,055
Cost of Sales	(\$3,193)	(\$3,493)
CASH MARGIN:	\$8,837	\$6,562
OFFTAKES:		
Revenues	\$14,771	\$67,226
Cost of Sales	(\$13,922)	(\$66,510)
CASH MARGIN:	\$849	\$716
TOTAL CASH MARGIN:	\$35,322	\$30,622
CASH MARGIN EXCLUDING OFFTAKES:	91.1%	89.3%

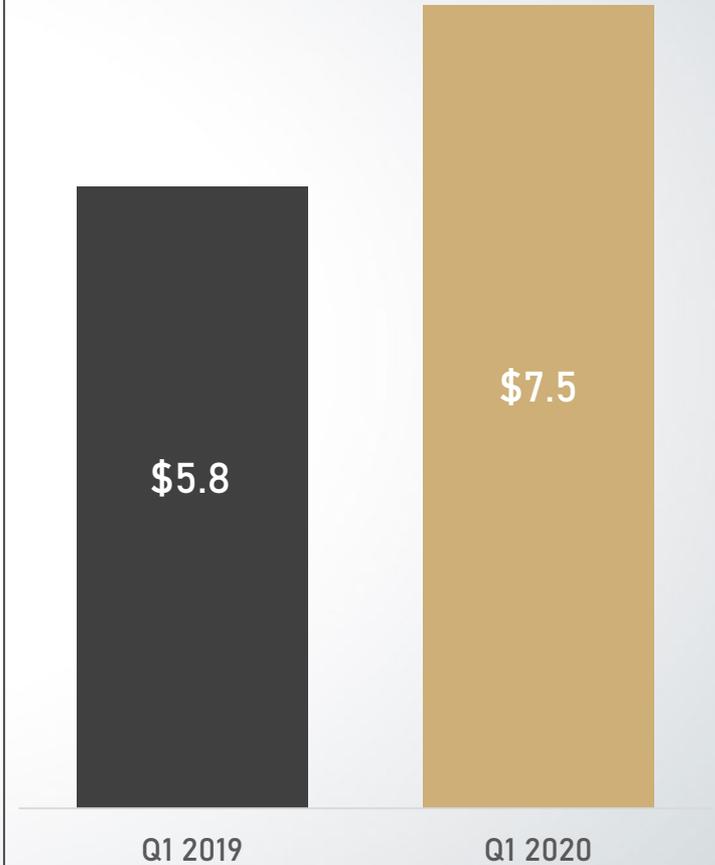


Q1 2020 FINANCIAL PERFORMANCE

EARNINGS (LOSS) (C\$ M)



ADJUSTED EARNINGS (C\$ M)





Q1 2020 RESULTS

(C\$ 000)	3 MONTHS ENDED	
	Mar. 31, 2020	Mar. 31, 2019
GOLD PRODUCTION (oz)	11,448	13,511
SILVER PRODUCTION (oz AuEq)	4,198	3,147
DIAMONDS PRODUCTION (oz AuEq)	1,935	2,653
OTHER METALS (oz AuEq)	578	442
REALIZED GOLD PRICE (C\$ per oz)	\$2,125	\$1,731
REVENUES	\$52,605	\$100,726
GROSS PROFIT	\$21,622	\$18,246
NET CASH FLOW FROM OPERATING ACTIVITIES	\$23,800	\$24,750
NET LOSS	(\$13,318)	(\$26,549)
NET LOSS PER SHARE BASIC AND DILUTED	(\$0.09)	(\$0.17)
ADJUSTED EARNINGS	\$7,548	\$5,825
ADJUSTED EARNINGS PER BASIC SHARE	\$0.05	\$0.04



STRONG FINANCIAL POSITION

BALANCE SHEET ITEMS

Mar. 31, 2020

Cash (C\$ M) \$158.3

Including \$85 M equity financing with Investissement Québec as at April 1, 2020 \$243.3

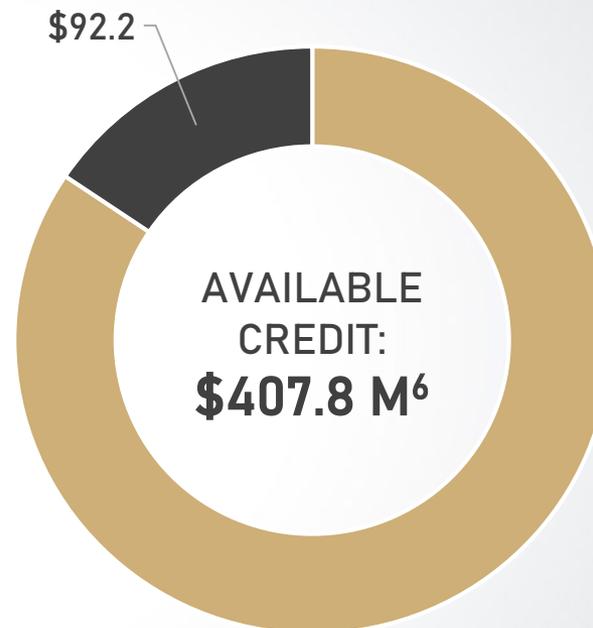
Debt (C\$ M) \$423.5

Investments (C\$ M)⁵ \$255.5

Basic Shares Outstanding (M) (as at Apr. 29, 2020) 165.3

Quarterly Dividend (C\$/Share) \$0.05

CREDIT FACILITY (C\$ M)



■ Undrawn Credit Facility ■ Drawn Credit Facility

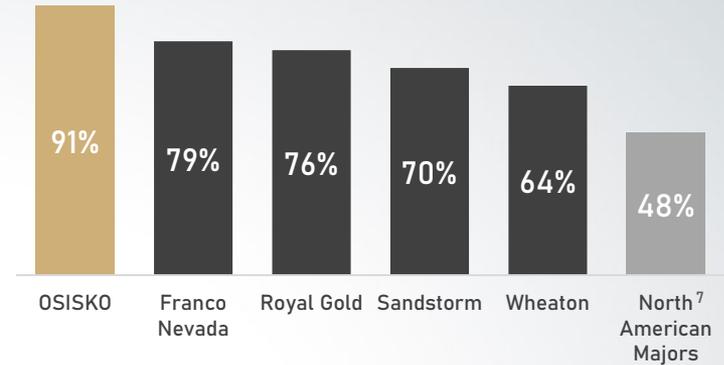
WELL POSITIONED TO DEPLOY CAPITAL



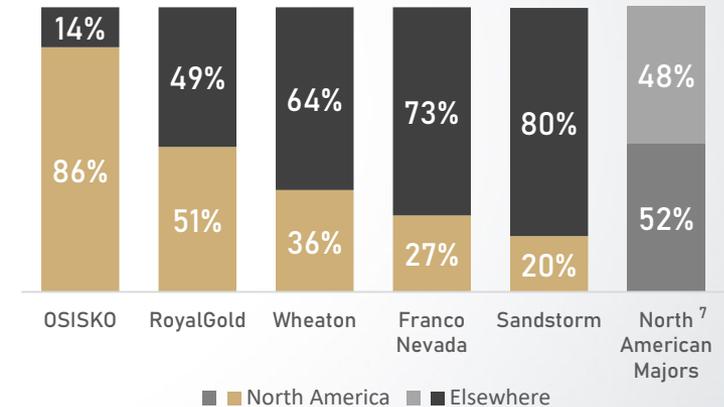
A QUALITY PORTFOLIO

- ◆ Over 135 royalties, streams and precious metals offtakes
- ◆ Diversified cash flow from 16 producing assets (primarily on gold mines)
- ◆ 91% cash operating margins⁸
- ◆ Lowest geopolitical risk profile

CASH OPERATING MARGINS⁸



CONSENSUS NPV BY GEOGRAPHY



PREMIER OPERATORS INCLUDING:



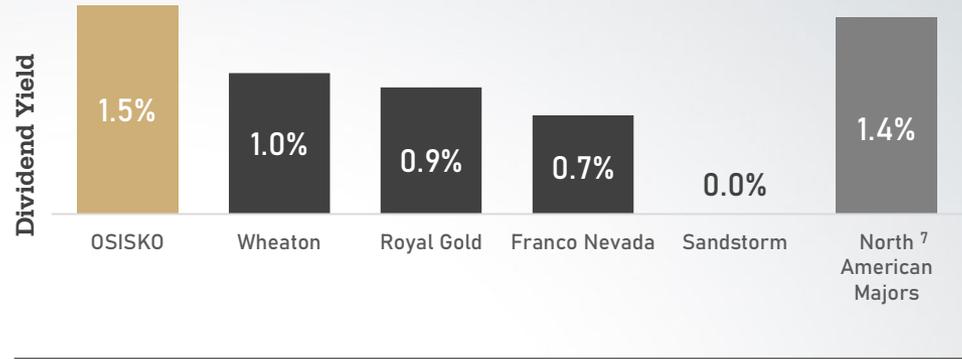


A QUALITY INVESTMENT

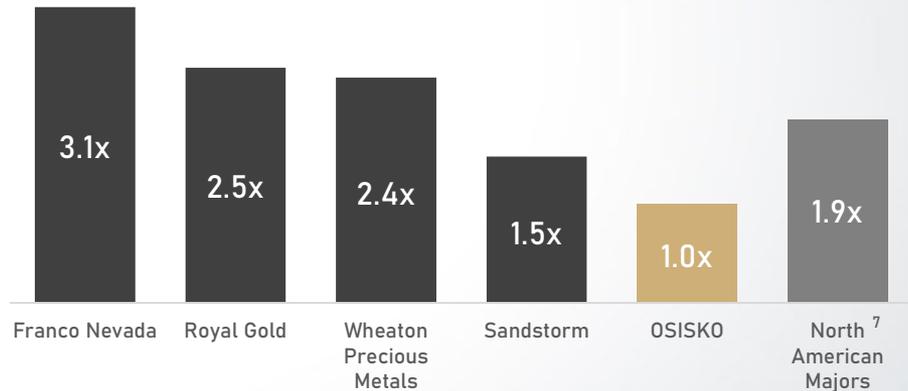
TSX | NYSE: OR



- ◆ Highest dividend in royalty sector
- ◆ Significantly undervalued with opportunity for re-rate
- ◆ High trading liquidity (on average \$18.5M per day)
- ◆ Strong balance sheet with C\$243M in cash and C\$900M in total financial capacity
- ◆ Diversified, supportive shareholder base



P/NAV TRADING MULTIPLES



**ESG
FOCUSED**



**TOP QUARTILE "A"
ESG RATING IN 2019**



**RANKED # 5 OUT OF 100 PRECIOUS METALS
COMPANIES BY SUSTAINALYTICS FOR 2019**



HYBRID BUSINESS MODEL

75%

25%

CORE ROYALTY BUSINESS

EARLY STAGE Accelerator Business

CARIBOO North Spirit Discovery Group



- ◆ Leverage technical team to select early stage stories
- ◆ In Accelerator companies, combine assets/teams/ capital
- ◆ Obtain high-value royalties at low price with limited competition
- ◆ Create royalties that otherwise wouldn't exist

- ◆ Cariboo is a district camp with decades of exploration potential
- ◆ Seeking external financing to advance the Cariboo Gold Project within NSDG
- ◆ Providing Osisko Shareholders with exposure to private equity type return as Cariboo is advanced

UNIQUE COMBINATION OF CORE ROYALTY BUSINESS STABILITY AND ACCELERATOR BUSINESS COMPETITIVE ADVANTAGE

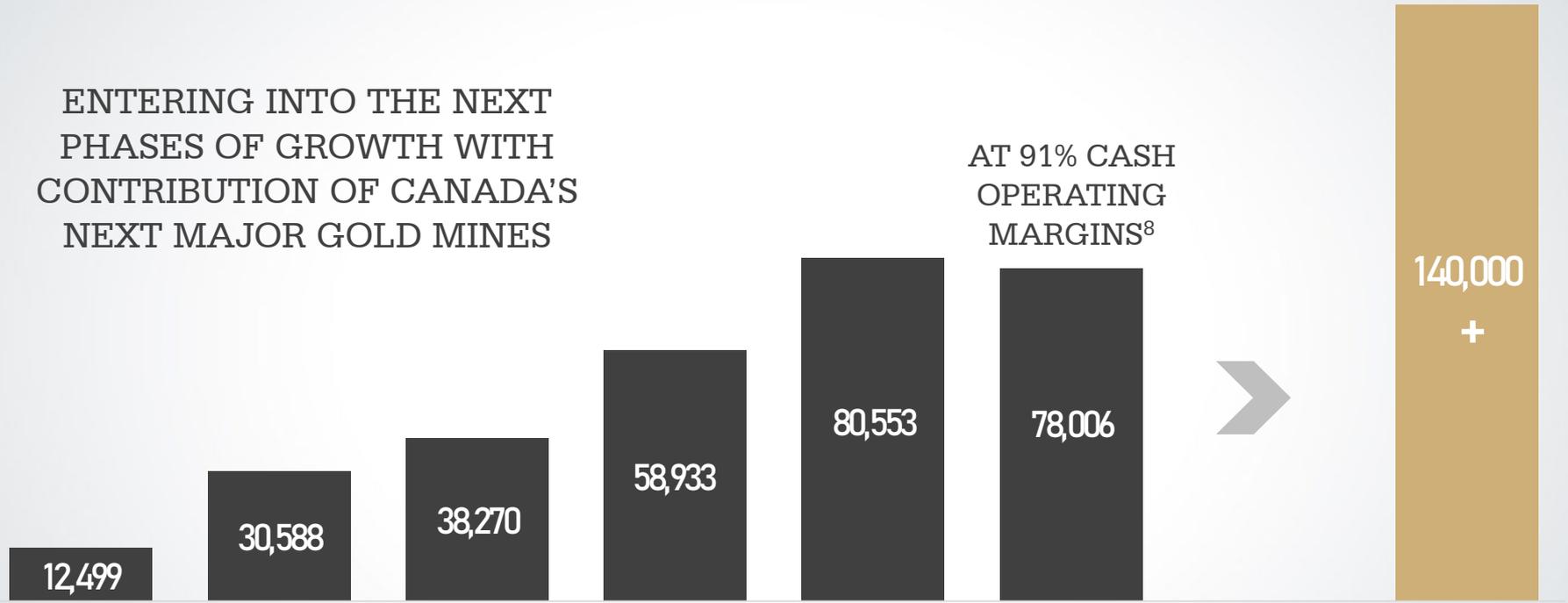


SUSTAINED GEO GROWTH

GEO PRODUCTION

ENTERING INTO THE NEXT PHASES OF GROWTH WITH CONTRIBUTION OF CANADA'S NEXT MAJOR GOLD MINES

AT 91% CASH OPERATING MARGINS⁸



2014

2015

2016

2017

2018

2019

Paid-For Royalty / Streaming Ounces

7 ROYALTIES



CREATED THE ACCELERATOR BUSINESS



2 MAJOR ACQUISITIONS



+135 ROYALTIES & STREAMING ASSETS

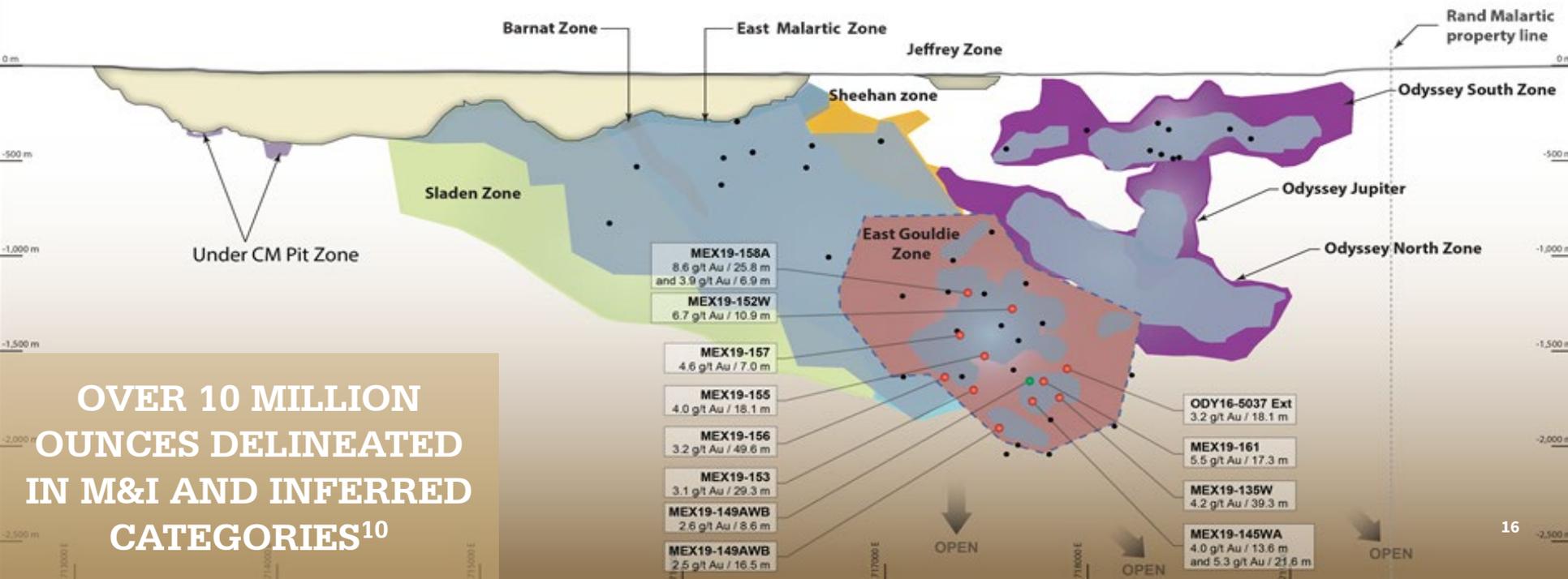
C\$500 M MARKET CAP

C\$2.1 B MARKET CAP

CANADIAN MALARTIC UNDERGROUND

East Gouldie, 5% NSR
 North Odyssey & East Malartic, 3% NSR
 South Odyssey, 5% NSR

- ◆ One of the largest new gold resources globally
- ◆ Limited drilling thus far and East Gouldie open in all directions⁹
- ◆ Initial production potentially starting in 2023⁹



OVER 10 MILLION
 OUNCES DELINEATED
 IN M&I AND INFERRED
 CATEGORIES¹⁰

EAGLE

5% NSR
Yukon, Canada | Victoria Gold Corp.

- ◆ Canada's newest gold mine
- ◆ Ramping up to 220,000 ounces of gold per year
- ◆ Large land package being actively explored

ÉLÉONORE

2-3.5% NSR
Québec, Canada | Newmont Corporation

- ◆ Operated by world's leading gold company Newmont Corporation
- ◆ Among the largest mines in Québec
- ◆ Aggressive exploration campaign underway

MANTOS

100% Ag Stream
Antofagasta, Chile | Mantos Copper S.A.

- ◆ Progressing mine expansion will increase deliveries to Osisko
- ◆ Another long-life asset in a top mining jurisdiction

WINDFALL

2.0-3.0% NSR
Québec, Canada | Osisko Mining Inc.



- ◆ Unique combination of size and high grade
- ◆ Over 5 million ounce resource¹¹ and growing, all above 1,200m
- ◆ Additional 250,000 metres of drilling in 2020, 20+ drills on site

HERMOSA

1.0% NSR
Arizona, USA | South32 Limited



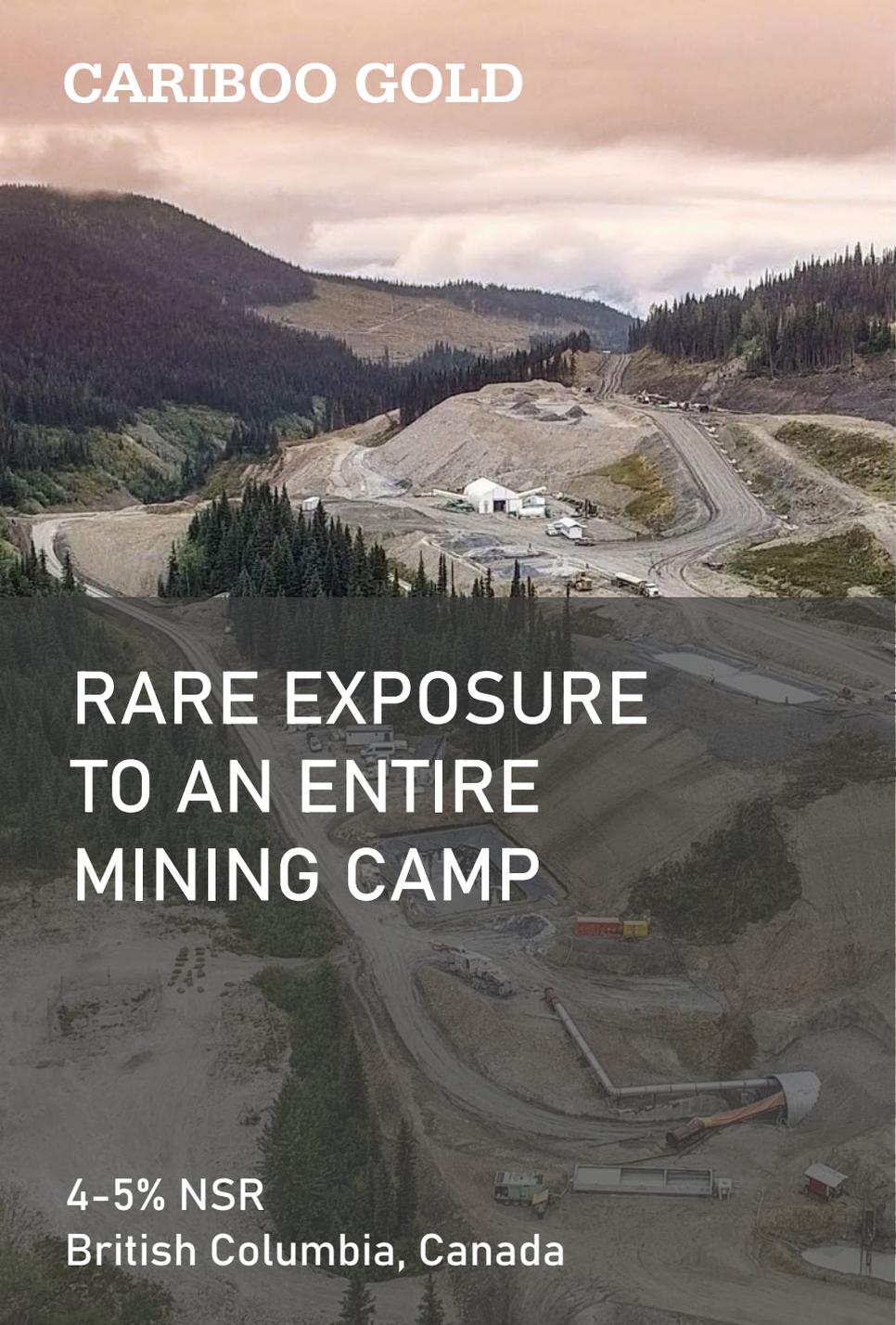
- ◆ World-class polymetallic deposit
- ◆ South32 is a major diversified operator
- ◆ Over 100Mt at 10.4% Zn Eq grade and multi-decade mine life
- ◆ Pre-feasibility study on-track for H2 2020¹²

HORNE 5

90-100% Ag Stream
Québec, Canada | Falco Resources Ltd.



- ◆ 6 million GEOs in reserves¹³
- ◆ Feasibility complete, permitting and discussions with stakeholders progressing
- ◆ One of the largest undeveloped gold projects in Canada



RARE EXPOSURE TO AN ENTIRE MINING CAMP

4-5% NSR
British Columbia, Canada

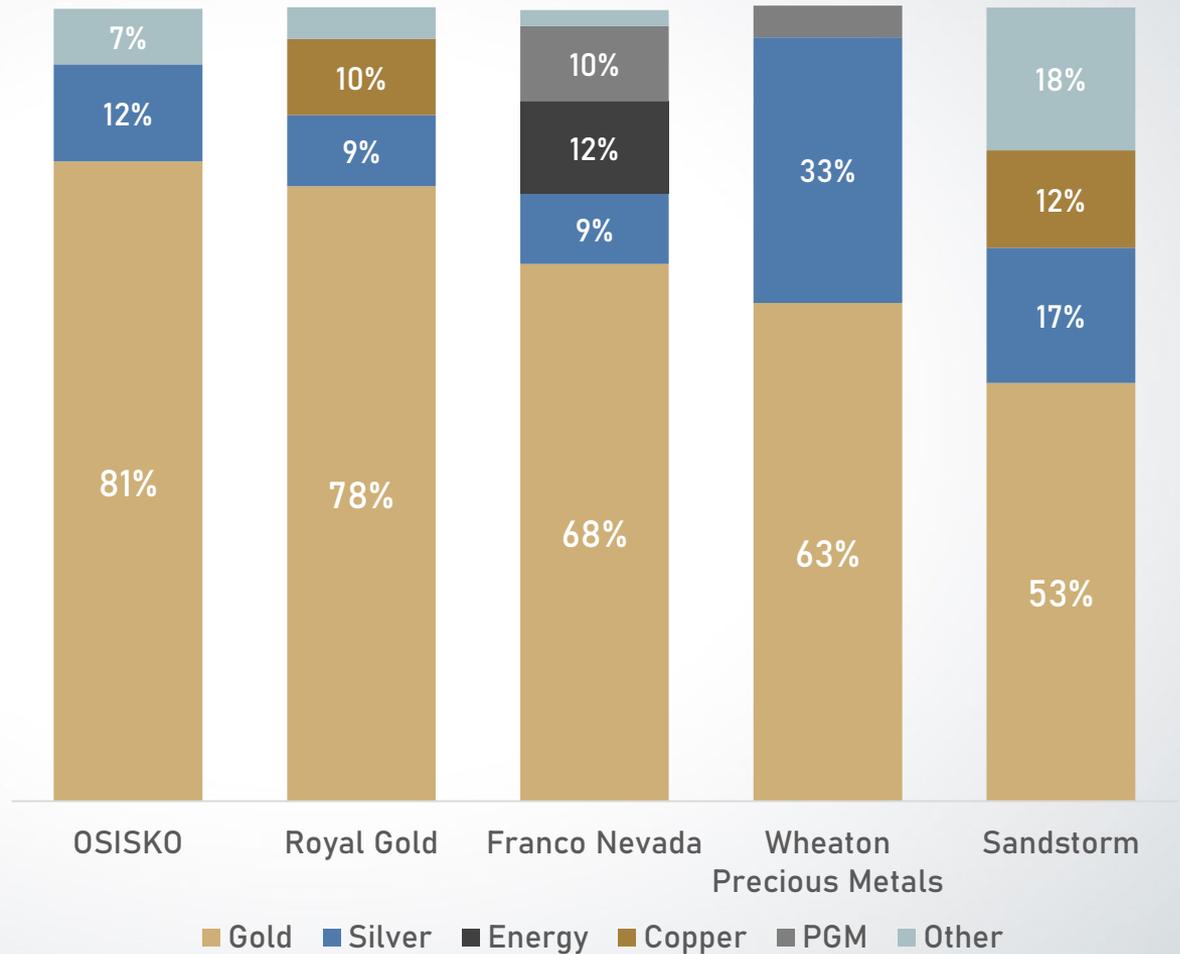
- ◆ 4.4 M OZ Au UNDERGROUND RESOURCE¹⁴ AND GROWING
- ◆ Decades of exploration potential with current resource sitting on 4 km of a 83 km trend
- ◆ 100% owned by Osisko
- ◆ +185,000 ounces of gold per year
- ◆ Low capex and easily scalable production
- ◆ Seeking external financing to develop within the North Spirit Discovery Group platform
- ◆ Clear path to permitting
- ◆ Construction decision in 2022



HIGH EXPOSURE TO GOLD PRICE

BASED ON
2019 REVENUES

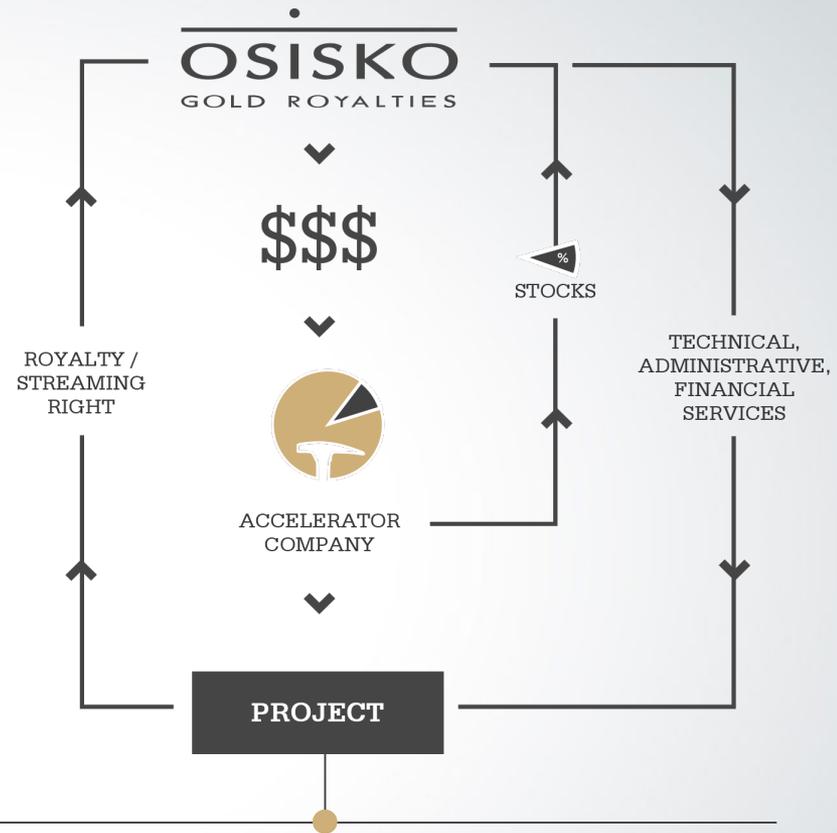
OSISKO
PROVIDES
THE HIGHEST
EXPOSURE TO
GOLD





OPTIONALITY THROUGH ACCELERATOR MODEL

- ◆ Leverage technical skillset to find attractive exploration assets early and provide capital / expertise
- ◆ Attract additional market capital to invest on royalty ground
- ◆ Osisko shareholders exposed to over 18 million GEOs in resources through accelerator companies¹⁵
- ◆ Over 400,000 meters drilled on Osisko royalty ground by Accelerator companies in 2019¹⁵
- ◆ Tax efficiency as investment in flow-through shares shelter royalty income



ACCELERATOR COMPANIES



16%
OWNERSHIP

~C\$1 B Market cap.
2.0-3.0% NSR on Windfall



18%
OWNERSHIP

~C\$70 M Market cap.
1.5% NSR on Pine Point



18%
OWNERSHIP

~C\$60 M Market cap.
90-100% Ag stream on Horne 5



10%
OWNERSHIP

~C\$40 M Market cap.
1.2% NSR on Bralorne



19%
OWNERSHIP

~C\$100 M Market cap.
3-5% NSR on Santana



Q1 2020 SUMMARY

18,159

ATTRIBUTABLE
GEOs EARNED FOR
Q1 2020

91%

CASH MARGIN EARNED
ON GEOs RECEIVED
FOR Q1 2020
(excluding offtakes)

C\$23.8 M

CASH FLOW FROM
OPERATING ACTIVITIES
IN Q1 2020

C\$27.9 M

BEFORE CHANGES IN
NON-CASH WORKING
CAPITAL ITEMS

C\$169.5 M

IN INVESTMENTS
AS AT MAR. 31,
2020

C\$158.3 M

IN CASH
AS AT MAR. 31,
2020

A BETTER GOLD INVESTMENT



QUALITY

- ◆ Diversified portfolio of over 135 high-quality royalty assets
- ◆ World-class operators and mining jurisdictions
- ◆ Highest dividend in royalty sector at ~1.5%



UPSIDE

- ◆ Production & cash flow growth
- ◆ Strong development pipeline of assets
- ◆ High exposure to gold



OPPORTUNITY

- ◆ Trading at discount
- ◆ Increased returns through accelerator model
- ◆ Exposure to the new discoveries and increased mine life

ENDNOTES

1. GEOs are calculated on a quarterly basis and include royalties, streams and offtakes. Silver earned from royalty and stream agreements was converted to gold equivalent ounces by multiplying the silver ounces by the average silver price for the period and dividing by the average gold price for the period. Diamonds, other metals and cash royalties were converted into gold equivalent ounces by dividing the associated revenue by the average gold price for the period. Offtake agreements were converted using the financial settlement equivalent divided by the average gold price for the period. Refer to the Portfolio of Royalty, Stream and Other Interests section of the Management's Discussion and Analysis for Q1 2020 for average metal prices used.
2. "Adjusted earnings" and "Adjusted earnings per basic share" are non-IFRS financial performance measures which have no standard definition under IFRS. Refer to the non-IFRS measures provided under the Non-IFRS Financial Performance Measures section of the Management's Discussion and Analysis for Q1 2020
3. Cash operating margin, which represents revenues less cost of sales, is a non-IFRS measure. The Company believes that this non-IFRS generally accepted industry measure provides a realistic indication of operating performance and provides a useful comparison with its peers.
4. \$52.6 million including offtakes for Q1 2020 (\$100.7 million for Q1 2019)
5. The fair value corresponds to the quoted price of the investments in a recognized stock exchange as at May 1, 2020.
6. Including the C\$100 million accordions.
7. Majors include Barrick Gold, Newmont Corporation, Agnico Eagle, Kinross and Kirland Lake Gold
8. Excluding offtakes
9. Refer to Agnico Eagle press release dated February 13, 2020
10. Agnico Eagle's mineral reserves and resources disclosure as at December 31, 2019:
 - ◆ M&I mineral resources of 136 Koz, 2,022 Kt @ 2.10 g/t Au on Odyssey
 - ◆ M&I mineral resources of 694 Koz, 9,924 Kt @ 2.18 g/t Au on East Malartic
 - ◆ Inf. mineral resources of 1,666 Koz, 22,368 Kt @ 2.22 g/t Au on Odyssey
 - ◆ Inf. mineral resources of 5,192 Koz, 78,764 Kt @ 2.05 g/t Au on East Malartic
 - ◆ Inf. mineral resources of 2,738 Koz, 25,520 Kt @ 3.34 g/t Au on East Gouldie
11. Osisko Mining's mineral resources disclosure as at December 31, 2019:
 - Indicated mineral resources of 1,206 Koz, 4,127 Kt @ 9.1 g/t Au
 - Inf. mineral resources of 3,938 Koz, 14,532 Kt @ 8.4 g/t Au
12. South32 corporate presentation - 2020 BMO Capital Markets Global Metals and Mining Conference
13. Falco Resources' mineral reserves and resources disclosure as at December 31, 2019:
 - P&P mineral reserves of 5,961 Koz Au Eq., 80.9 Mt @ 2.37 g/t Au Eq.
 - M&I mineral resources (including reserves) of 7,501 Koz Au Eq., 91.2 Mt @ 2.56 g/t Au Eq.
 - Inf. mineral resources of 1,736 Koz, 21.5 Mt @ 2.51 g/t Au Eq.
14. Cariboo Gold project resources as at December 31, 2019:
 14. Measured resources of 35 Koz, 139 Kt @ 7.8 g/t
 15. Indicated resources of 2,404 Koz, 13,289 Kt @ 5.6 g/t
 16. Inferred resources of 1,922 Koz, 11,936 Kt @ 5.0 g/t
15. Includes Windfall, Horne 5, Cariboo and Pine Point