

# A Leading Copper and Gold Producer Developing a Tier-1 Copper Asset

## First Quarter 2020 Financial Results May 14, 2020



TURQUOISE HILL

TSX-NYSE: TRQ

# Forward-Looking Statements

Certain statements made herein, including statements relating to matters that are not historical facts and statements of Turquoise Hill Resources Ltd.'s (the "Company" or "Turquoise Hill") 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", "will", "believe" and similar expressions suggesting future outcomes or statements regarding an outlook. These include, but are not limited to, information regarding the potential impact of COVID-19 on the Company's business, operations and financial condition, the timing and amount of production and potential production delays, statements in respect of the impacts of any delays on the Company's cash flows, expected copper and gold grades, liquidity, funding requirements and planning, statements regarding timing and status of underground development, the mine design for Panel 0 of Hugo North Lift 1 and the related cost and production schedule implications, the re-design study for Panels 1 and 2 of Hugo North Lift 1, short-term and long-term financing options under consideration and related negotiations, the expectations set out in the Tavan Tolgoi Power Plant ("TTPP") Feasibility Study, the possible progression of the TTPP and alternative power supply options to the TTPP, capital and operating cost estimates, timing of completion of the Definitive Estimate review, 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 and 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 TTPP or alternative power supply options to the TTPP, the status of the Company's relationship and interaction with the Government of Mongolia on the continued operation and development of Oyu Tolgoi and Oyu Tolgoi LLC internal governance. 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; the outcome of the Definitive Estimate review; 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; regulatory restrictions (including environmental regulatory restrictions and liability); Oyu Tolgoi LLC'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 strikes, blockages or similar events outside of the Company's control) that may affect the Company's ability to deliver its products in a timely manner; currency fluctuations; the speculative nature of mineral exploration; the global economic climate; 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; and defective title to mineral claims or property. 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 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 18, 2020 in respect of the year ended December 31, 2019 (the "AIF") as supplemented by our Management's Discussion and Analysis of Financial Condition and Results of Operations for the three months ended March 31, 2020 ("MD&A").

Readers are further cautioned that the list of factors enumerated in the "Risk Factors" section of the AIF and in 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.





# Presenters

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**Ulf Quellmann**

**Chief Executive Officer**

**Luke Colton**

**Chief Financial Officer**

**Jo-Anne Dudley**

**Chief Operating Officer**



# COVID – 19 update

- Since the COVID-19 situation escalated in January, the health and safety of our workforce, suppliers and communities has remained our top priority
- We are closely monitoring the situation and taking precautionary measures both on site and in our UB offices. In full compliance with, and aligned to guidance and decrees issued by the Government of Mongolia, State Emergency Committee, and the local authorities
- The Government of Mongolia was decisive and acted early to contain the virus spread by halting international rail, flights and intercity travels. These early actions by the Government of Mongolia have resulted in Mongolia having one of the lowest levels of COVID–19 cases in the world
- The immediate impact of the Government’s travel and border restrictions slowed supplies into Oyu Tolgoi, concentrate deliveries to our customers, and restricted access to the mine for teams from Oyu Tolgoi, Rio Tinto and our construction partners
- The situation has since stabilized with shipments of copper concentrates to our customers across the border, and supplies into Oyu Tolgoi returning to normalized levels
- Open pit operations and underground development performance continue per expectations with no impact to date from the challenges of personnel movements posed by COVID-19. Some elements of underground infrastructure have been impacted with Shafts 3 and 4 on care and maintenance
- Oyu Tolgoi’s Business Resilience Team is meeting on a daily basis and is working closely with the Mongolian authorities to prioritize the health and safety of all its employees and the wider community



# Q1'20 Highlights

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- ✓ All Injury Frequency Rate (AIFR) of 0.20 per 200,000 hours worked
- ✓ Oyu Tolgoi open pit produced 35,203 tonnes of copper and 26,154 ounces of gold and remains on track to achieve 2020 copper and gold production guidance
- ✓ Initiatives are being implemented to bring forward the higher gold bearing ore into 2020, which are expected to lead to gold production at the upper end of the guidance range
- ✓ C1 copper cash costs and all-in sustaining costs were \$2.07 and \$2.39 per pound of copper produced, respectively
- ✓ Strong production outlook through 2021
- ✓ Record Underground development of 1,939 eqm in March
- ✓ The conveyor decline continues to progress with over 1,000 total eqm completed during the quarter
- ✓ As at March 31, 2020, Turquoise Hill has \$ 1.8 billion of available liquidity, sufficient to fund operations, underground and power development into Q3 2021

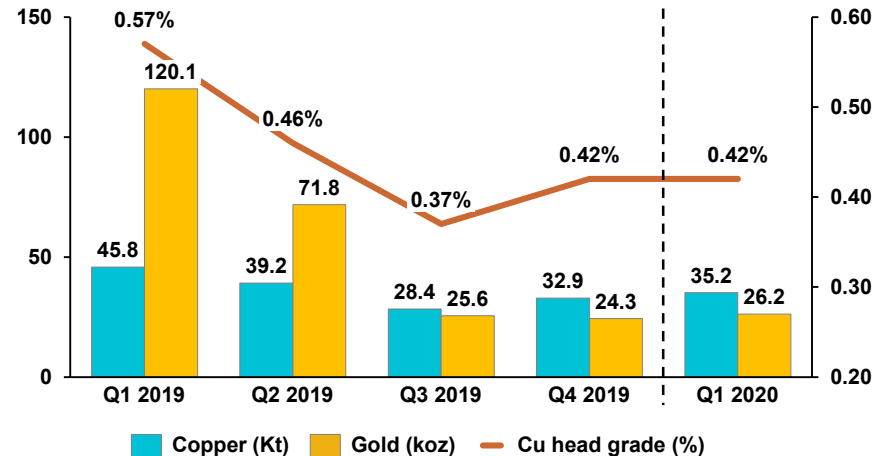


# Q1'20 Production

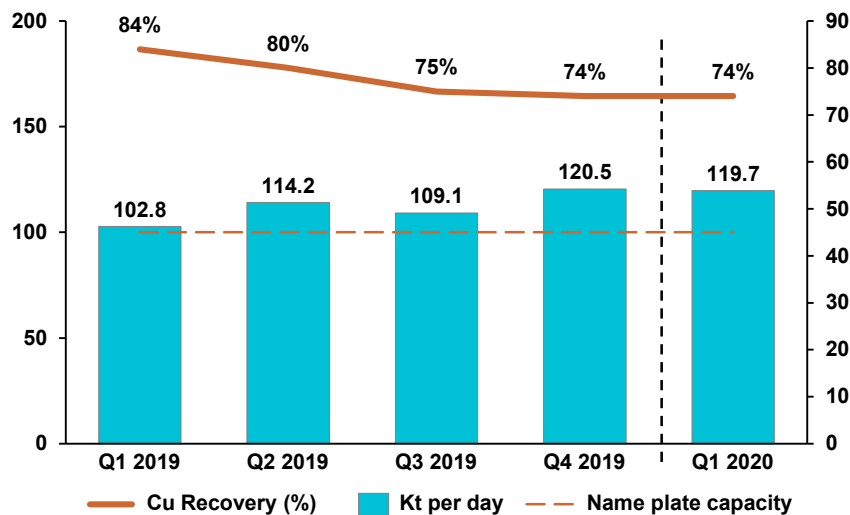
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- Copper production was 35,203 tonnes
- Gold production was 26,154 ounces
- C1 copper cash costs were \$2.07
- Mill through put was 119.7Kt per day

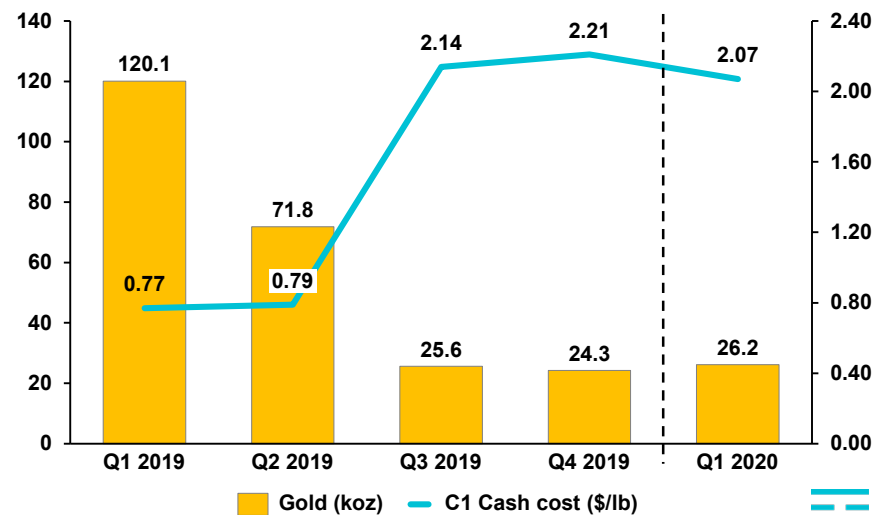
## Oyu Tolgoi Metal Production



## Oyu Tolgoi Mill Throughput



## Gold Impact on C1 Cost





# Infrastructure and underground development update

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## Shafts 2, 3 & 4



## Below ground hard infrastructure



## Mine development



- ✓ Shaft 2 - hoisting may be impacted by ordinary course stretching of newly commissioned ropes. Currently, payloads and hoisting speeds have been reduced to allow operations and development to continue as per expectations
- ✓ Shaft 3 - construction works progressed on sinking ventilation, compressor building, pump house and local mine dry
- ✓ Shaft 4 - compressor building, pump house, pumping system and mine dry were completed. Completion of rope-up of 4 stage winders, socketing and stage connections

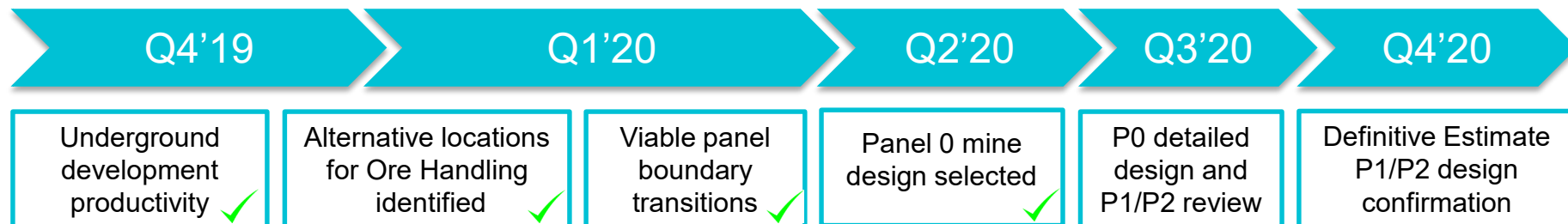
- ✓ Civil works continued in the primary crusher one chamber with mass pour number 10 completed in March
- ✓ Transfer Station 5 E-room commenced
- ✓ Structural steel installation at Drive
- ✓ Completion of bench # 3 portion of the Transfer Chamber # 22

- ✓ Underground development progressed 5.5 total equivalent kilometres and completed 3,228 m<sup>3</sup> of mass excavation during the quarter
- ✓ A record of over 1,939 eqm of underground development was achieved in March, with an average of 1,822 eqm per month for the quarter
- ✓ The conveyor decline continues to progress with over 1,000 total eqm completed during the quarter



# Updated Panel 0 Mine Design

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- Panel 0 design change approved, caving method of mining remains valid
- Many fundamentals, including location of key infrastructure such as shafts and the primary crusher are unchanged
- Mine design changes provide increased execution and operational resilience to Panel 0 geotechnical conditions
- Design decision supported by extensive geotechnical modelling and a rigorous technical assurance process including independent third parties
- Decision considered recovery, geotechnical, construction, operation and value risks
- Next phase of design studies ongoing including a review of design options for Panel 1 and Panel 2 to reflect Panel 0 learnings

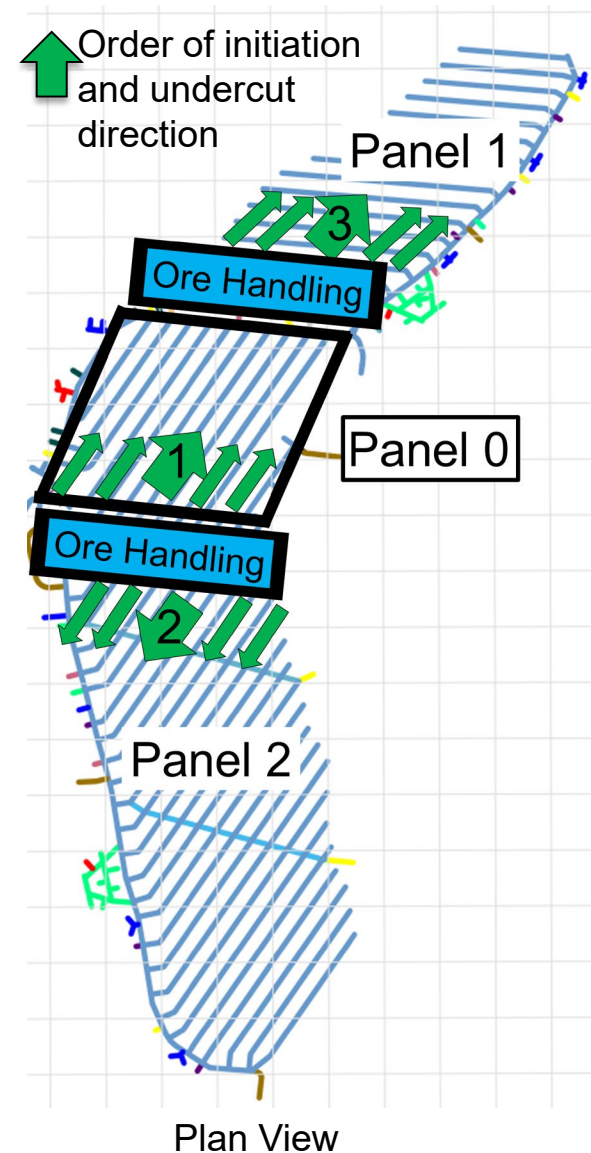




# Updated Panel 0 Mine Design

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- Anticipated delay to OTFS16 key project milestone of sustainable production of 25 months with a range of 21 months to 29 months
- Forecast increase in development capital cost of \$1.5 billion with a range of \$1.3 billion and \$1.8 billion
- Primary design changes:
  - Incorporation of structural pillars to the North and South of the Panel 0 boundaries;
  - Relocation of planned ore handling infrastructure to the pillars to address identified stability risks;
  - Initiation of a single undercut face (instead of two); and
  - Independent initiation of Panels 1 and 2 removing interdependencies and enabling these areas to be mined discretely
- Approved design option will undergo a period of further detailed design, engineering and optimization



- Oyu Tolgoi LLC's (OT) Tavan Tolgoi Power Plant (TTPP) Feasibility Study submitted to the Government of Mongolia (GOM) on February 14, 2020 (estimated project cost of \$924 million)
- Notice of Contingency under Power Source Framework Agreement (PSFA) was submitted by OT to GOM on February 14, 2020 – initiating phase 1 of the “contingency process”, which attempted (unsuccessfully) to agree on a basis for TTPP to proceed
- Phase 2 of the “contingency process” commenced upon completion of phase 1. In phase 2, OT and GOM consider the alternatives to TTPP prescribed in the PSFA
- Minister of Energy notified OT on April 14 2020 of GOM decision to develop and fund a State-Owned Power Plant (SOPP)
- OT is currently in discussions with GOM to allow continued consideration of TTPP as well as SOPP as part of phase 2.
- If agreement cannot be reached as part of phase 2, OT is thereafter entitled under the PSFA to select and implement one of the prescribed alternatives outlined in the agreement.



- **Tax Assessment**

Oyu Tolgoi LLC has proceeded with the initiation of a formal international arbitration proceeding to resolve the outstanding tax dispute between Oyu Tolgoi and the Mongolian Tax Authority. The arbitral award shall be final and binding on both parties.

- **Parliamentary Working Group**

The Parliamentary Working Group has completed its report, from which a Resolution was submitted and passed by the Parliament of Mongolia in December 2019.

Representatives from Turquoise Hill and Rio Tinto are currently engaged with the Government of Mongolia to work together and resolve the issues raised in the Resolution



# Financial Performance Overview

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## Key Financial Metrics of Turquoise Hill

All values on a consolidated basis unless otherwise stated and in millions of United States dollars except where stated.

	First Quarter of 2020	First Quarter of 2019	Change
Revenue	130.7	352.7	-62.9%
Cash generated from operating activities before interest and tax	1.5	49.8	-97.0%
Basic and diluted income per share attributable to owners of Turquoise Hill (\$ per share) <sup>1</sup>	0.03	0.06	-
C1 cash costs	2.07	0.77	+168.8%
All-in-sustaining unit costs	2.39	1.45	+64.8%
Capital expenditures	301.1	325.3	-7.4%
Liquidity (billions of dollars) <sup>2</sup>	1.8		

1. Attributable to Turquoise Hill

2. Cash and cash equivalents, and available and undrawn funds under the project finance facility





- Turquoise Hill has approximately \$1.8 billion liquidity available at the end of March 31, 2020 and we expect to have sufficient liquidity to fund underground development and power into Q3 2021
- Turquoise Hill is well progressed in its discussions with Rio Tinto regarding its proposal for sourcing incremental interim funding to ensure Turquoise Hill can progress the underground development
- Current estimates indicate the incremental financing requirement over and above the \$1.8 billion in liquidity currently available, of at least \$4 billion. An improvement over the previously disclosed \$4.5 billion due in part to the final Panel 0 mine design, coupled with lower forecast LIBOR rates
- Variables impacting magnitude of additional funding include mine optimization, incremental underground development and power capital needed, timing of sustainable first production, debt service costs, including principal repayments, amount of cash flow generated from operating activities net of sustainable capital requirements, and the impact of COVID-19



# Oyu Tolgoi – A True World Class Asset

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- ✓ A proven safety track record (AIFR 0.20 in Q1 2020)
- ✓ Demonstrated resilience in the face of COVID-19
- ✓ Record lateral underground development of 1,939 eqm in March
- ✓ Conveyor decline continues to progress with over 1,000 eqm completed during the quarter
- ✓ Panel 0 Mine Design is now complete and will undergo a period of further detailed design, engineering and optimisation to support the Definitive Estimate
- ✓ Q1 Copper and gold production from the open-pit remaining on-track with full year guidance
- ✓ Initiatives have been implemented by Oyu Tolgoi to bring forward the higher gold bearing ore into 2020; consequently, if these initiatives are successful, we anticipate gold production will be at the upper end of the guidance range
- ✓ Strong open-pit production outlook through 2021
- ✓ As at March 31, 2020, Turquoise Hill has \$ 1.8 billion of available liquidity, sufficient to fund operations, underground and power development into Q3 2021



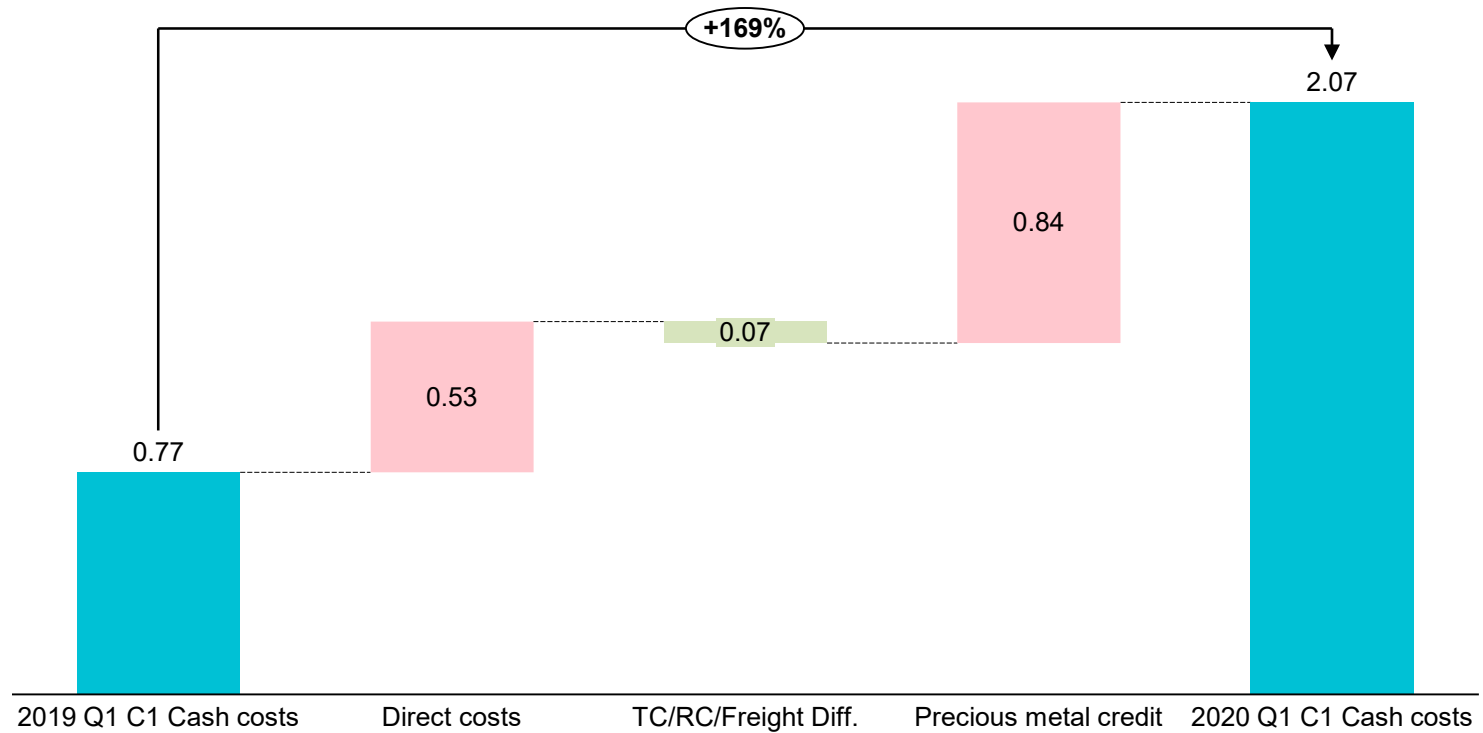




# C1 Cash Costs over Q1'19

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## Reconciliation of C1 Cash Costs<sup>1</sup>



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





## 2020 Guidance

Operational guidance	
Mill throughput (million tonnes)	40
Copper production (tonnes)	140,000 – 170,000
Gold production (ounces)	120,000 – 150,000

Financial guidance	
Operation cash costs (\$ million)	800 – 850
C1 cash costs (\$/lb) <sup>1</sup>	1.80 – 2.20
Capital expenditure	
Open pit (\$ million)	80 – 100
Underground (\$ million)	1,100 – 1,200

- Unit cost guidance assumes the midpoint of expected 2020 copper and gold production ranges and commodity price assumptions of \$2.39 per pound copper and \$1,513 per ounce gold.

## 2021 Outlook

Operational guidance	
Mill throughput (million tonnes)	
Copper production (tonnes)	170,000 – 200,000
Gold production (ounces)	450,000 – 500,000



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TRQ: TSX & NYSE

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

