

## Forward-Looking Statements

This presentation includes certain "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of the "safe harbour" provisions of the United States Private Securities Litigation Reform Act of 1995.

All statements and information, other than statements of historical fact, are forward-looking statements and information that involve various risks and uncertainties. There can be no assurances that such statements or information will prove accurate and actual results and future events could differ materially from those expressed or implied in such statements. Such statements and information contained herein, which include, but are not limited to, information regarding 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, liquidity, funding requirements and planning, statements regarding timing and status of underground development, the development options under consideration for the design of Panel 0, capital and operating cost estimates, mill throughput, timing and status of the Tavan-Tolgoi based power project, timing of completion of the definitive estimate review, corporate strategies and other statements that are not historical facts, represent the Company's best judgment as of the date hereof based on information currently available to the Company, including information received from Rio Tinto that is in the process of being independently reviewed by the Company and its Qualified Person. The Company does not assume any obligation to update any forward-looking statements or information or to conform these forward-looking statements or information to actual results, except as required by law.

For a more detailed list of specific forward-looking statements and information applicable to the Company, refer to the "Forward-Looking Information and Forward-Looking Statements" section of the Annual Information Form dated as of March 13, 2019 in respect of the year ended December 31, 2018 as supplemented by our Management's Discussion and Analysis of Financial Condition and Results of Operations for the three and nine months ended September 30, 2019.

All amounts are in U.S. dollars, unless otherwise stated.

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, 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 ("NI 43-101")"



### Introduction

## Oyu Tolgoi – a World-Class Mine

- Turquoise Hill is one of the few "pure play" copper companies in the world
- Oyu Tolgoi is a world-class, high-grade copper and gold deposit supporting a multidecade life of mine
- Projected to be world's third largest copper mine when at full capacity
- Established open pit mine currently generating steady cash flow
- Underground development well advanced and expected to generate material cash flow



### Mongolia

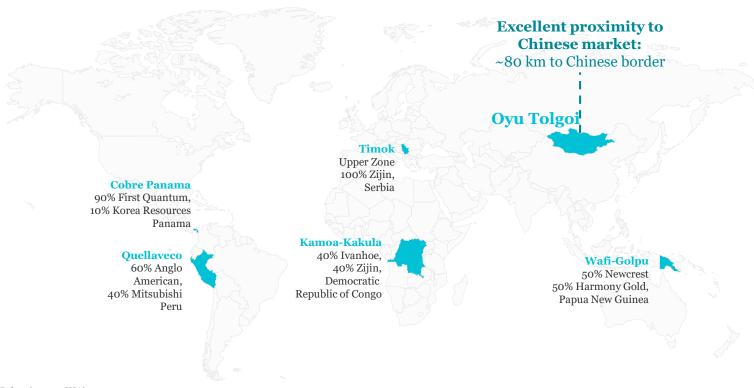
## **Attractive Location**

### Copper Assets Are Increasingly Located Outside of the OECD

> As assets in traditional mining countries become depleted, new regions are being developed

#### Mongolia Highlights

- Democratically-elected government
  - Nearly three decades of free elections
  - Low crime rate
- Over the last decade, GDP has grown at 10%+ p.a. while foreign direct investment grew at almost 15% p.a.<sup>1</sup>
- > Third Neighbour Policy
- Developed technical and vocational training centres



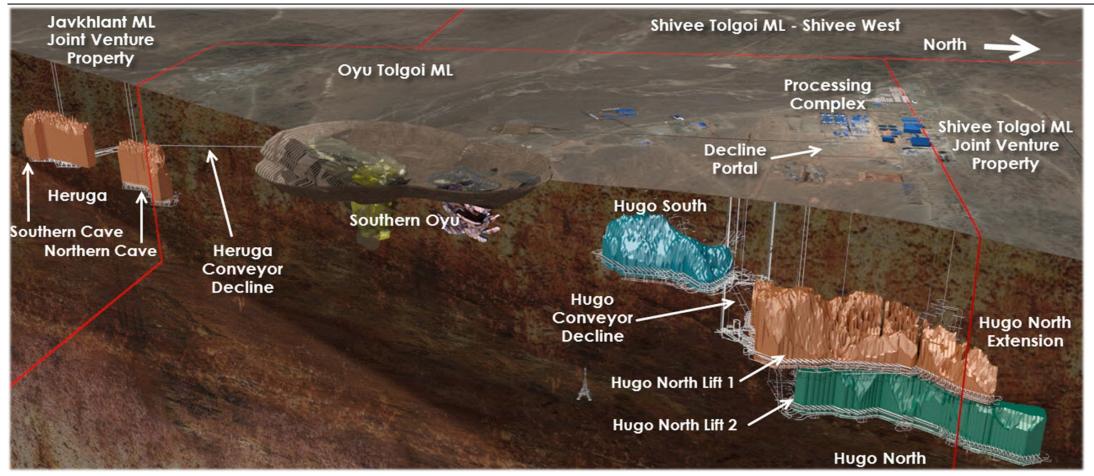
Source: World Bank, United Nations Development Program

Compound annual growth rate from 2007 – 2017, based on the World Bank GDP data (current US\$)



### A World-Class Asset: Oyu Tolgoi

## Significant Reserves and Resources



Source: 2016 OTTR

- 1. Included in reserves: Oyut, Hugo North Lift 1. Not included in reserves: Hugo North Lift 2, Hugo South, Heruga.
- 2. Proven reserves grades of 0.54% Cu and 0.35 g/t Au. Probable reserves of 0.97% Cu and 0.29 g/t Au.
- Total reserves and resources from 2016 OTTR, accounts for depletion to December 31, 2015; total resources inclusive of reserves. Cu Eq. calculated at US\$ 3.01/lb copper, US\$ 1,250/oz gold, US\$ 20.37/oz silver, and US\$ 11.90/lb molybdenum
- Measured resource grades of 0.81% Cu, 0.38 g/t Au, 1.97 g/t Ag, 48.7 ppm Mo;
- Indicated resource grades of 1.00% Cu, 0.32 g/t Au, 2.34 g/t Ag, 43.6 ppm Mo;
- Inferred resource grades of 0.56% Cu, 0.27 g/t Au, 1.64 g/t Ag, 75.1 ppm Mo;

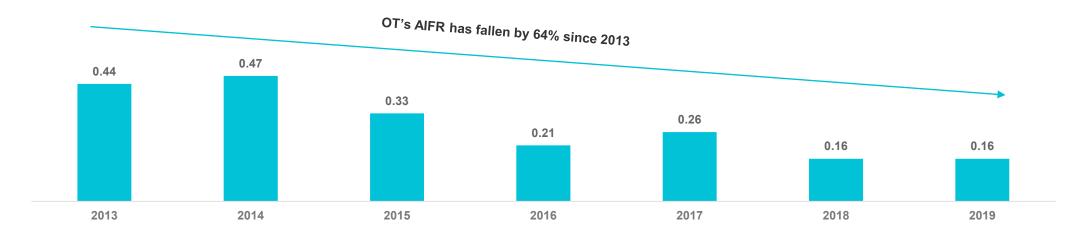
### A World-Class Asset: Oyu Tolgoi

## Best-in-Class\* Safety Performance

- Industry-leading safety performance
- > All-Injury Frequency Rate of 0.16 per 200,000 hours worked for the year ended December 31, 2019
  - Injury rate steadily declined since 2013, dropping 64% from 2013 through 2019
  - Safety is a top priority and is critical to our continued success

#### **All Injury Frequency Rate**

Based on 200,000 Hours of Work Exposure



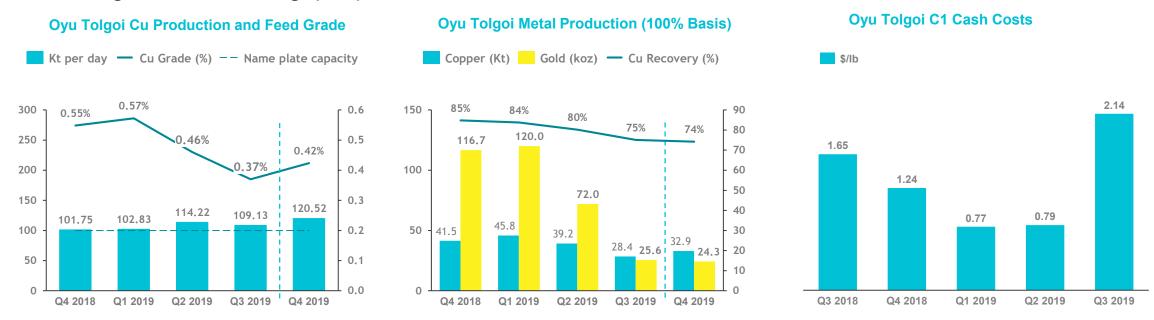
\*ICMM AIFR



### A World-Class Asset: Oyu Tolgoi - Open Pit

## Continued Operational Excellence

- Copper production for 2019 of 146,346 tonnes was in-line with our 2019 guidance for copper of 125,000 155,000 tonnes, while Gold production was 241,840 ounces, beating the higher end of guidance
- > C1 copper cost range for 2019 is \$1.50 \$1.70
- Strong 2019 mill throughput performance of 40.8 Mt

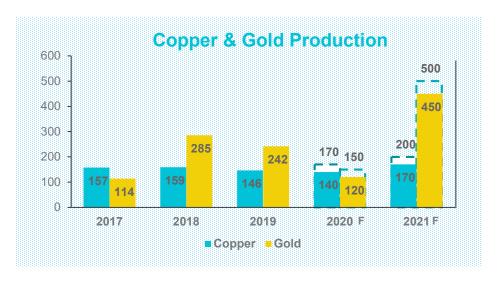


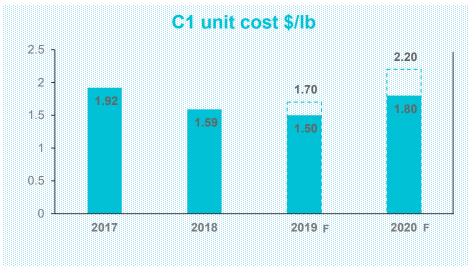
- Q1 & Q2 C1 cash costs reflect the large increase in gold production as Oyu Tolgoi benefitted from the processing and sale of Phase 4a ore in Q1 & Q2'19 that contained higher gold content
- Q3 C1 high cash cost is due to lower Cu and Au production compared to Q1 & Q2

### A World-Class Asset: Oyu Tolgoi - Open Pit

## Oyu Tolgoi Production









### **Market**

## Close Proximity to Chinese Market

- Oyu Tolgoi is 80km from the China Border
- > We currently sell our concentrate to over 15 independent Chinese smelters



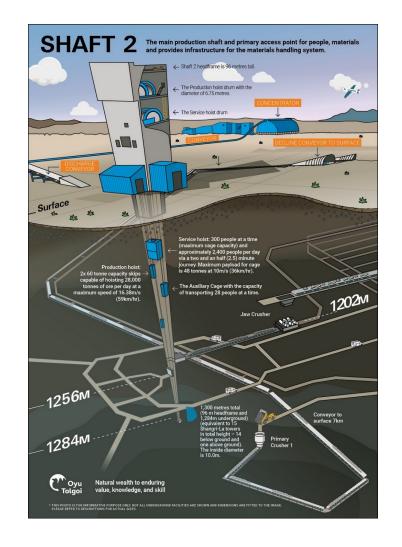


## Above Ground Infrastructure Complete



## Shaft 2 Construction Completed

- Shaft 2 construction is complete. The service hoist now allows us to transport 300 people per cycle cage vs a maximum of 60 people per cycle cage through Shaft 1.
- The 10-metre diameter shaft sunk to 1.3km below surface, is one of the largest mining shafts in the world.
- Using the world's largest friction hoist, Shaft 2 can lift 60 tonne capacity skips, providing a daily maximum capacity of approximately 35,000 tonnes.
- Underground Development material is currently being lifted to surface via the shaft 2 production hoist.

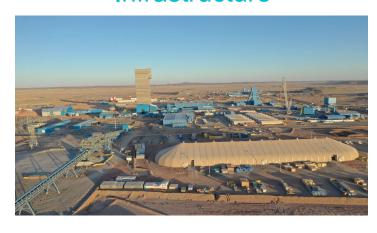




### A World-Class Asset: Oyu Tolgoi - Underground

## Infrastructure Progress Update

## Above Ground Infrastructure



## Shafts & Below Ground Infrastructure



# Mine Development



- Mine dry and control center
- ✓ 5,500 person camp
- Central heating plant
- Surface discharge conveyor linking Shaft 2 to existing Overland conveyor
- Shaft 5 ventilation fans
- Mine air heaters
- ✓ Batch plant 4 & quarry

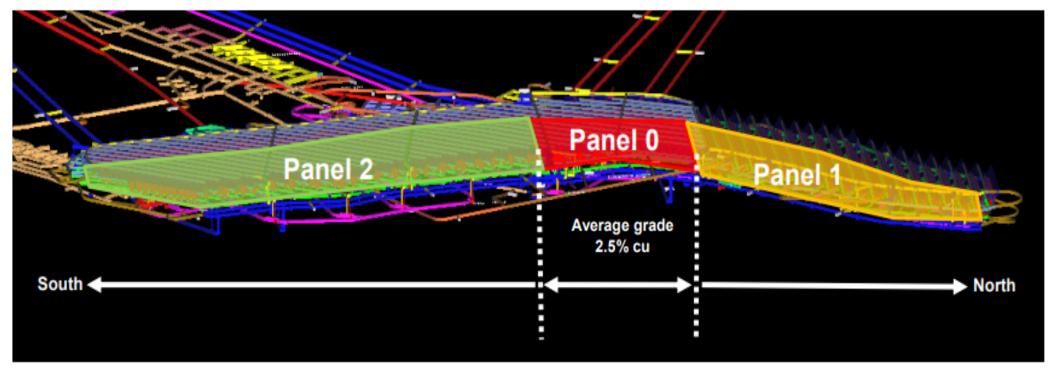
- Shaft 2 construction complete
- ✓ Shaft 2 Jaw Crusher
- ✓ Shaft 5 sinking to 1.2km
- Ore bin 11 & transfer station
- Excavation of the Primary Crusher 1 chamber
- Critical underground facilities

 A record of over 1800 eqm of underground development was achieved in December

### A World-Class Asset: Oyu Tolgoi - Underground

## Hugo North Lift 1Expansion

- Underground production begins with the high-grade Panel 0
- Highest copper grades occur during ramp up exceeding 2.5% Cu<sup>1</sup>
- Long-term development optionality with large Resource base to leverage





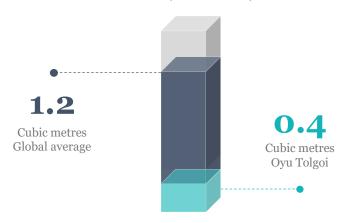
### **Sustainability**

### Commitment to Environmental Standards

- Oyu Tolgoi awarded the IFC's Volunteer Code of Practice Water Stewardship Award in 2018
- Global leader in water use efficiency
- Water recycling rate of approximately 87% in 2019

### Water Use Efficiency

Cubic metres of water per tonne of ore processed









87%

water recycling rate of 87 percent



### **Funding & Cash Flow**

## Strong Liquidity Position

### Strong liquidity position to ensure continued funding of Oyu Tolgoi

- > ~\$3.2 billion: total underground capex spent to date
- > ~\$2.7 billion: total liquidity available as at September 30, 2019
  - \$1.1 billion: remaining project finance proceeds
  - \$1.6 billion: cash
- > Expect to continue to generate additional cash from ongoing open-pit operations, which will also be available to help fund the underground development. We currently expect to have enough liquidity to fund our operations and underground development into Q1 2021.
- Engaged external financial advisors to evaluate available sources of capital

# Delivering Value to Host Communities

Oyu Tolgoi Contributes Materially to Expanding the Mongolian Economy

~13,800

Oyu Tolgoi's workforce<sup>1</sup> at the end of Q4'19. **93% Mongolian** 

~\$2.6B

Taxes<sup>2</sup> and royalties paid to the Mongolian Government 2010 – 2019 ~\$10.3B

Spent in Mongolia<sup>3</sup> 2010 – 2019

564

Mongolian national businesses worked with Oyu Tolgoi in 2019 \$3.1B

Spent on operations
Mongolian procurement
2010 – 2019

>\$30M

Invested in sustainable long-term projects in the South Gobi 2014 – 2018

- 1. Includes contractors
- 2. Includes VAT
- 3. In-country spend includes salaries, payments to Mongolian suppliers, taxes, and other payments to the Government of Mongolia

### **Well Positioned for Future Success**

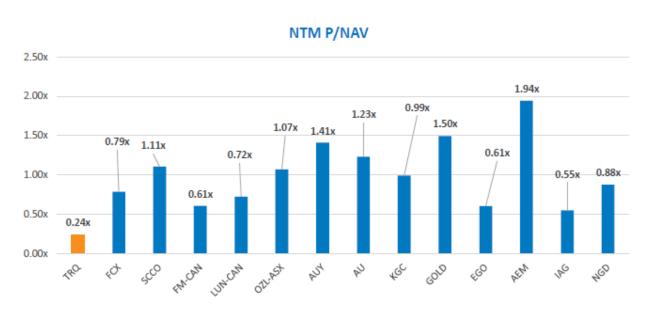
## Well Positioned to Manage Project Areas

Financing & CAPEX Budget	<ul> <li>\$4.4B in project financing from 20 global financial institutions</li> <li>A Definitive Estimate on underground development is expected in 2H 2020.</li> </ul>
Operating Manager	<ul> <li>Rio Tinto is our operating manager at Oyu Tolgoi; a world-class mining company with extensive block caving experience</li> </ul>
<b>Domestic Power Solution</b>	<ul> <li>Power Source Framework Agreement signed</li> <li>Comprehensive feasibility study has been submitted to the Government of Mongolia</li> </ul>
Fiscal Regime / Government Relations	<ul> <li>Peaceful democracy</li> <li>Frequent engagement with the Government of Mongolia</li> <li>Stable open-pit production since 2013; underground construction resumed 2016</li> <li>Government of Mongolia is a major shareholder (34%) in Oyu Tolgoi</li> </ul>
Path to Market	<ul> <li>Oyu Tolgoi has exported material volumes since start up</li> <li>Oyu Tolgoi's concentrates known and accepted by smelters</li> </ul>
Local Stakeholders	<ul> <li>Excellent relationships with nearby communities and businesses</li> <li>Strong local workforce: 19% from South Gobi region</li> </ul>



### **Value Proposition**

### Attractive Price to Net Asset Value



Company		31/2020 sing Price	NTM P/NAV
Turquoise Hill Resources Ltd.	\$	0.63	0.24x
Copper Peer Group			
Freeport-McMoRan, Inc.		11.10	0.79x
Southern Copper Corporation		37.68	1.11x
First Quantum Minerals Ltd.	\$	10.36	0.61x
Lundin Mining Corporation		6.94	0.72x
OZ Minerals Limited	\$	10.16	1.07x
Peer Average:			0.86x
Gold Peers			
Yamana Gold Inc.		4.07	1.41x
AngloGold Ashanti Limited Sponsored ADR		20.36	1.23x
Kinross Gold Corporation		5.07	0.99x
Barrick Gold Corporation		18.52	1.50x
Eldorado Gold Corporation		7.28	0.61x
Agnico Eagle Mines Limited		61.82	1.94x
IAMGOLD Corporation		2.96	0.55x
New Gold Inc.	\$	0.92	0.88x
Peer Average:			1.14x
Total Peer Average:			1.03x



<sup>\*</sup> As at January 31, 2020 estimated Net Asset Value for the next twelve months based on the FactSet consensus

### **Market Perspective**

# Research Coverage

Scotiabank	> Sector Outperform	> Target: C \$2.00
RBC	> Sector Perform	> Target: US \$1.50
CIBC	› Neutral	> Target: C \$1.60
Canaccord	› Buy	> Target: C \$2.50
Macquarie	Outperform	> Target: C \$1.00
<b>TD Securities</b>	> Spec Buy	> Target: C \$2.25
<b>Eight Capital</b>	> Neutral	> Target: C \$2.00
Credit Suisse	› Neutral	> Target: C \$1.00





#### **Well Positioned for Future Success**

## Clear Path to Long-Term Value Creation

- Turquoise Hill is one of the few "pure play" copper companies
- Oyu Tolgoi is a World-class, high-grade copper and gold deposit supporting a multi-decade life of mine
- Projected to be the world's third largest copper mine when at full capacity
- Established open pit mine currently generating steady cash flow
- Expect material free cash flow generation from underground
- Strong liquidity position and potential for additional financing to fund underground development



### **Turquoise Hill's Management Team**

### Proven Operator and Developer of World-Class Mines



**Ulf Quellmann** 

**Chief Executive Officer** 

Appointed as CEO effective August 1, 2018, Mr. Quellmann has more than 20 years of experience in corporate finance, strategy, treasury and investor relations at General Motors, Alcan and Rio Tinto.



**Luke Colton** 

Chief Financial Officer

Appointed CFO on October 9, 2017. Mr. Colton has 15 years of mining experience and had been with Rio Tinto since 2004 before joining Turquoise Hill, working in various business units including minerals, iron ore and energy. Mr. Colton was also a Senior Accountant at E&Y.



**Jo-Anne Dudley** 

**Chief Operating Officer** 

Appointed Chief Operating Officer in June 2019, Ms. Dudley has 25 years of mining industry experience. Since 2005 Ms. Dudley has been working on Rio Tinto underground projects in Australia, South Africa, the USA, and nine years of work on Oyu Tolgoi, including leading its Strategic Mine and Resources Planning unit.

