

TURQUOISE HILL
TSX-NYSE: TRQ

Cautionary Notes

Certain statements made herein, including statements relating to matters that are not historical facts and statements of Turquoise Hill Resources Ltd.'s (the "Company", "Turquoise Hill" or "TRQ") beliefs, intentions and expectations about developments, results and events which will or may occur in the future, constitute, "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of the "safe harbor" provisions of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements and information relate to future events or future performance, reflect current expectations or beliefs regarding future events and are typically identified by words such as "anticipate", "could", "should", "expect", "seek", "may", "intend", "likely", "plan", "estimate", "w ill", "believe" and similar expressions suggesting future outcomes or statements regarding an outlook. These include, but are not limited to, statements and information regarding: discussions with, and the nature of the Company's relationship and interaction with, the Government of Mongolia (GOM) on the continued operation and development of Oyu Tolgoi, including with respect to the Definitive Estimate (DE) and the potential termination, amendment or replacement of the 2009 Investment Agreement (IA) or the 2015 Oyu Tolgoi Underground Mine Development and Financing Plan (UDP); the willingness and ability of the parties to the IA or the UDP to amend or replace either such agreement; the implementation and successful execution of the funding plan that is the subject of the binding Heads of Agreement between Rio Tinto and TRQ (HoA) and the amount of any additional future funding gap to complete the Ovu Tolgoi project as well as the amount and potential sources of additional funding required therefor, all as contemplated by the HoA; the expectations set out in the Oyu Tolgoi 2020 Technical Report dated as of June 30, 2020 (OTTR20); the timing and amount of future production and potential production delays; statements in respect of the impacts of any delays on achieving first commercial production and on the Company's cash flows; expected copper and gold grades; the merits of the class action complaints filed against the Company in October 2020 and January 2021, respectively; the likelihood that the Company will be added as a party to the international tax arbitration brought by Oyu Tolgoi against the GOM and the merits of the GOM defence and counterclaim: liquidity, funding sources and funding requirements; the amount of any funding gap to complete the Oyu Tolgoi project; the amount and potential sources of additional funding; the Company's ability to reprofile its existing project debt in line with current cash flow projections; the amount by which a successful re-profiling of the Company's existing debt would reduce the Company's currently projected funding requirements; the Company's ability to raise supplemental senior debt; the timing of studies, announcements and analyses; status of underground development; the mine design for Panel 0 of Hugo North Lift 1 and the related cost and production schedule implications; the redesign studies for Panels 1 and 2 of Hugo North Lift 1 and the possible outcomes, content and timing thereof; expectations regarding the possible recovery of ore in the two structural pillars, to the north and south of Panel 0; the possible progression of the state-owned power plant (SOPP) and related amendments to the Power Source Framework Agreement (PSFA) as well as power purchase agreements; the timing of construction and commissioning of the potential SOPP, sources of interim power; the potential impact of COV ID-19, including any restrictions imposed by health or governmental authorities relating thereto on the Company's business, operations and financial condition; capital and operating cost estimates; mill and concentrator throughput; the outcome of formal international arbitration proceedings; anticipated business activities, planned expenditures, corporate strategies, and other statements that are not historical facts.

Forward-looking statements and information are made based upon certain assumptions and other important factors that, if untrue, could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such statements or information. There can be no assurance that such statements or information will prove to be accurate. Such statements and information are based on numerous assumptions regarding present and future business strategies, local and global economic conditions, and the environment in which the Company will operate in the future, including the price of copper, gold and silver; projected gold, copper and silver grades; anticipated capital and operating costs; anticipated future production and cash flows; the anticipated location of certain infrastructure in Hugo North Lift 1 and sequence of mining within and across panel boundaries; the availability and timing of required governmental and other approvals for the construction of the SOPP, the ability of the GOM to finance and procure the SOPP within the timeframes anticipated in the PSFA, as amended, subject to ongoing discussions relating to a standstill period; the willingness of third parties to extend existing power arrangements; the status and nature of the Company's relationship and interactions and discussions with the GOM on the continued operation and development of Oyu Tolgoi LLC internal governance (including the outcome of any such interactions or discussions); the willingness and ability of the parties to the land the UDP to amend or replace either such agreement; the nature and quantum of the current and projected economic benefits to Mongolia resulting from the continued operation of Oyu Tolgoi; the implementation and successful execution of the funding plan that is the subject of the HoA and the amount of any additional future funding gap to complete the Oyu Tolgoi project as well as the amount and potential sources of additional funding

Cautionary Notes (cont'd)

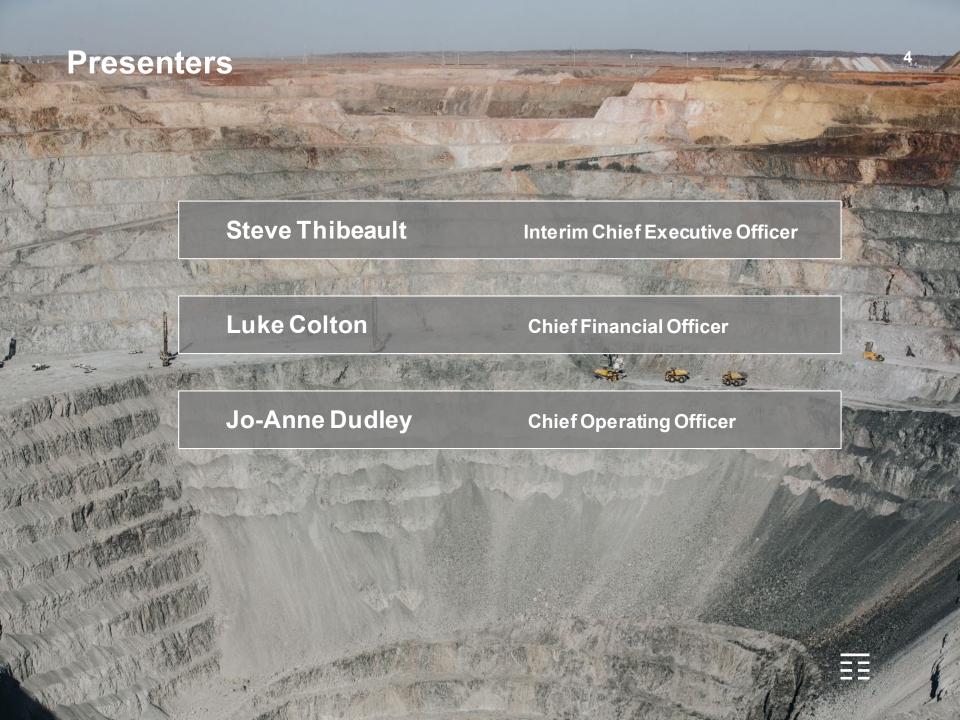
Certain important factors that could cause actual results, performance or achievements to differ materially from those in the forward-looking statements and information include, among others: copper, gold and silver price volatility; discrepancies between actual and estimated production; mineral reserves and resources and metallurgical recoveries; development plans for processing resources; public health crises such as COVID-19; matters relating to proposed exploration or expansion; mining operational and development risks, including geotechnical risks and ground conditions; litigation risks, including the outcome of the class action complaints filed against the Company; the outcome of the international tax arbitration proceedings; regulatory restrictions (including environmental regulatory restrictions and liability); Oyu Tolgoi LLC or the GOM's ability to deliver a domestic power source for the Oyu Tolgoi project within the required contractual time frame; communications with local stakeholders and community relations; activities, actions or assessments, including tax assessments, by governmental authorities; events or circumstances (including public health crises, strikes, blockades or similar events outside of the Company's control) that may affect the Company's ability to deliver its products in a timely manner; delays (including delays in the decision to commence the undercut), and the costs which would result from delays, in the development of the underground mine (which could significantly exceed the costs projected in OTTR20); currency fluctuations; the speculative nature of mineral exploration; the global economic climate; global climate change; dilution; share price volatility; competition; loss of key employees; cyber security incidents; additional funding requirements, including in respect of the development or construction of a long-term domestic power supply for the Oyu Tolgoi project; capital and operating costs, including with respect to the development of additional deposits and processing facilities; defective title to mineral claims or property and human rights requirements. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements and information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. All such forward-looking statements and information are based on certain assumptions and analyses made by the Company's management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believes are reasonable and appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements or information.

Readers are cautioned not to place undue reliance on forward-looking information or statements. By their nature, forward-looking statements involve numerous assumptions, inherent risks and uncertainties, both general and specific, which contribute to the possibility that the predicted outcomes will not occur. Events or circumstances could cause the Company's actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. Important factors that could cause actual results to differ from these forward-looking statements are included in the "Risk Factors" section in the Company's Annual Information Form dated as of March 8, 2021 in respect of the year ended December 31, 2020 (the AIF), as supplemented by our Management's Discussion and Analysis of Financial Condition and Results of Operations for the three and six months ended June 30, 2021 (MD&A).

Readers are further cautioned that the list of factors enumerated in the "Risk Factors" section of the AIF and in the "Risks and Uncertainties" section of the MD&A that may affect future results is not exhaustive. When relying on the Company's forward-looking statements and information to make decisions with respect to the Company, investors and others should carefully consider the foregoing factors and other uncertainties and potential events.

Disclosure of information of a scientific or technical nature in this presentation in respect of the Oyu Tolgoi mine was approved by Jo-Anne Dudley (FAusIMM(CP)), Chief Operating Officer of Turquoise Hill. Ms. Dudley is a "qualified person" as that term is defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Reference is made to OTTR2020 which is available under the Company's profile on SEDAR at www.sedar.com.

This presentation contains certain non-GAAP (Generally Accepted Accounting Principles) measures such as C1 Cash Costs. Such measures have non-standardised meaning under International Financial Reporting Standards ("IFRS") and may not be comparable to similar measures used by other issuers. These measures are presented in order to provide investors and other stakeholders with additional understanding of performance and operations at the Oyu Tolgoi mine and are not intended to be used in isolation from, or as a replacement for, measures prepared in accordance with IFRS. See the MD&A for more information about non-GAAP measures reported by the Company.



Q2'21 Highlights

- ✓ Year to date All Injury Frequency Rate (AIFR) of 0.14 to end Q2 2021.
- Oyu Tolgoi produced 36.7kt of copper and 113.1koz of gold
- ✓ Forecast 2021 copper and gold production of 150 to 180kt and 400 to 480koz, respectively
- ✓ Overall project construction progress remains broadly in line with the Definitive Estimate and the project-related technical criteria on-track to initiate the undercut
- Outstanding non-technical criteria have delayed the initiation of the undercut, and COVID-19 impacts and delayed budget uplift will further impact project costs
- √ \$0.7 billion of available liquidity¹, sufficient to fund the Company's requirements into Q3 2022²
- ✓ Base case incremental funding requirement of \$2.4Bn²



^{2.} Based on current projections and subject to change

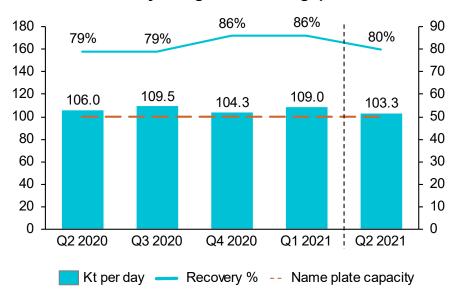
Q2 2021 Production

- Copper production was 36,735 tonnes
- Gold production was 113,054 ounces
- C1 copper cash costs¹ were \$0.83 per pound
- Mill throughput was 103.3 Kt per day

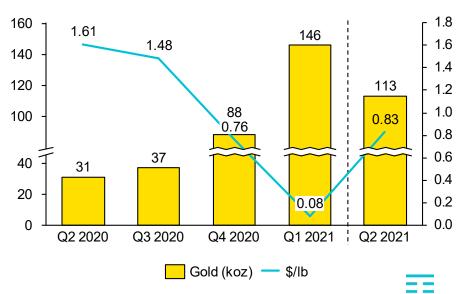
200 0.60 0.56% 0.55 0.50% 146 0.47% 150 0.47% 0.50 0.45% 113 0.45 100 0.40 88 0.35 45 50 42 0.30 37 36 37 37 0.25 0.20 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Copper (Kt) Gold (koz) — Cu head grade (%)

Oyu Tolgoi Metal Production





Gold Impact on C1 Cost



^{1.} Refer to section - Non-GAAP Measures - of the MD&A at June 30, 2021

Financial Performance Overview

Key Financial Metrics of Turquoise Hill

All values on a consolidated basis and in United States dollars

	Second Quarter of 2021	Second Quarter of 2020	Change
Revenue	317.8	278.0	14.3%
Cash generated from operating activities before interest and tax	295.7	34.7	752.2%
Basic and diluted income per share attributable to owners of Turquoise Hill (\$ per share)	0.48	0.36	-
C1 cash costs ¹	0.83	1.61	(48.4%)
All-in-sustaining unit costs ¹	1.48	2.18	(32.1%)
Capital expenditures ²	230.3	261.9	(12.1%)
Liquidity (billions of dollars) ³	0.7	1.5	-
Base case incremental funding requirement (billions of dollars) ⁴	2.4	≥3.6	-

^{1.} C1 cash costs and all-in-sustaining unit costs are non-GAAP measures which are not intended to replace measures prepared in accordance with IFRS. Refer to section - Non-GAAP Measures - of the MD&A at June 30, 2021



^{2.} Includes open pit and underground capital expenditures

^{3.} Cash and cash equivalents

^{4.} Refer to section - Funding of Oyu Tolgoi LLC by Turquoise Hill - of the MD&A at June 30, 2021

As At: 30-June-21

Liquidity and Funding

Current Liquidity and Outlook^{1 2}

- Improved commodity price forecasts have continued to sustain liquidity window
- Liquidity outlook reflects Q1 tax payments made to the Mongolian Tax Authority, impact of continued COVID-19 restrictions as well as the on-going force majeure

Available Liquidity	\$0.7B
Liquidity Extends to	Q3 2022

Incremental Funding Requirement^{1 2}

- Expected funding gap has increased to \$2.4 billion as at June 30, 2021, from \$2.3 billion as at Mar 31, 2021
- ✓ Funding requirement increased by \$100 million due to the resequencing of ore phases of the open pit and the 2021 development cost impact of the known COVID-19 delays offset by higher forecast commodity prices

	Base Case Estimate	\$2.4B
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Funding Plan

Under the HOA Turquoise Hill and Rio Tinto will3:

- Pursue re-profiling of existing project debt to better align with the revised mine plan, project timing and cash flows
- Seek to raise up to US\$500M in Senior Supplemental Debt (SSD) under the existing project financing arrangements

In addition:

 Rio Tinto has committed to address any potential shortfalls from the re-profiling and additional SSD of up to US\$750M by providing a senior co-lending facility

Base Case Underground Development:

- Definitive Estimate Cost: \$6.75 billion
- Additional 2021 development cost impact of known COVID-19 delays: \$100 million⁴
- Sustainable Production: October 2022
- The sustainable production date is dependent on the timing of undercut commencement which has been delayed from the Company's expected timing. This is impacted by the resolution of the non-technical issues and additional expected impacts of ongoing COVID-19 restrictions⁵
- 1. Forecasts incorporate principal and interest payments and do not assume any re-profiling of existing principal repayments or additional external financing
- 2. Liquidity outbook and incremental funding requirement impacted by various factors. Please refer to section Funding of Oyu Tolgoi LLC By Turquoise Hill of the MD&A at June 30, 2021
- 3. Subject to approval by OT LLC and any required support from GOM
- As at June 30, 2021
- Please refer to section Oyu Tolgoi Underground Update By Turquoise Hill of the MD&A at June 30, 2021



Underground Development and Exploration Update

Shafts and Materials Handling



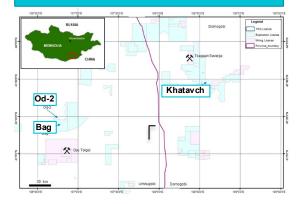
- Q2'21 progress significantly impacted by COVID-19 constraints on site and in Mongolia, including restrictions on movement of international expertise
- Material Handling System 1 is greater than 90% complete in-line with Definitive Estimate.
- Primary Crusher 1 is expected to be completed in Q3'21
- No shaft sinking progress in Q2'21 however, specialised shaft sinking personnel are now in Mongolia to prepare for recommencement of activities

Mine Development



- All lateral development and undercut drilling to initiate the undercut is complete
- Supporting infrastructure for Panel 0 production is on track for completion under current site conditions
- Conveyor decline continues to progress towards breakthrough
- Undercut technical criteria on track but schedule is under increasing pressure due to the rapidly evolving situation

Exploration Update



- ✓ TRQ has 3 Exploration Licenses: Bag, Od-2 and Khatavch
- 2021 exploration program planned across all 3 licenses
- Current restrictions on people movements in the Ömnögovi and Dornogovi provinces have resulted in delays to our field work.
- Safety remains our first priority and appropriate measures will be maintained to protect our exploration team, contractors and the communities in which we work

Key Milestones to Sustainable Production of Panel 0

- Discussions with various governmental bodies with a view to resolving outstanding nontechnical undercut criteria
- Commencement of the undercut following satisfaction of
 - Technical criteria complete or on-track for completion
 - Non-technical criteria under discussion
- Secure funding for the completion of the Oyu Tolgoi underground project

Sustainable production forecast to occur in October 2022¹





Operation and Finance

2021 Guidance

Operational guidance	
Mill throughput (million tonnes)	
Copper production (tonnes)	150,000 – 180,000
Gold production (ounces)	400,000 – 480,000

Financial guidance	
Operating cash costs (\$ million) 1	800 – 850
C1 cash costs (\$/Ib) 1, 2	(0.20) - 0.20
Capital expenditure	
Open pit (\$ million)	105 – 125
Underground (\$ billion)	0.9 – 1.0

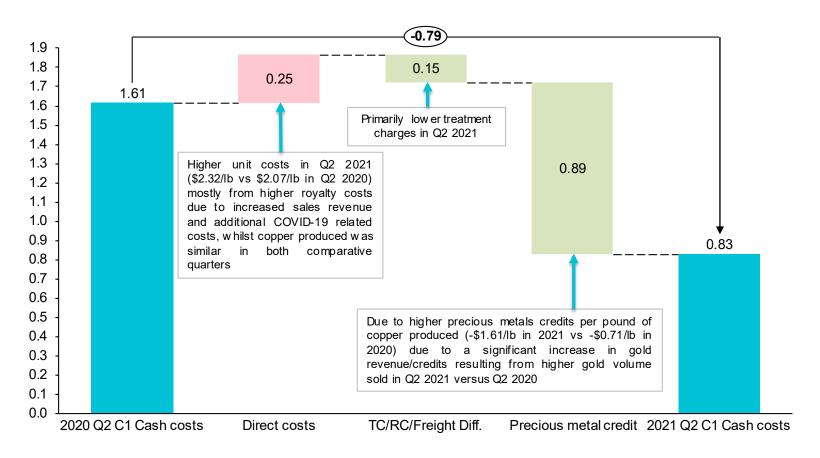


- 1. Refer to section Non-GAAP Measures of the MD&A at June 30, 2021
- 2. Unit cost guidance assumes the midpoint of expected 2021 copper and gold production ranges and a gold commodity price assumption of \$1,804 per ounce



C1 Cash Costs over Q2 2020 and Q2 2021

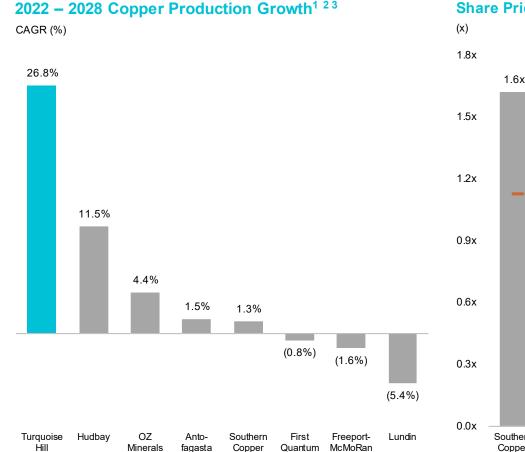
Reconciliation of C1 Cash Costs1

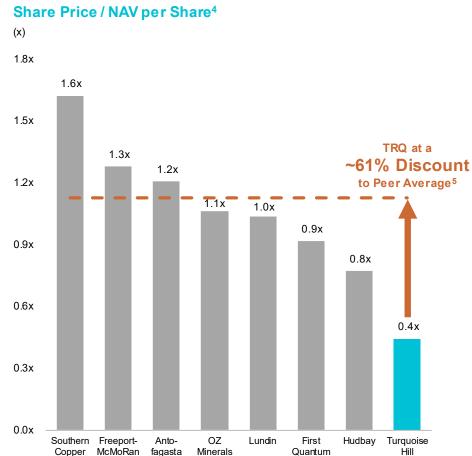


All values on a consolidated basis unless otherwise stated and in United States dollars per pound of copper produced 1. Based on the reconciliation of C1 cash costs in the MD&A. Refer to section - Non-GAAP Measures - of the MD&A at June 30, 2021



Turquoise Hill Offers Leading Growth, but Is Currently Trading at a Deep Discount Relative to Peers





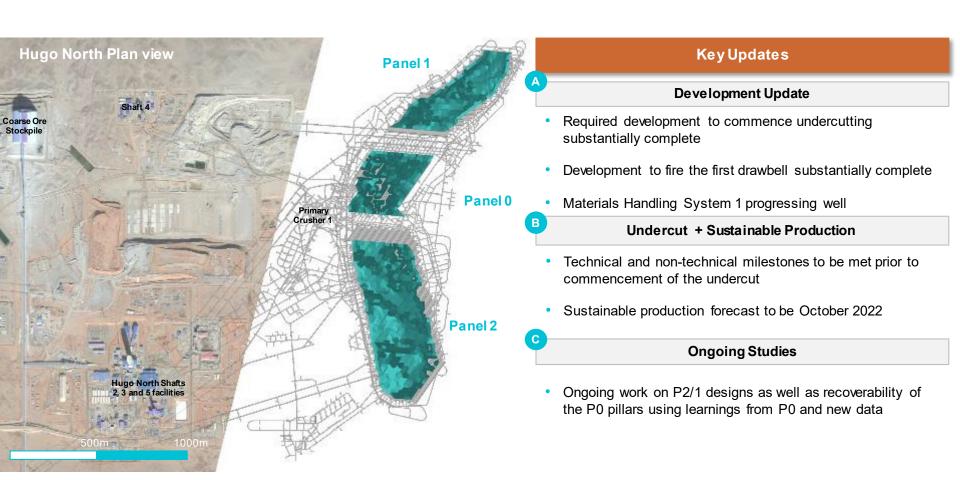
Source: Wood Mackenzie, OTTR20, Capital IQ

- 1. Based on pay able, attributable copper production
- TRQ's 2022 and 2028 production based on OTTR20, peer copper production data based on Wood Mackenzie estimates as at Q2 2021
- OTTR20 excludes any impacts of COVID-19
- Market data as of July 15, 2021; P/NAV calculations use broker consensus NAV as reported by Capital IQ
- 5. Peer av erage P/NAV excludes TRQ



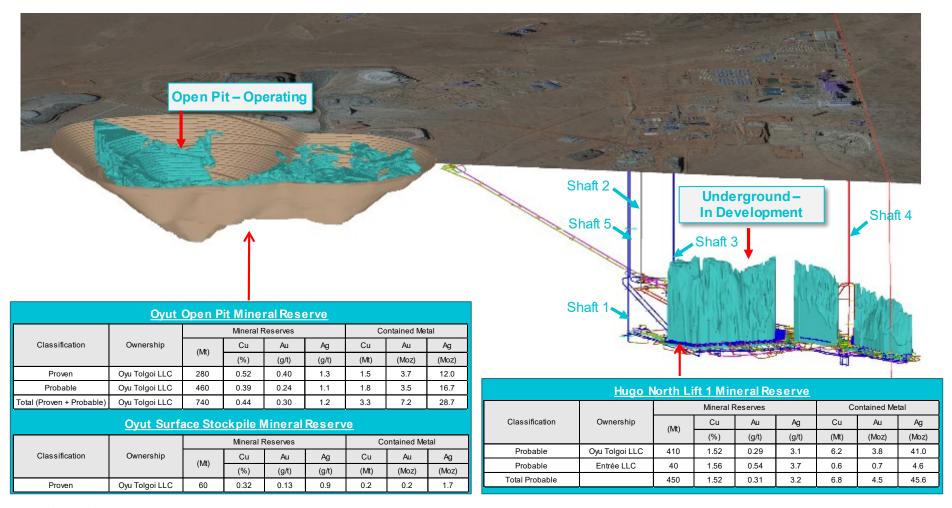
Development Update

Progress continues in 2021 Despite COVID-19 challenges



Oyut Open Pit and Hugo North Lift 1 Mineral Reserves^{1 2 3 4}

Hugo North Mineral Reserves increased by 10Mt Since OTTR20 Due to Mine Design Refinements



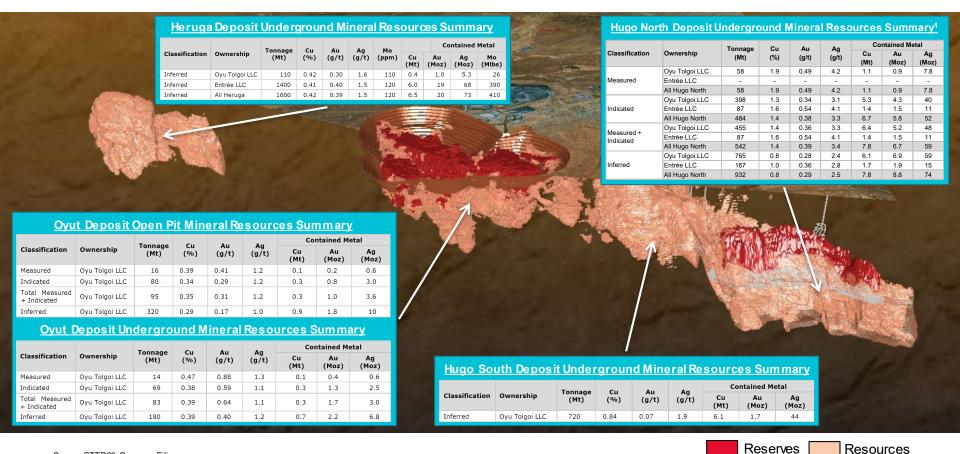
Source: Company Filings

- 1. Totals may not match due to rounding. CIM Definition Standards (2014) are used for reporting of Mineral Reserves
- 2. The Hugo North Mineral Reserve includes 1.5Mt of underground development material which has been stockpiled at surface and is awaiting processing
- 3. Mineral Reserv es dated December 31, 2020
- 4. See section Mineral Reserves of the Company's AIF



Significant Open Pit and Underground Resources

Oyu Tolgoi Mineral Resources as at December 31, 2019 (Updated on June 30, 2020)



Source: OTTR20, Company Filings

- 1. Hugo North Mineral Resources as of Definitive Estimate (December 18, 2020)
- 2. Totals may not match due to rounding to two significant floures in line with industry best practice. CIM Definition Standards (2014) are used for reporting of Mineral Resources
- The Mineral Resources exclude Mineral Reserves
- 4. The metal prices used in determining the CuEq formulae are: \$3.08/lb for copper, \$1,292/oz for gold, \$19.00/oz for silver, and \$10.00/lb for molybdenum
- 5. The metallurgical recoveries used in determining the CuEq formulae for each deposit are: Oyut deposit: Copper 78%, Gold 67%, Silver 52%. Hugo North deposit: Copper 93%, Gold 80%, Silver 81%. Hugo South deposit: Copper 89%, Gold 81%, Silver 84%. Heruga: Copper 82%, Gold 73%, Silver 78%, Molybdenum 60%
- 6. For the Oyut deposit, a cut-off grade of 0.24% CuEq has been used for Mineral Resources with open pit potential. A cut-off 0.41% CuEq has been used for Mineral Resources with underground mining potential
- 7. For the Hugo North, Hugo South, and Heruga deposits a cut-off grade of 0.41% CuEq grade used based on the assumption that the deposits will be mined using underground mining methods
- 8. The effective date of the Mineral Resources estimates is December 31, 2019 (updated on June 30, 2020). The Mineral Resources do not account for resources mined after the effective date
- 9. In the Mineral Resource tabulations, the term Entrée LLC refers to ownership by the proposed joint venture arrangement between Oyu Tolgoi LLC and Entrée LLC
- 10. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability
- 11. Molybdenum is excluded from the Total Resources in the Ovut Deposit Open Pit Mineral Resources Summary table
- The contained copper, gold, silver, and molybdenum estimates in the tables have not been adjusted for metallurgical recoveries



turquoisehill.com

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Turquoise Hill is an international mining company focused on the operation and development of the Oyu Tolgoi copper-gold mine in southern Mongolia

