RED CLOUD FALL MINING SHOWCASE

NOVEMBER 10, 2022

Franco Nevada

FNV: TSX | NYSE



CAUTIONARY STATEMENT

Forward Looking Statements

This presentation contains "forward looking information" and "forward looking statements" within the meaning of applicable Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995, respectively, which may include, but are not limited to, statements with respect to future events or future performance, management's expectations regarding Franco-Nevada's growth, results of operations, estimated future revenues, performance guidance, carrying value of assets, future dividends and requirements for additional capital, mineral reserve and mineral resource estimates, production estimates, production costs and revenue, future demand for and prices of commodities, expected mining sequences, business prospects and opportunities, the performance and plans of third party operators, audits being conducted by the Canada Revenue Agency ("CRA"), the expected exposure for current and future assessments and available remedies, the remedies relating to and consequences of the ruling of the Supreme Court of Panama in relation to the Cobre Panama project. In addition, statements (including data in tables) relating to reserves and resources including reserves and resources covered by a royalty, stream or other interest, gold equivalent ounces ("GEOs") or mine lives are forward looking statements, as they involve implied assessment, based on certain estimates and assumptions, and no assurance can be given that the estimates and assumptions are accurate and that such reserves and resources, mine lives and GEOs will be realized. Such forward looking statements reflect management's current beliefs and are based on information currently available to management. Often, but not always, forward looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budgets", "potential for", "scheduled", "estimates", "forecasts", "predicts", "projects", "intends", "targets", "aims", "anticipates" or "believes" or variations (including negative variations) of such words and phrases or may be identified by statements to the effect that certain actions "may", "could", "should", "would", "might" or "will" be taken, occur or be achieved. Forward looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of Franco-Nevada to be materially different from any future results, performance or achievements expressed or implied by the forward looking statements. A number of factors could cause actual events or results to differ materially from any forward looking statement, including, without limitation: fluctuations in the prices of the primary commodities that drive royalty and stream revenue (gold, platinum group metals, copper, nickel, uranium, silver, iron-ore and oil and gas); fluctuations in the value of the Canadian and Australian dollar, Mexican peso and any other currency in which revenue is generated, relative to the U.S. dollar; changes in national and local government legislation, including permitting and licensing regimes and taxation policies and the enforcement thereof; the adoption of a global minimum tax on corporations; regulatory, political or economic developments in any of the countries where properties in which Franco-Nevada holds a royalty, stream or other interest are located or through which they are held; risks related to the operators of the properties in which Franco-Nevada holds a royalty, stream or other interest, including changes in the ownership and control of such operators; relinquishment or sale of mineral properties; influence of macroeconomic developments; business opportunities that become available to, or are pursued by Franco-Nevada; reduced access to debt and equity capital; litigation; title, permit or license disputes related to interests on any of the properties in which Franco-Nevada holds a royalty, stream or other interest; whether or not Franco-Nevada 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 treatment of offshore streams; excessive cost escalation as well as development, permitting, infrastructure, operating or technical difficulties on any of the properties in which Franco-Nevada holds a royalty, stream or other interest; access to sufficient pipeline capacity; actual mineral content may differ from the reserves and resources contained in technical reports; rate and timing of production differences from resource estimates, other technical reports and mine plans; risks and hazards associated with the business of development and mining on any of the properties in which Franco-Nevada holds a royalty, stream or other interest, including, but not limited to unusual or unexpected geological and metallurgical conditions, slope failures or cave-ins, flooding and other natural disasters, terrorism, civil unrest or an outbreak of contagious disease; the impact of the COVID-19 (coronavirus) pandemic; and the integration of acquired assets. 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 Franco-Nevada 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; Franco-Nevada's ongoing income and assets relating to determination of its PFIC status; no material changes to existing tax treatment; the expected application of tax laws and regulations by taxation authorities; the expected assessment and outcome of any audit by any taxation authority; no adverse development in respect of any significant property in which Franco-Nevada 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; integration of acquired assets; 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. In addition, there can be no assurance as to the outcome of the ongoing audit by the CRA or the Company's exposure as a result thereof. Franco-Nevada cannot assure investors that actual results will be consistent with these forward looking statements. Accordingly, investors should not place undue reliance on forward looking statements due to the inherent uncertainty therein.

For additional information with respect to risks, uncertainties and assumptions, please refer to Franco-Nevada's most recent Annual Information Form filed with the Canadian securities regulatory authorities on www.sedar.com and Franco-Nevada's most recent Annual Report filed on Form 40-F filed with the SEC on www.sec.gov. The forward-looking statements herein are made as of the date herein only and Franco-Nevada does not assume any obligation to update or revise them to reflect new information, estimates or opinions, future events or results or otherwise, except as required by applicable law.

Non-GAAP Measures

Cash Costs, Cash Costs per GEO sold, Adjusted Net Income, Adjusted Net Income per Share, Adjusted Net Income Margin, Adjusted EBITDA, Adjusted EBITDA per Share, and Adjusted EBITDA Margin are non-GAAP financial measures with no standardized meaning under International Financial Reporting Standards ("IFRS") and might not be comparable to similar financial measures disclosed by other issuers. For a quantitative reconciliation of each non-GAAP financial measure to the most directly comparable IFRS financial measure, refer to the appendix at the end of this presentation. Further information relating to these Non-GAAP financial measures is incorporated by reference from the "Non-GAAP Financial Measures" section of Franco-Nevada's MD&A for the three and nine months ended September 30, 2022 and filed on November 7, 2022 with the Canadian securities regulatory authorities on SEDAR available at www.sedar.com and with the U.S. Securities and Exchange Commission available on EDGAR at www.sec.gov.

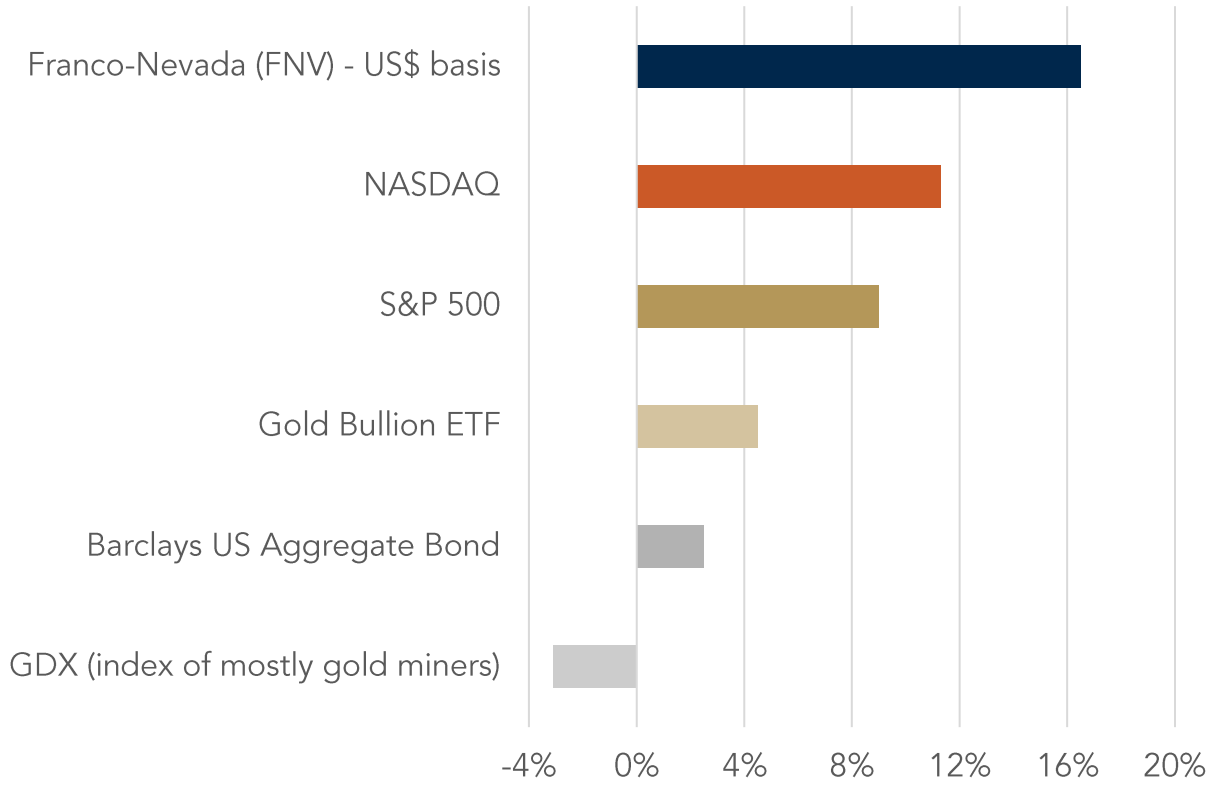
Gold and Gold Equivalent Ounces

Starting in Q4 2021, revenue from Franco-Nevada's Energy assets is included in the calculation of GEOs. GEOs for comparative periods have been recalculated to conform with the current presentation. For further details, please refer to the appendix at the end of this presentation on GEOs and Non-GAAP Measures.

This presentation does not constitute an offer to sell or a solicitation for an offer to purchase any security in any jurisdiction.

Leading Track Record

(CAGR Since FNV Inception[1, 2, 3])



A lower-risk gold investment to hedge against market volatility

NYSE and TSX listed

Large holders include:

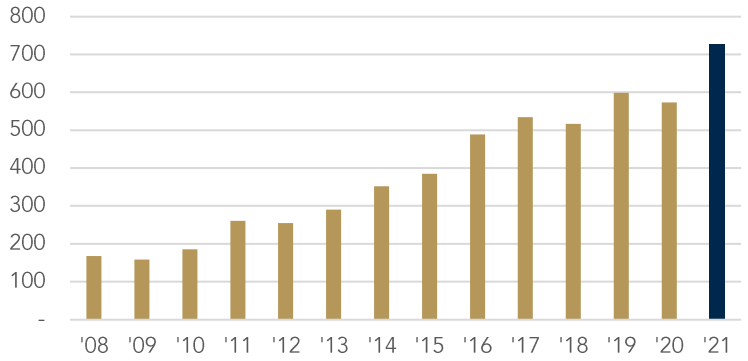
- BlackRock
- Fidelity
- MFS

1. FNV Inception – December 20, 2007
2. Compounded annual total returns to October 31, 2022
3. Source: TD Securities; Bloomberg

TRACK RECORD

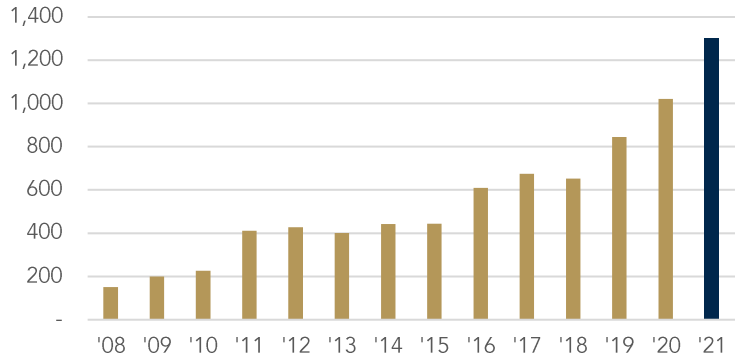
GEOs[1]

(000's)



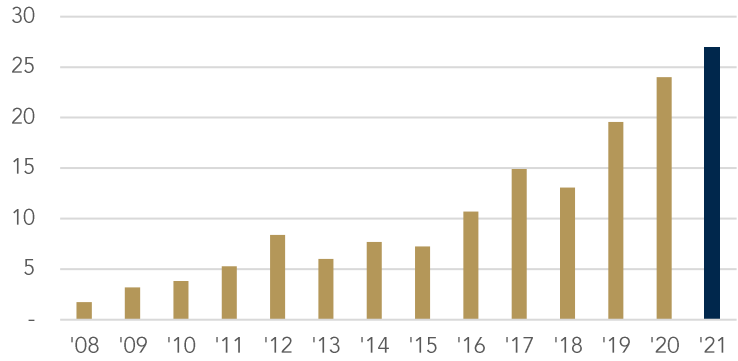
Revenue

(US$ Millions)



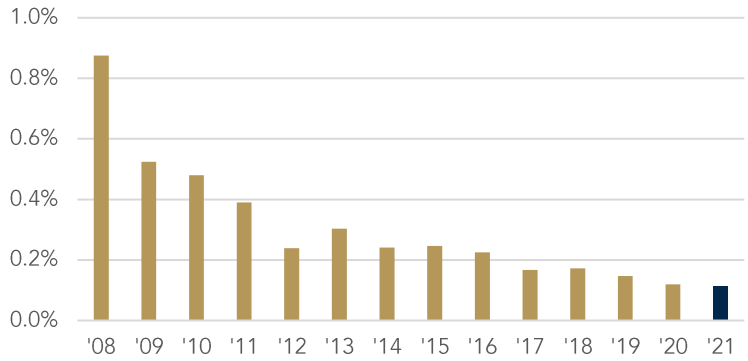
Market Capitalization[2]

(US$ Billions)



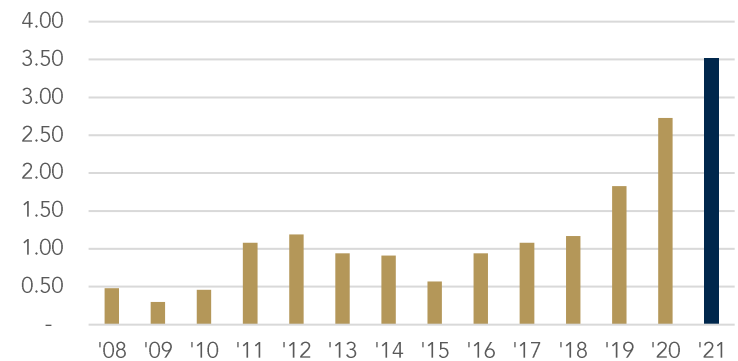
G&A

(% of Capitalization)



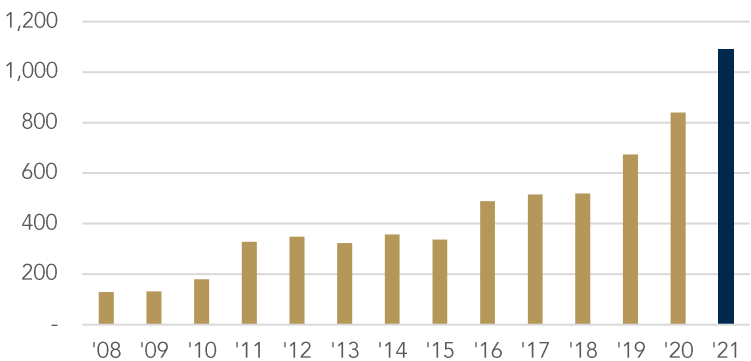
Adjusted Net Income per Share[3]

(US$ per Share)



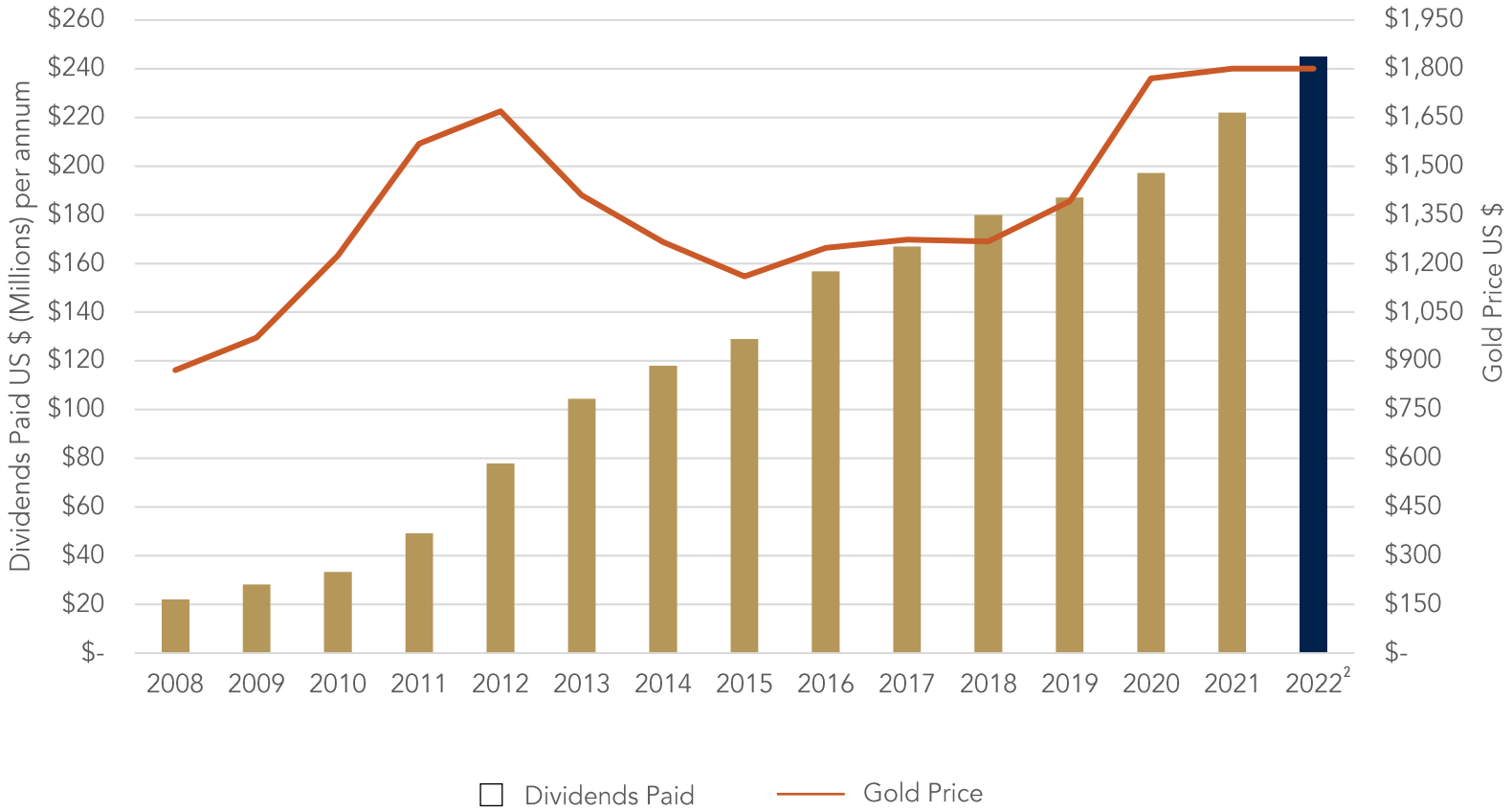
Adjusted EBITDA[3]

(US$ Millions)



1. Starting in Q4 2021, revenue from Franco-Nevada's Energy assets are included in the calculation of GEOs. GEOs for comparative periods have been recalculated to conform with the current presentation. For further details, please refer to the appendix at the end of this presentation on GEOs and Non-GAAP Measures
2. Market Capitalization as of December 31 of each year
3. Please refer to the appendix at the end of this presentation on GEOs and Non-GAAP Measures

PROGRESSIVE & SUSTAINABLE DIVIDENDS



US$0.32/share

(Quarterly dividend starting Q1/22)

15th annual dividend increase

>$1.85B paid since IPO[1]

Indicative 2022 dividends of $245M[2]

IPO investors now realizing
8.4% yield (U.S.)[3]
10.9% yield (CDN)[3]

1. Includes DRIP
2. Assumes current quarterly dividend of $0.32 per share and current share count are maintained throughout 2022
3. As at September 30, 2022

Gold Price for 2022 of $1,800 as used in guidance published on March 9, 2022


Business Model
ANTAPACCAY

Our ESG Focus

- Responsible Capital Allocation
- Community Contributions
- Good Governance & Shareholder Alignment
- Fostering Diversity and Inclusion
- Transparent ESG Disclosure

Top ESG Rankings

SUSTAINALYTICS a Morningstar company ESG INDUSTRY TOP RATED 2022

SUSTAINALYTICS a Morningstar company ESG REGIONAL TOP RATED 2022

MSCI ESG RATINGS AA

CCC | B | BB | BBB | A | AA | AAA

Corporate ESG Performance Prime

RATED BY ISS ESG

BEST 50 2022 CANADA'S BEST CORPORATE CITIZENS

For additional details, please see pages 37-38 of this presentation and our most recent ESG Report

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Partnership Approach

Alignment with partners for a win-win solution

Support leading operators through long-term partnership

Technical team with strong track record identifying successful projects





Asset Portfolio

COBRE PANAMA



416 Assets

Covering Approximately 65,700 km²

Our Portfolio

416
TOTAL

	Precious Metals	Diversified
113 PRODUCING	■	■
44 ADVANCED	▼	▼

259
EXPLORATION

Not all assets shown on map including exploration assets
Asset count as of October 28, 2022

CORE PRECIOUS METAL STREAMS OUTPERFORMING

Antamina
$610M investment

2021 revenue: $94M
Mine life potential[1]: 30+ years
Payback[2]: 71%
Silver production has exceeded expectations[3]

Antapaccay
$500M investment

2021 revenue: $112M
Mine life potential[1]: 30+ years
Payback[2]: 109%
Coroccohuayco deposit to extend mine life



Cobre Panama
$1.36B investment

2021 revenue: $235M
Mine life potential[1]: 35+ years
Payback[2]: 36%
Expanding to 100 Mtpa in 2023[4]

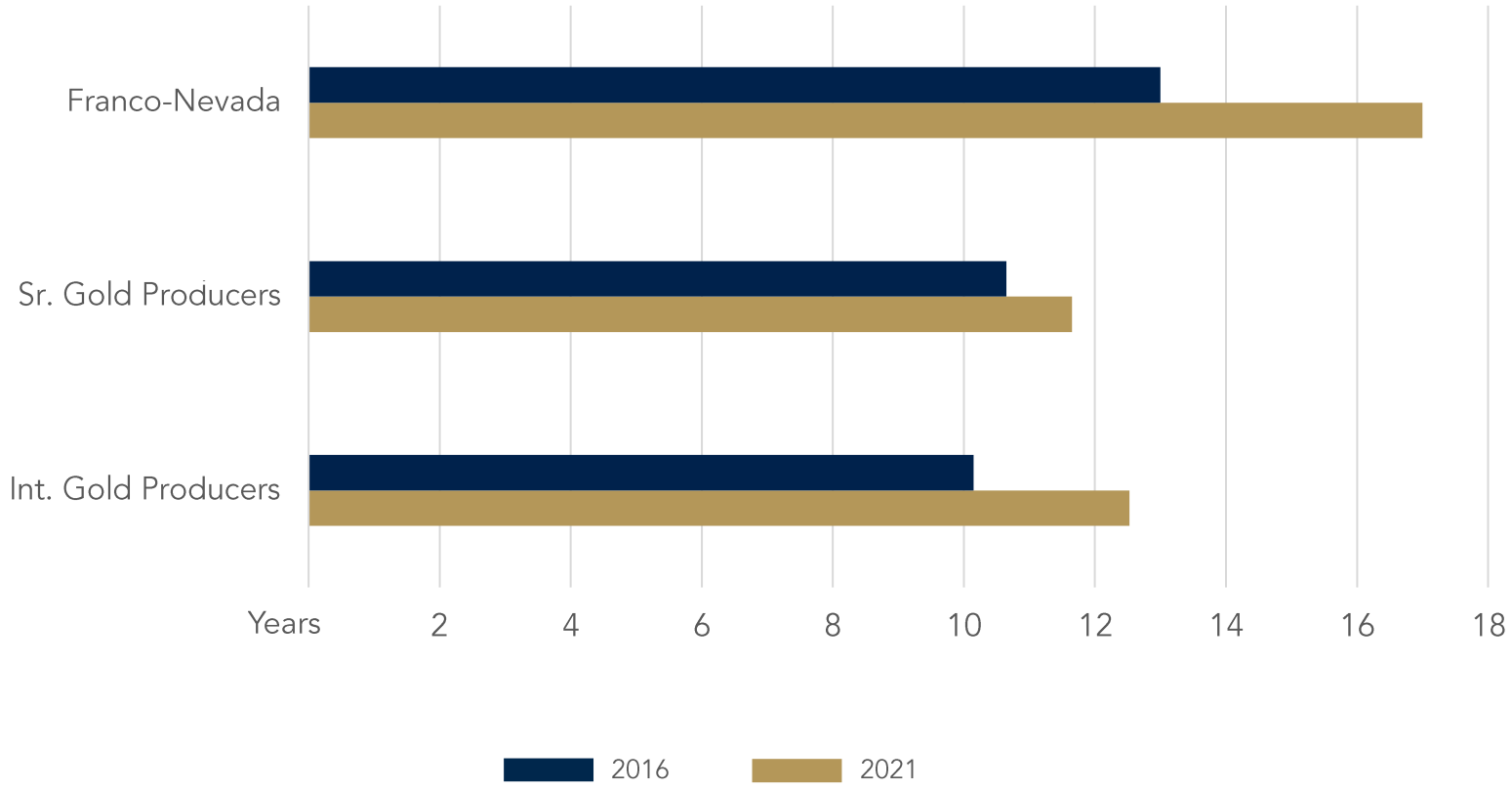
Candelaria
$655M investment

2021 revenue: $117M
Mine life potential[1]: 25+ years
Payback[2]: 90%
UG exploration success has expanded mine life[5]

1. Mine life potential includes Franco-Nevada assessment of resource conversion potential. Also assumes current or operator-forecasted production rates. Antamina potential assumes additional tailings capacity is permitted. Antapaccay potential assumes open pit only scenario for Coroccohuayco project developed with a later start date
2. As at September 30, 2022
3. Based on FNV sales from inception of stream through Q3 2022 vs. acquisition guidance
4. Design throughput was originally 58 Mtpa
5. Mine life was 14 years in Technical Report dated July 28, 2014

Growing reserves and reserve lives

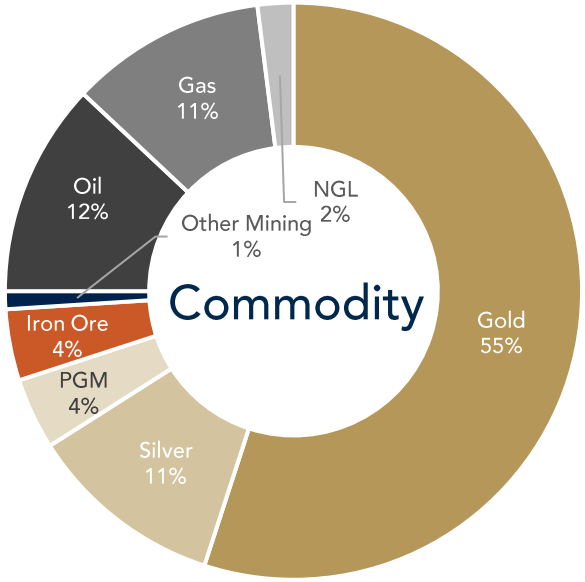
Long-duration portfolio increases optionality



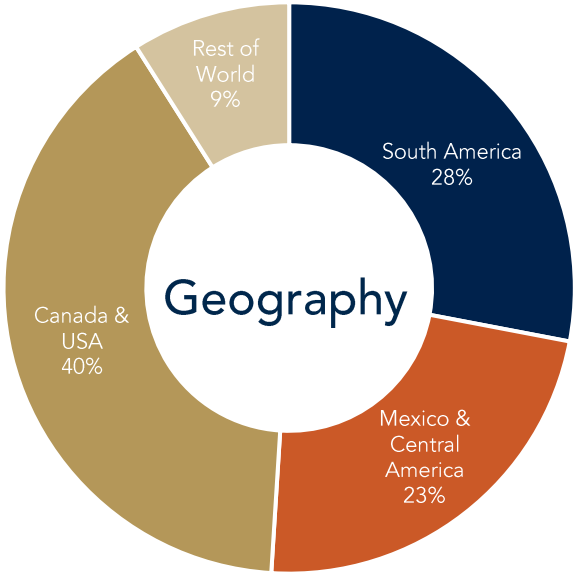
Source: Bank of America/Merrill Lynch (May 2022)
Seniors: Agnico Eagle, Barrick, Kinross and Newmont.
Intermediates: Alamos Gold, IAMGOLD, New Gold and Yamana.

Diversified with Low Risk

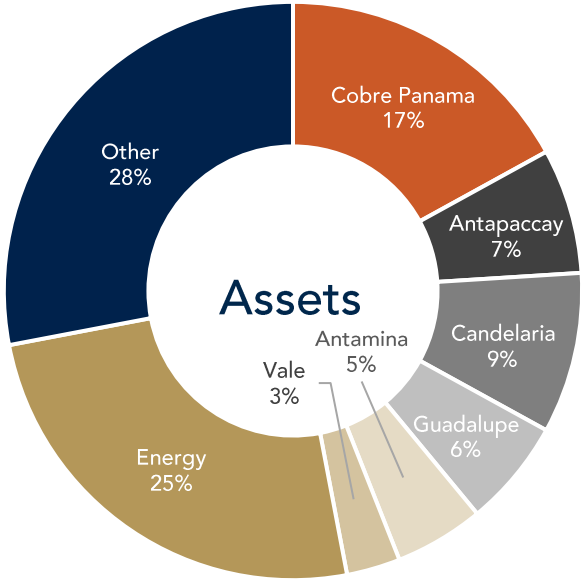
(YTD 2022 Revenue)



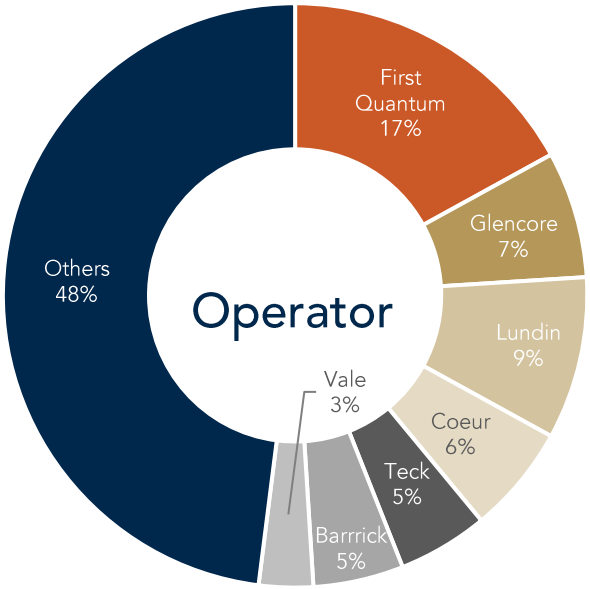
70% from Precious Metals



91% from Americas



Asset Diversification



Operator Diversification

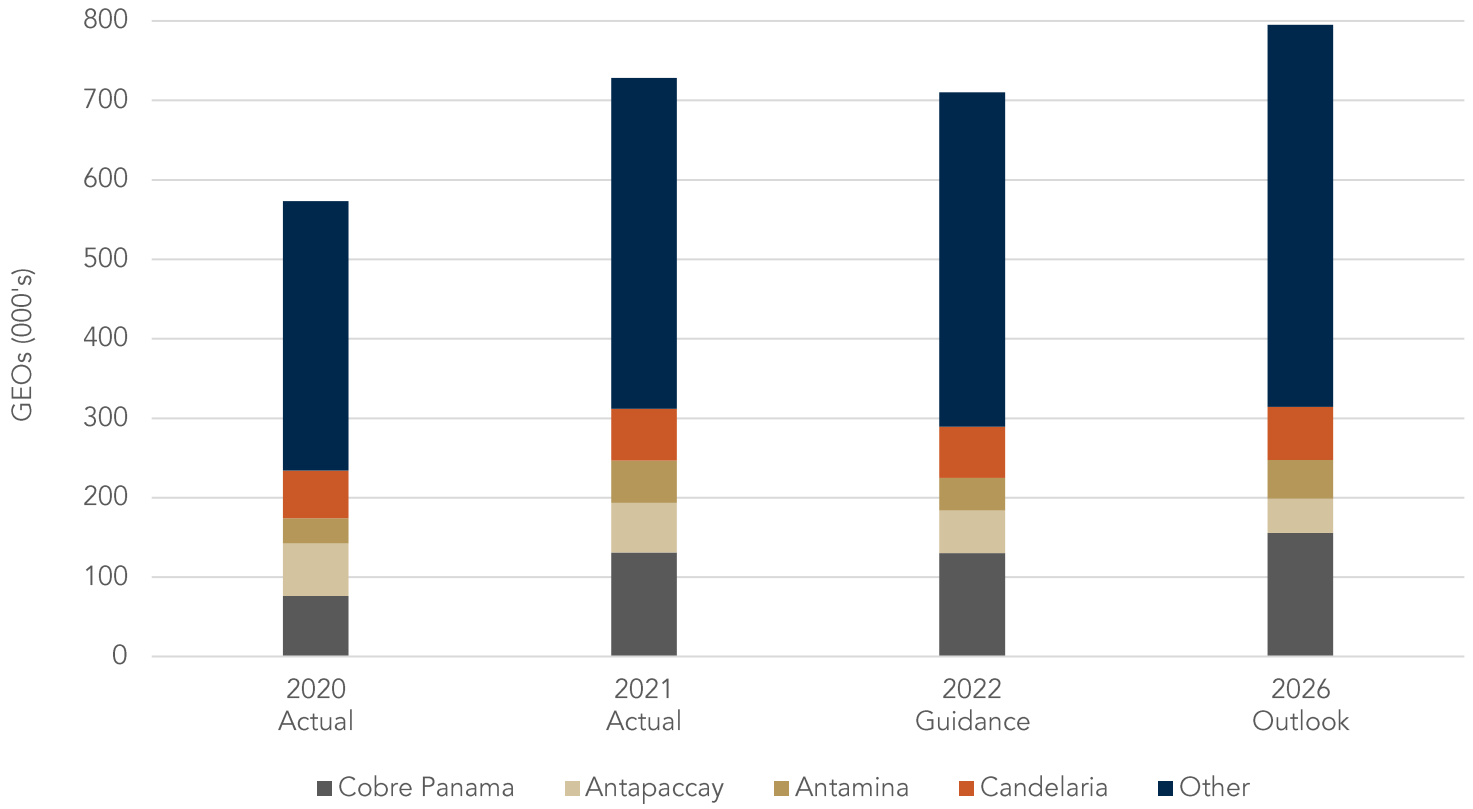
1. YTD 2022 Revenue as at September 30, 2022


Growth Outlook
ANTAMINA

Cobre Panama ramp-up driving growth

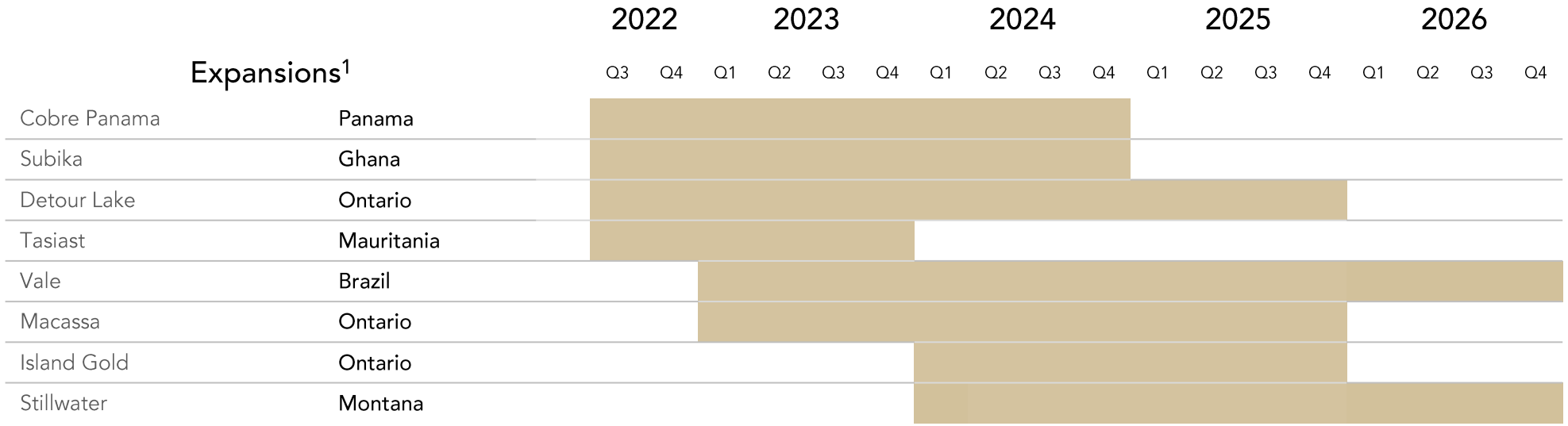
GEO Growth Profile

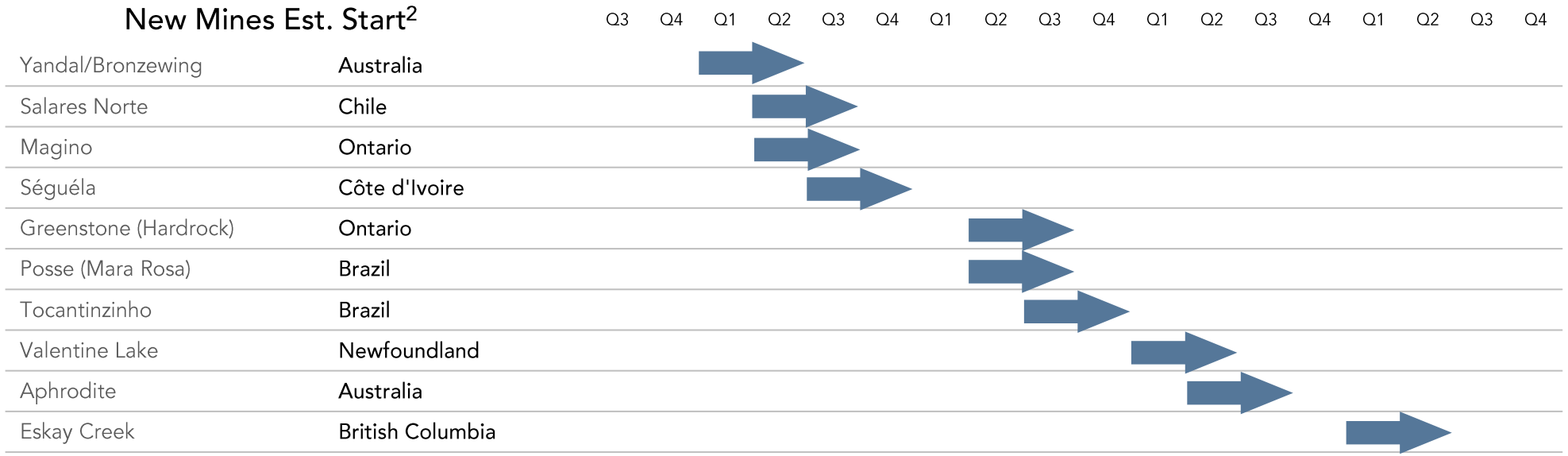
(Including Energy)



GEOs for the years 2020 and 2021 represent actuals. GEOs for the years 2022 and 2026 represent midpoint of guidance issued on March 9, 2022

ORGANIC GROWTH DRIVERS

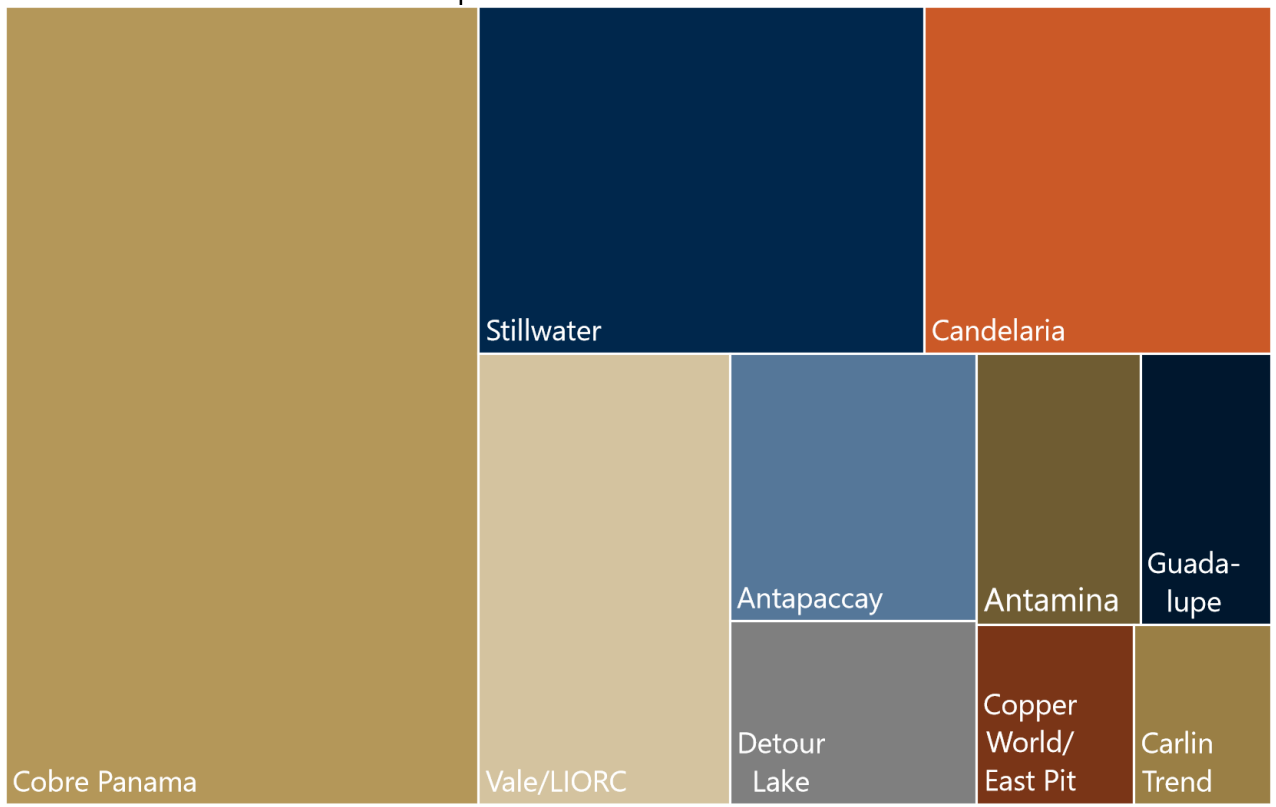




1. Expansion periods are based on operators' indicated period of ramp-up
2. Indicated start periods are based on operators' guidance and FNV best estimates

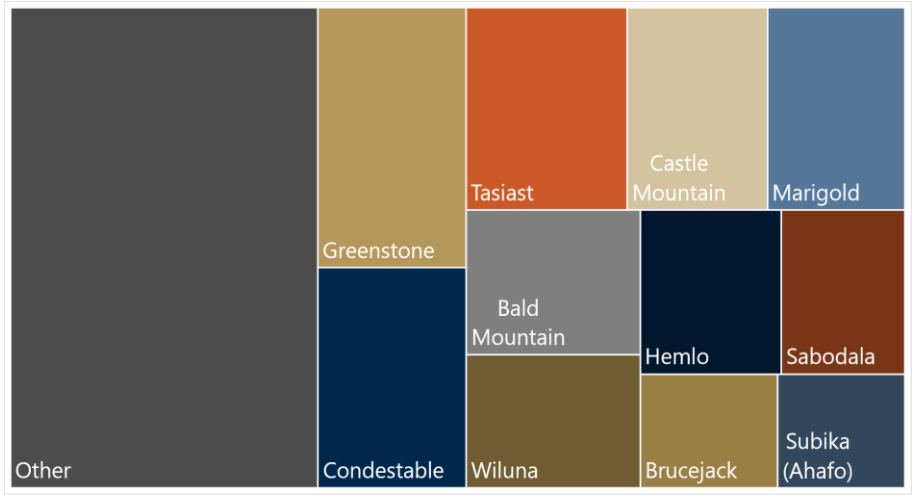
ROYALTY OUNCE BREAKDOWN

Top 10 Assets in 5 Year Outlook[1]



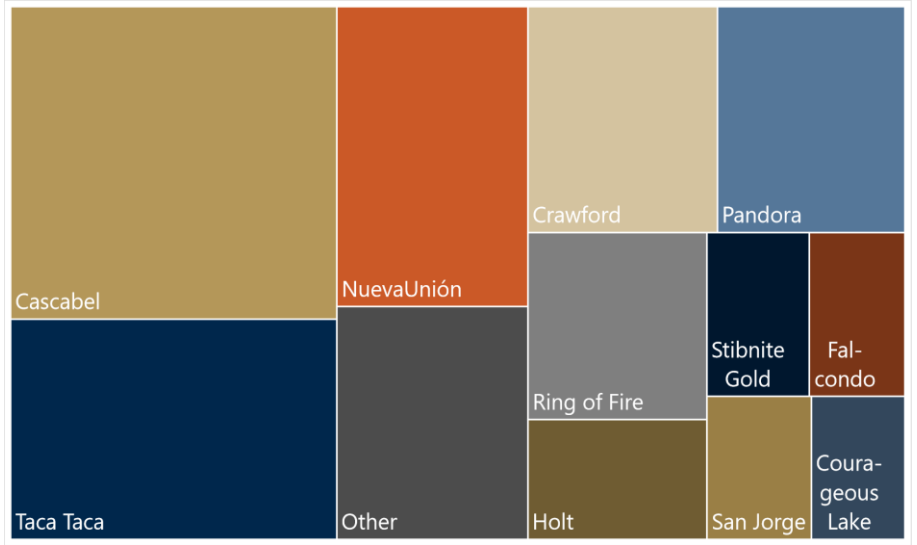
13.3 Moz +

Other Assets in 5 Year Outlook[1]



2.4 Moz +

Long-Term Assets[1]



2.9 Moz

M&I Royalty Ounces increased 15% to 18.6 Moz at year end 2021

1. For calculation of M&I Royalty Ounces refer to Franco-Nevada 2022 Asset Handbook
   Mineral Reserve estimates reported by Vale S.A. as of December 31, 2020 have been prepared and reported in accordance with SEC Industry Guide 7 and as such no Mineral Resources are reported. Franco-Nevada has therefore only calculated Mineral Reserve Royalty Ounces for Vale (Northern & Southeastern System) and Sossego and, as such, Mineral Reserve Royalty Ounces are shown in place of M&I Mineral Resource Royalty Ounces for these assets. Details for the Mineral Reserve Royalty Ounces can be found in the 2022 Asset Handbook
   5 Year Outlook (2026) as published on March 9, 2022

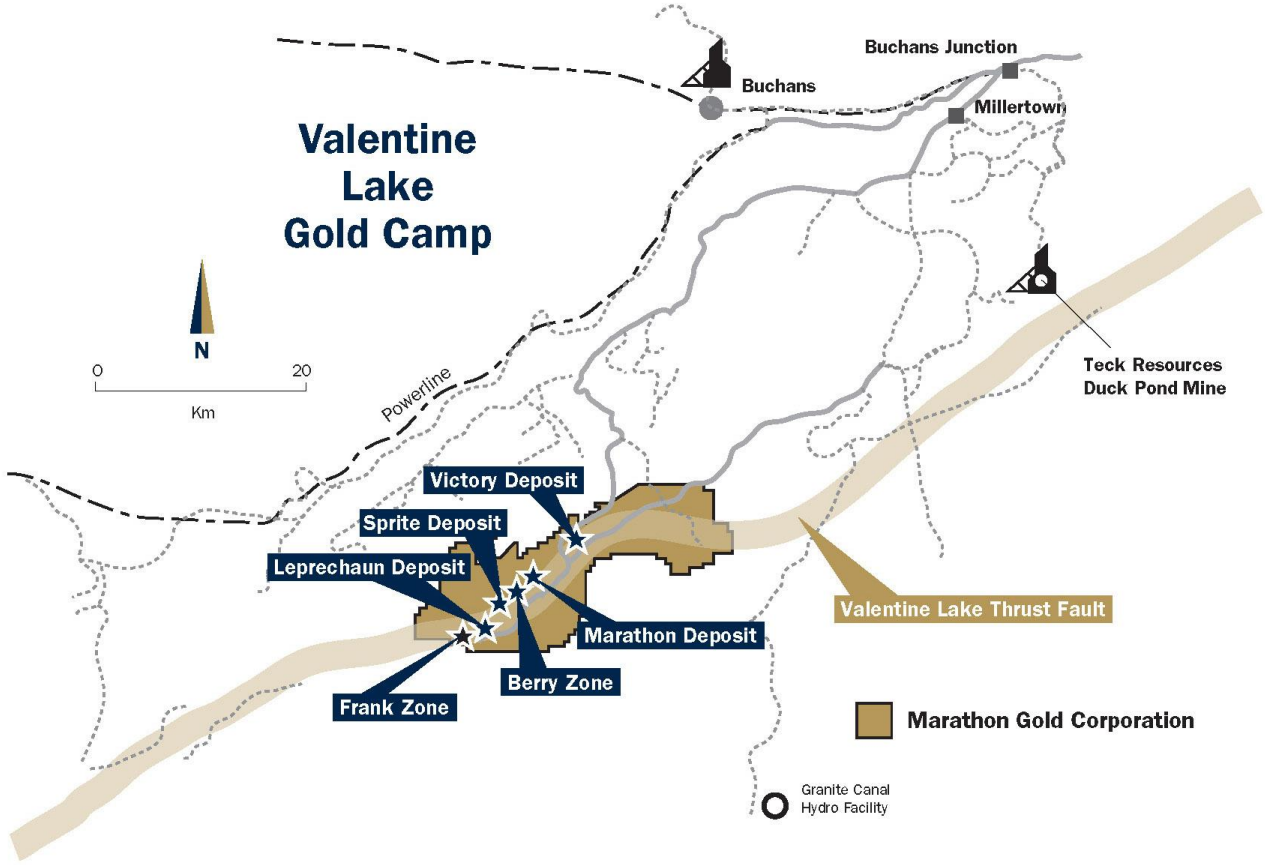
VALENTINE LAKE/MARATHON GOLD

High grade open pit gold project located in central Newfoundland

FNV acquired 2% NSR in February 2019 for C$18M with a 0.5% buyback for US$7M until December 31, 2022

Proceeds from the financing were to advance the prefeasibility study

Deposit had demonstrated strong economics and the 240 km^2 property had excellent upside potential



Source: Marathon Gold Corporation; Technical Report Preliminary Economic Assessment, October 30, 2018; News Release, February 21, 2019

CASCABEL/SOLGOLD

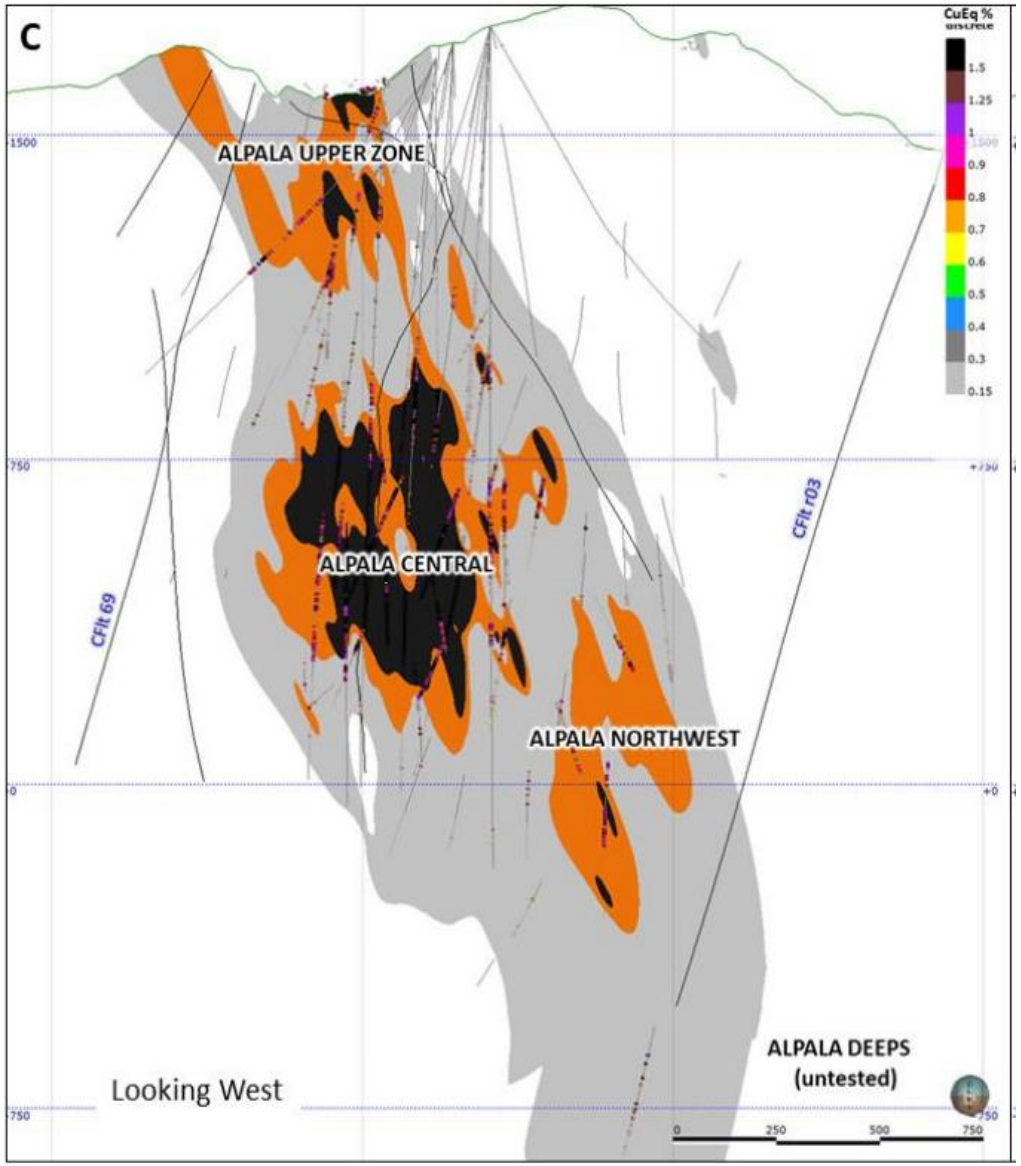
FNV acquired a 1% royalty on the Cascabel concession for US$100 million from SolGold in September 2020

SolGold was advancing a prefeasibility study with the proceeds

The resources at the time indicated one of the best copper-gold development projects in the world

M&I resources of 2.7 Bt @ 0.53% CuEq1 including 21.7 Moz Au

High grade core of 442 Mt @ 1.40% CuEq2



Source: SolGold: News Release dated April 7, 2020
1. 0.21% CuEq cut-off.
2. 0.80% CuEq cut-off.

ESKAY CREEK/SKEENA RESOURCES

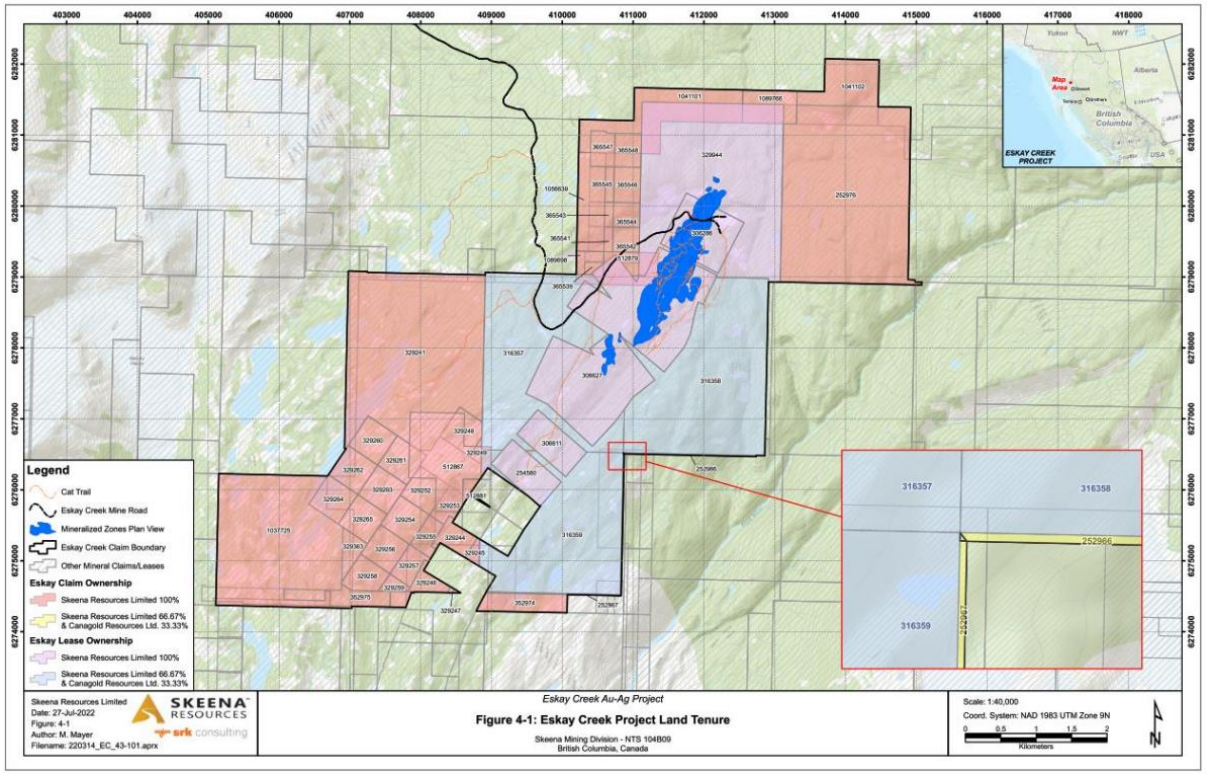
FNV holds a 1% royalty on the Eskay Creek Project which was modified in December 2021 to cover substantially all of the land package

FNV participated in an equity placement of C$22.1M for 1.47M shares

FNV also acquired a ROFR / option on a 0.5% NSR subject to a buyback

Proceeds were used to fund exploration at the project which continue to be successful

Skeena published a feasibility study in September 2022 with a large reserve of 3.9 Moz AuEq (29.9 Mt at 2.99 g/t Au and 79 g/t Ag)



Source: Skeena Resources: News Release dated September 8, 2022

SHOVELNOSE / WESTHAVEN GOLD

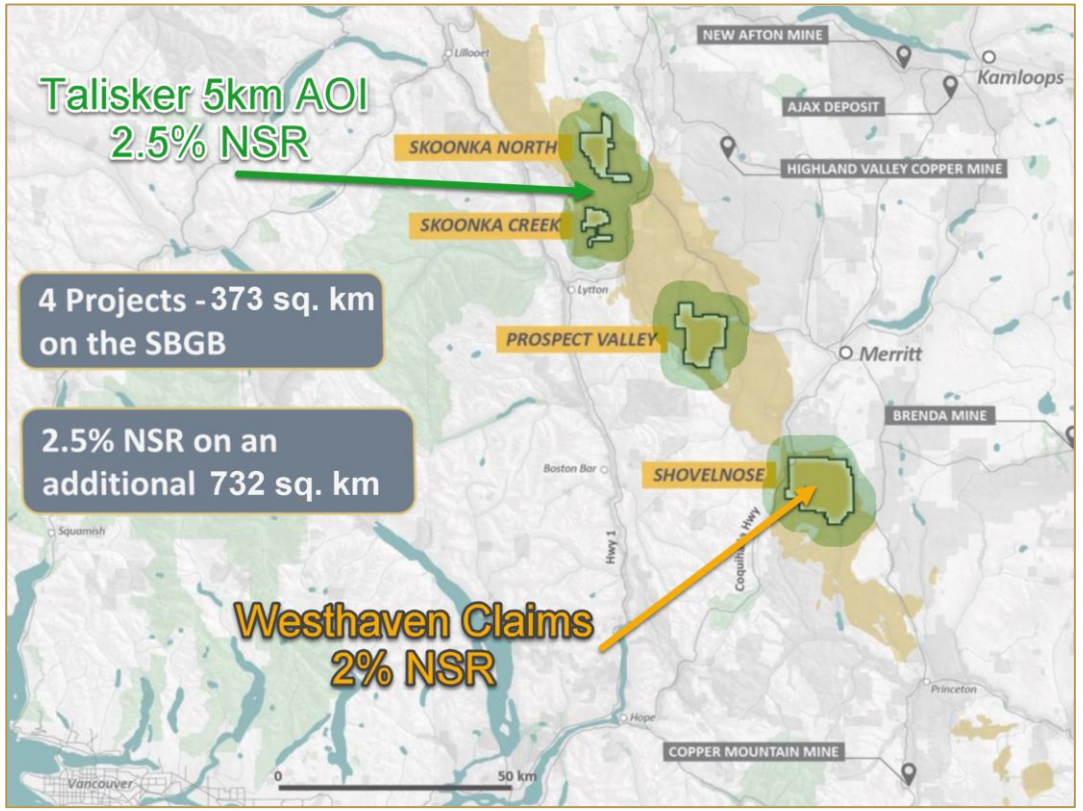
FNV acquired a 2% NSR on Westhaven's large land package in prospective Spences Bridge Gold Belt

Also acquired Westhaven's existing 2.5% NSR on Talisker Resources' claims within a 5 km AOI

Total consideration of US$6.75 million + an equity placement for C$1M

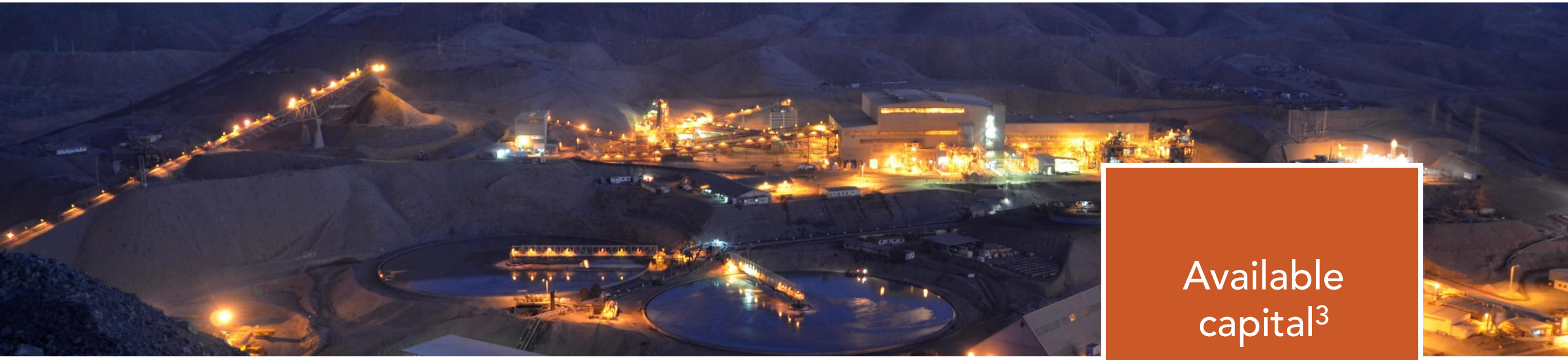
Westhaven was an early mover in the region and Shovelnose property includes an indicated resource of 841 koz AuEq (10.6 Mt at 2.32 g/t Au and 11.43 g/t Ag) plus an inferred resource of 277 koz AuEq (9.2 Mt at 0.89 g/t Au and 3.47 g/t Ag)

Proceeds were used to fund exploration at the project, including the recently mobilized drilling at Skoonka Creek



Source: Westhaven Gold: News release dated January 10, 2022 and October 26, 2022

AVAILABLE CAPITAL



Cash and cash equivalents[1] ≈$1B

+

Credit Facility[1, 2] ≈$1B

=

Available capital[3] $2B DEBT FREE

1. As at September 30, 2022
2. $1B Corporate Revolver
3. Funding commitments subsequent to September 30, 2022 will be funded with cash flow from operations

Shareholder Alignment

Committed to high-share ownership and low G&A – treating shareholder funds as our own

Financial Flexibility

Avoiding long-term debt and paying progressive and sustainable dividends ensures capital availability at all times

Cyclical Investing

Board and management have a patient approach to investing in cyclical markets

Asset Selection

Strong technical skills and a focus on exploration optionality and good tenure drive successful asset selection

THANK YOU FOR YOUR INTEREST IN

Franco Nevada

Leading track record

Low-risk business model

Diversified portfolio

Growth and optionality

www.FRANCO-NEVADA.com

TSX: FNV | NYSE: FNV

APPENDIX – GEOS AND NON-GAAP MEASURES

1. Starting in Q4 2021, revenue from Franco-Nevada's Energy assets is included in the calculation of GEOs. GEOs for comparative periods have been recalculated to conform with the current presentation. GEOs include Franco-Nevada's attributable share of production from our Mining and Energy assets, after applicable recovery and payability factors. GEOs are estimated on a gross basis for NSR royalties and, in the case of stream ounces, before the payment of the per ounce contractual price paid by the Company. For NPI royalties, GEOs are calculated taking into account the NPI economics. Silver, platinum, palladium, iron ore, oil, gas and other commodities are converted to GEOs by dividing associated revenue, which includes settlement adjustments, by the relevant gold price. The price used in the computation of GEOs earned from a particular asset varies depending on the royalty or stream agreement, which may make reference to the market price realized by the operator, or the average price for the month, quarter, or year in which the commodity was produced or sold.

Average Prices and Rates

		For the three months ended September 30,		For the nine months ended September 30,	
		2022	2021	2022	2021
Gold	($/oz)	$ 1,728	$ 1,789	$ 1,825	$ 1,801
Silver	($/oz)	$ 19.22	$ 24.36	$ 21.94	$ 25.78
Platinum	($/oz)	$ 886	$ 1,024	$ 958	$ 1,122
Palladium	($/oz)	$ 2,074	$ 2,459	$ 2,163	$ 2,551
Iron Ore Fines 62% Fe CFR China	($/tonne)	$ 105	$ 191	$ 129	$ 205
Edmonton Light	(C$/bbl)	$ 116.51	$ 84.20	$ 123.51	$ 76.35
West Texas Intermediate	($/bbl)	$ 91.56	$ 70.52	$ 98.09	$ 64.82
Henry Hub	($/mcf)	$ 7.91	$ 4.32	$ 6.65	$ 3.34

2. Non-GAAP financial measures: Cash Costs, Cash Costs per GEO sold, Adjusted Net Income, Adjusted Net Income per Share, Adjusted Net Income Margin, Adjusted EBITDA, Adjusted EBITDA per share, and Adjusted EBITDA Margin are non-GAAP financial measures with no standardized meaning under IFRS and might not be comparable to similar financial measures disclosed by other issuers. For a quantitative reconciliation of each non-GAAP financial measure to the most directly comparable IFRS financial measure, refer to the following tables. Further information relating to these Non-GAAP financial measures is incorporated by reference from the "Non-GAAP Financial Measures" section of Franco-Nevada's MD&A for the three and nine months ended September 30, 2022 and filed on November 7, 2022 with the Canadian securities regulatory authorities on SEDAR available at www.sedar.com and with the U.S. Securities and Exchange Commission available on EDGAR at www.sec.gov. Starting in Q4 2021, revenue from Franco-Nevada's Energy assets are included in the calculation of GEOs. Similarly, the composition of Cash Costs and Cash Costs per GEO sold has been amended to include costs and GEOs related to Franco-Nevada's Energy assets. Cash Costs and Cash Costs per GEO sold for comparative periods have been recalculated to conform with current presentation.

Cash Costs

(expressed in millions, except per GEO amounts)	For the three months ended September 30,		For the nine months ended September 30,	
	2022	2021	2022	2021
Total costs of sales	$ 110.5	$ 115.0	$ 343.8	$ 351.3
Depletion and depreciation	(68.5)	(73.0)	(212.7)	(221.4)
Cash Costs	$ 42.0	$ 42.0	$ 131.0	$ 129.9
GEOs	176,408	177,578	546,074	545,694
Cash Costs per GEO sold	$ 238	$ 237	$ 240	$ 238

Adjusted Net Income

(expressed in millions, except per share amounts)	For the three months ended September 30,		For the nine months ended September 30,	
	2022	2021	2022	2021
Net income	$ 157.1	$ 166.0	$ 535.6	$ 512.8
Impairment (reversals) and charges	—	—	—	7.5
Foreign exchange loss (gain) and other (income) expenses	2.3	0.4	(3.5)	1.7
Finance income related to repayment of Noront loan	—	—	(2.2)	—
Tax effect of adjustments	0.3	(0.4)	2.8	(1.9)
Other tax related adjustments:				
Recognition of previously unrecognized deferred tax assets	—	(0.4)	—	(11.0)
Adjusted Net Income	$ 159.7	$ 165.6	$ 532.7	$ 509.1
Basic weighted average shares outstanding	191.6	191.1	191.5	191.0
Adjusted Net Income per share	$ 0.83	$ 0.87	$ 2.78	$ 2.67

Adjusted Net Income Margin

(expressed in millions, except per share amounts)	For the three months ended September 30,		For the nine months ended September 30,	
	2022	2021	2022	2021
Adjusted Net Income	$ 159.7	$ 165.6	$ 532.7	$ 509.1
Revenue	304.2	316.3	995.3	972.3
Adjusted Net Income Margin	52.5%	52.4%	53.5%	52.4%

Adjusted EBITDA

(expressed in millions, except per share amounts)	For the three months ended September 30,		For the nine months ended September 30,	
	2022	2021	2022	2021
Net income	$ 157.1	$ 166.0	$ 535.6	$ 512.8
Income tax expense	30.4	30.2	103.1	79.4
Finance expenses	0.8	0.8	2.5	2.7
Finance income	(2.4)	(0.6)	(5.9)	(3.0)
Depletion and depreciation	68.5	73.0	212.7	221.4
Impairment charges	—	—	—	7.5
Foreign exchange loss (gain) and other (income) expenses	2.3	0.4	(3.5)	1.7
Adjusted EBITDA	$ 256.7	$ 269.8	$ 844.5	$ 822.5
Basic weighted average shares outstanding	191.6	191.1	191.5	191.0
Adjusted EBITDA per share	$ 1.34	$ 1.41	$ 4.41	$ 4.31

Adjusted EBITDA Margin

(expressed in millions, except Margin)	For the three months ended September 30,		For the nine months ended September 30,	
	2022	2021	2022	2021
Adjusted EBITDA	$ 256.7	$ 269.8	$ 884.5	$ 822.5
Revenue	304.2	316.3	995.3	972.3
Margin	84.4%	85.3%	84.8%	84.6%