



# **Annual Report** 2016

**Uncovering the Future** 

# Annual Report 2016

## **Uncovering the Future**

- 06 A New Brand
- 08 A World-Class Asset
- 14 Letter from the Chairman
- 16 Letter from the CEO
- 18 Open-Pit Operations
- **26 Underground Development**
- 32 Sustainability
- 40 Impact in Mongolia

Design by Burnkit
Printed by Blanchette Pres
Made in Canada

© Turquoise Hill Pesqurees Ltd. Vancouver 2017

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any mean electronic or mechanical, including photocopying or any storage and retrieval system, without permission in writing from the publisher.



This annual report unveils the new Turquoise Hill brand, including a new logo and look and feel. The new logo illustrates how the underground and open pit come together to form the world-class Oyu Tolgoi mine.

Turquoise Hill Resources officially changed its name five years ago in August 2012 and a new phase of the Company's history began. Since that time, Oyu Tolgoi's openpit production began, the concentrator has continued to improve and in 2016 underground development commenced where approximately 80% of the mine's long-term value resides. Management determined 2017 would be an appropriate time to update the Turquoise Hill brand to reflect the Company's five-year evolution into one of Canada's leading base-metal organizations and in expectation of Oyu Tolgoi becoming the world's third-largest copper mine when the underground reaches peak production.

This annual report unveils the new Turquoise Hill brand, including a new logo and look and feel.

The new logo illustrates how the underground and open pit come together to form the world-class Oyu Tolgoi mine. The logo's stacked lines represent the roads and benches of surface mining in the open pit, while the turquoise sections reveal the shafts and working levels found in the underground. The various pieces of the logo also represent the mine's many partners working together in an orchestrated fashion to make Oyu Tolgoi the success that it has been and the achievements we expect it to attain in the future.

The journey of Turquoise Hill and Oyu Tolgoi has been an exciting one. The Company looks forward to the completion of underground development and the realization of Oyu Tolgoi's full potential.

Turquoise Hill – uncovering the future.



Oyu Tolgoi is the best developing copper project globally and is expected to be the world's third-largest copper mine when the underground reaches peak production. Between 2017 and 2025 (expected peak copper production for Oyu Tolgoi), copper production is expected to increase more than 300% and gold production is expected to increase more than 450%. Few, if any, copper mines in the world are currently able to show such significant production growth over an eight-year period.

Between 2013 (first year of production) and 2016, Oyu Tolgoi has produced more than 625,000 tonnes of copper, approximately 1.7 million ounces of gold and approximately \$1.8 billion of operating cash flow.

Oyu Tolgoi is one of Mongolia's leading employers with a workforce of more than 9,300 at the end of 2016. Approximately 94% of the workforce is Mongolian.

Oyu Tolgoi's operations had an industry-leading safety performance for 2016 with an All Injury Frequency Rate (AIFR) of 0.22 per 200,000 hours worked. The mine's AIFR has decreased approximately 50% since production began in 2013.

By 2025 when Oyu Tolgoi is expected to reach peak production, the mine is expected to generate significant cash flow for Turquoise Hill.

Long-term, Oyu Tolgoi's resources provide the mine with development optionality, which is expected to generate decades of production. Additionally, there is untapped exploration potential at Oyu Tolgoi offering possible upside to long-term production.

The mine is committed to building and promoting a localized, sustainable, quality-assured supply chain within Mongolia as well as developing a competitive and skilled Mongolian supplier community. During 2016, Oyu Tolgoi actively worked with Mongolian suppliers to accommodate their participation in the underground development procurement tendering process.

Since 2011, Oyu Tolgoi has been running a program to support both local businesses and the South Gobi economy. The goal of the program is to contribute to economic development by supporting the growth and expansion of market-based, nonmining business.

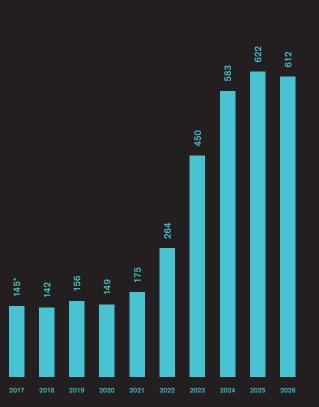
Oyu Tolgoi is a proud Mongolian business that is at the forefront of driving the country's economy.

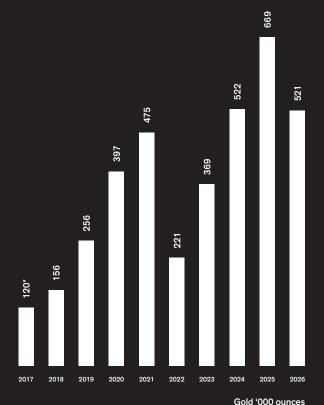
+329%

Expected copper production growth 2017–2025

+458%

Expected gold production growth 2017–2025





Copper '000 tonnes
\*2017 production at midpoint of guidance range.

\*2017 production at midpoint of guidance range.



### Letter from the Chairman

### **Dear Shareholders:**

I am pleased to be writing this letter as Chairman of Turquoise Hill. I have been an independent director of your Company since 2012 and look forward to leading the board during this transformational growth phase for Turquoise Hill and Oyu Tolgoi. By 2025 when Oyu Tolgoi reaches peak production, it is expected to be the third-largest copper mine in the world.

### Oyu Tolgoi's operations, development and financing

During 2016, Oyu Tolgoi's open-pit operations performed at record levels and, following notice to proceed approval in May, underground construction commenced around the middle of the year. Approximately 80% of Oyu Tolgoi's long-term value is in the underground. The restart of construction moves us closer to recognizing Oyu Tolgoi's full potential as production from Hugo North Lift 1 begins to ramp up in 2021.

The drawdown of the project finance facility in June was a landmark event for the Company in 2016. It is one of the largest project finance facilities ever completed in the mining industry. It provides Turquoise Hill with substantial liquidity to progress underground development of Oyu Tolgoi.

During the annual mine visit by the Board of Directors in August, we observed first-hand how efficiently operations at the open pit and concentrator function as well as the initial components of underground construction. I am always impressed with the

sheer scale of Oyu Tolgoi and its workforce as well as the dedication and determination of our Mongolian and expatriate employees alike. We value and appreciate their many accomplishments in 2016.

### Maintaining and improving corporate governance

The Turquoise Hill board and management believe that strong corporate governance contributes to maintaining and increasing shareholder value. This is why the board and management continually work at maintaining and improving corporate governance practices and reinforcing the value of Turquoise Hill through proper application of the Company's *Code of Business Conduct*.

The Turquoise Hill Code is applicable to all employees, consultants, officers, and directors regardless of their position in the organization. The Code provides that all members of the Turquoise Hill family adhere to this commitment of a culture of honesty, integrity and accountability. Turquoise Hill requires the highest standards of professional and ethical conduct at all times and in all locations.

The Company is fully committed to protecting the environment and to safeguarding the health, safety and welfare of all employees, contractors and communities who are affected by Turquoise Hill and Oyu Tolgoi. We are dedicated to performing our duties in a safe, environmentally responsible and effective way.

The Turquoise Hill Board of Directors is comprised of seven persons of which four are independent, including the Chairman. The remaining three are appointed by Rio Tinto, including the CEO. The Audit Committee is composed solely of independent directors. Additionally, there are no interlocking directorships.

In March 2017, the Company amended two significant corporate policies. First, we modified our overboarding policy to limit the number of public company board memberships to two (including the Turquoise Hill board) for directors who are CEOs or senior executives of a public company and to five for non-executive directors. Secondly, we amended the Majority Voting Policy to require the board to accept, except in exceptional circumstances, a director nominee's resignation following a meeting at which he or she received a greater number of votes "withheld" or "abstained" than votes "for" with respect to his or her election. Both these measures were implemented to bring us more in line with the recommendations of governance advisors.

Also in March 2017, the Company restructured the long-term incentive program for senior executives in order to more substantially align their equity compensation with the interests of shareholders. Going forward, the Performance Share Units program has been significantly enhanced and more members of the senior team will be participants than in previous years. In addition, we have adopted an equity

ownership policy requiring senior executives to accumulate a meaningful equity interest in Turquoise Hill over a five-year period. We believe these executive compensation reforms will further incentivize the management team.

#### People

15

Jill Gardiner retired as Chair of the Board at the year end. We wish to thank her for her focus, dedication and commitment to Turquoise Hill. During her tenure a number of significant milestones in unlocking the value of Oyu Tolgoi were achieved. We wish her all the best in the future.

In January 2017, we welcomed Maryse Saint-Laurent as a director. She is an accomplished legal executive, corporate director and senior advisor to boards and management teams with almost 20 years of experience in the energy and electricity sectors. Ms. Saint Laurent has a particular focus on corporate governance.

Rowena Albones, a Rio Tinto appointed director since October 2013, is not standing for re-election at the 2017 shareholders' meeting. The board would like to thank her for her contributions and commitment to Turquoise Hill. Ulf Quellmann, currently CFO of the Rio Tinto copper and diamonds group, will be nominated for election at the upcoming meeting to fill this position.

The board would also like to thank Chief Financial Officer Steeve Thibeault who is retiring in May 2017 for his financial leadership and commitment to Turquoise Hill. He was a key member of the project finance team and led the Turquoise Hill financial group during his tenure. We wish him all the best.

#### Looking ahead

While the global economic outlook remains uncertain, there is a positive outlook in the mining industry and among the base metals, for copper in particular. Your Company is positioned with a world-class asset that is well financed to ideally take advantage of this optimism.

I look forward to Oyu Tolgoi's continued efficient operational performance in 2017 and accelerated- progress with underground development. The Board of Directors is proud of your Company's workforce and all they do to make Oyu Tolgoi the Mongolian success story it is.

I would also like to personally thank the Turquoise Hill management team for their tireless effort in driving the Company forward as well as time spent with the financial community showcasing the world's best developing copper project.

~·--

Sincerely, R. Peter Gillin

### **Dear Shareholders:**

It has been almost five years since the Company's name changed to Turquoise Hill. During that period, a number of significant achievements have occurred, including the start of open-pit production, continued improvements to concentrator performance and the start of underground construction. To mark this dynamic evolution, we are unveiling new branding with our 2016 annual report. The new logo synthesizes Oyu Tolgoi's underground mine and open pit coming together to form this world-class asset. Oyu Tolgoi has achieved so much since production began in January 2013. This has been possible due to the mine's partners uniting around Oyu Tolgoi's success, which is also represented in the logo. Our journey since 2012 has been an exciting one; however I think Oyu Tolgoi has an even brighter future with the start of underground mining.

During 2016, we dedicated significant time showcasing Turquoise Hill and Oyu Tolgoi to shareholders and potential investors in North America, Europe, Asia and Australia. It was the first time we had undertaken marketing in Asia and Australia. In meetings, we spend considerable time explaining the strengths of Oyu Tolgoi and its expected prominence with underground production. The main points of the Oyu Tolgoi "story" include the following:

- The Oyu Tolgoi workforce is our greatest asset – they convert plans into reality;
- At peak production in 2025, Oyu Tolgoi is expected to be the third-largest copper mine in the world — that is just eight years away;

- After completed construction and rampup is underway, Oyu Tolgoi is expected to begin generating significant cash flow for many years and, based on what we know today, our intention is to dividend some portion of that cash flow to Turquoise Hill shareholders;
- The funding of the Hugo North Lift 1 underground mine is in place from project finance/supplemental debt, operating cash flow and Turquoise Hill cash;
- We are long-term believers in copper based on an expected decrease in the copper supply beginning around 2020 and anticipate Oyu Tolgoi to benefit from that short fall with the expected start of sustainable underground production in 2021;
- Oyu Tolgoi's resources provide long-term development optionality and expected production for decades; and,
- Oyu Tolgoi is the best copper project in development today.

#### Open-pit operating at record levels

Oyu Tolgoi operated at record levels in 2016 achieving a number of all-time highs. One of the mine's most important accomplishments for the year was their AIFR of 0.22 per 200,000 hours worked. This was an industry-leading performance and I am extremely proud of this achievement. Oyu Tolgoi's workforce continues to impress me with their dedication to safety.

At the beginning of 2016, we acknowledged the challenges facing the mine given depressed commodity prices and the start of lower grades due to the expected completion of Phase 2 mining around mid-year. Oyu Tolgoi had been working for several years in anticipation of the reduced grades and had been implementing cost reductions and productivity improvements to mitigate the impact. Commodity prices began improving by mid-2016 and significantly accelerated in early November. Given the strong commodity prices by year-end, Oyu Tolgoi's production exceeding guidance and record-setting concentrator performance, we ended 2016 with almost \$400 million of operating cash flow. We greatly appreciate the hard work of the Oyu Tolgoi workforce for making this possible.

For the first time in 2016, Oyu Tolgoi's concentrator surpassed nameplate capacity of 100,000 tonnes per day; representing an approximate 90% increase in throughput since production began in 2013. Annual mined material reached a record high during the year and the average daily concentrator rate for the fourth quarter also set a record high. This kind of performance is indicative of the Oyu Tolgoi workforce, which is approximately 94% Mongolian.

I am very proud of where we ended 2016; however we still have approximately 18 months of low grades to tackle, which were anticipated and part of our 2014 Technical Report. For 2017 and the first half of 2018, we are expecting continued lower grades and metal production due to the mining sequence of the open pit. We finished mining Phase 2

in 2016, which included the high-grade gold zone of the open pit, and expect to begin processing high-grade gold ore from Phase 4 around the middle of 2018. For 2017, Oyu Tolgoi is expected to produce 130,000 to 160,000 tonnes of copper and 100,000 to 140,000 ounces of gold. Oyu Tolgoi has done a fantastic job optimizing the business in order to sustain the grade challenges over the next year and a half.

### Underground construction progresses

Following the signing of the Underground Development and Financing Plan in May 2015 and signing of project finance in December 2015, 2016 began with a strong focus on notice to proceed. In May, the boards of Turquoise Hill, Rio Tinto and Oyu Tolgoi approved notice to proceed and construction of Hugo North Lift 1 began mid-year. By the end of 2016, the underground workforce had grown to more than 2,000 people.

Construction currently consists of four major work streams—lateral development, sinking of Shafts 2 and 5 as well as convey-to-surface advancement.

- By the end of 2016, approximately 1,600 equivalent metres of lateral development were complete, which was ahead of schedule. We are in the midst of installing a larger 3,500 tonne-per-day crusher that is expected to allow for increased lateral development in 2017.
- Shaft 2, used for both production and ventilation, was near completion at

the end of 2016 with 85 metres of development remaining. In addition to the final sinking, lateral construction is required off the shaft for the production, main access and dewatering levels. Shaft 2 is expected to be complete during 2017.

- Shaft 5, used for ventilation, had approximately 850 metres of development remaining at the end of 2016 and is expected to be complete by the end of 2017. When Shaft 5 is finished, we will be able to increase the number of development crews.
- Oyu Tolgoi began the surface excavation for the convey-to-surface decline in 2016. The work progressed quite well and was finished by the end of the year. That allowed for development of the decline to begin in the first quarter of 2017.

In October 2016, we published the 2016
Oyu Tolgoi Technical Report, which outlined
the long-term development plan for the mine.
The report provides more near-term granular
details for modeling and our intention was to
assist the financial community with greater
understanding of Oyu Tolgoi's long-term
value. We also included several alternative
production cases for additional clarity on how
the geologic resources could be sequenced
and what the potential incremental value
could be.

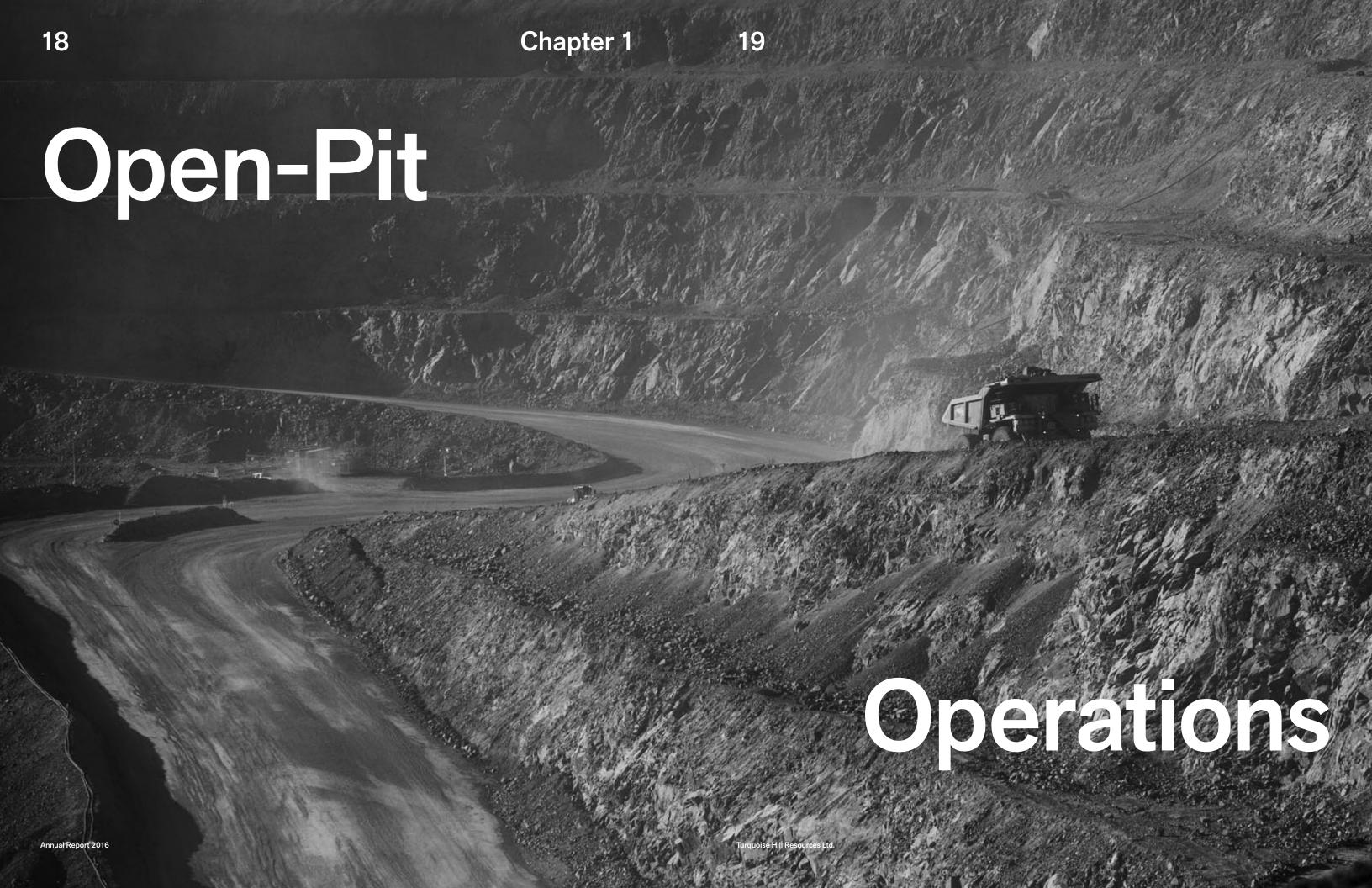
We are in the early stages of a multi-year construction program but I am pleased with the progress to date. Between 2017 and

2025 (anticipated peak production from Oyu Tolgoi), we expect copper production to grow by more than 300% and gold production to grow more than 450%. There are few — if any — existing mines that have such a significant growth profile as Oyu Tolgoi.

The future is very bright for Turquoise Hill and Oyu Tologi. I appreciate the support we receive from many of our shareholders. During 2017, we will continue to tell the Oyu Tolgoi "story" to the financial community highlighting why Oyu Tolgoi is a world-class mine and the leading copper project in development.

20055

Regards, Jeff Tygesen



Oyu Tolgoi's open-pit operations performed very well during 2016 exceeding copper and gold production guidance, achieving an industry-leading safety performance and setting several record highs. During the fourth quarter, the concentrator operated at its highest throughput since production began in 2013. By the end of 2016, Oyu Tolgoi had shipped more than 2.5 million tonnes of concentrate. For a mine in its fourth full year of operations, these results are truly impressive.

Top – Oyu Tolgoi's open pit mining team includes 26 female operators and 69 operators from Khanbogd Soum, the nearest town to the mine.

**Bottom** – Oyu Tolgoi's 2016 All Injury Frequency Rate of 0.22 per 200,000 hours worked was an industry-leading achievement.



During 2016, mining in Phase 2 of the open pit was completed, which was part of Oyu Tolgoi's high-grade gold zone.

The reduction in 2016 gold production compared to 2015 reflects the completion of Phase 2 mining. Also during 2016, Phases 3 and 6 of the open pit were mined; however these sections contain significantly lower gold grades than Phase 2.

Stripping of Phase 4 began during 2016. This phase of the open pit also contains part of the mine's high-grade gold zone. The mine plan for Phase 4 was divided into two parts, 4A and 4B, during the year in expectation of reaching the high-grade gold zone of the phase around mid-2018.

The impact of lower gold production from Phases 3 and 6 has been anticipated for a number of years and was reflected in the 2014 and 2016 Oyu Tolgoi Technical Reports.

Progress of the concentrator's performance has been in the works since 2014 when Oyu Tolgoi began actively implementing a number of productivity improvements. For 2016, the concentrator's average daily rate of 104,200 tonnes exceeded nameplate capacity of 100,000 tonnes per day for the first time.

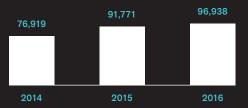
Oyu Tolgoi is expected to produce 130,000 to 160,000 tonnes of copper and 100,000 to 140,000 ounces of gold in concentrates for 2017. Open-pit operations are expected to mine in Phase 6 during the year as well as continue the stripping of Phase 4. In addition, stockpiled ore will be processed during the year. The lower production compared to 2016 is primarily the result of approximately one-quarter less copper head grade and approximately one-half less gold head grade. Oyu Tolgoi is well-positioned to sustain the 2017 grade challenges.



22

# **Open Pit Material Mined**

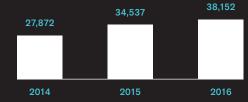
'000 tonnes



Open pit material mined has increased 26.0% since 2014 from ongoing productivity improvements.

### Ore Treated

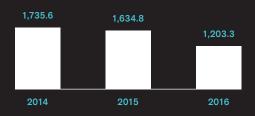
'000 tonnes



For the first time since production began, ore treated exceeded the concentrator's nameplate capacity of 36.5 million tonnes in 2016.

### Revenue

\$ in millions

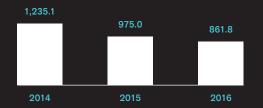


Revenue in 2016 decreased 26.4% over 2015 reflecting reduced gold sales and lower copper prices.

### **Cost of Sales**

**Open-Pit Operations 2016** 

\$ in millions



Cost of sales in 2016 decreased 11.6% over 2015 due to lower production volumes partially offset by higher unit costs.

# **Average Daily Concentrator Rate**

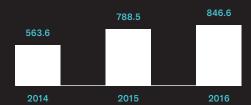
'000 tonnes



Average daily concentrator rate has increased 36.4% since 2014 from a robust program of productivity improvements.

### Concentrates Produced

'000 tonnes



As Oyu Tolgoi's operations have improved, concentrates produced have increased 50.2% since 2014.

# Operating Cash Flow

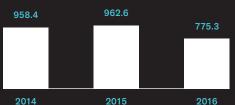
\$ in millions



Operating cash flow decreased 38.6% over 2015 reflecting lower gold production and sales in concentrates.

# **Operating Cash Costs**

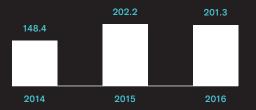
\$ in millions



Operating cash costs in 2016 decreased 19.5% over 2015 due to mining and production efficiencies and cost reduction programs.

# **Production of Copper Concentrates**

'000 tonnes



Copper production in 2016 exceeded guidance of 175,000 to 195,000 tonnes of copper.

# Production of Gold in Concentrates

'000 tonnes



Gold production in 2016 exceeded guidance of 255,000 to 285,000 ounces of gold.

### C1 Cash Costs

\$/Ib of Copper Produced



The increased 2016 C1 cash costs compared to 2015 reflects lower gold sales from reduced production.

# All-In Sustaining Costs (AISC)

\$/Ib of Copper Produced



The increased AISC for 2016 compared to 2015 mainly reflects lower gold revenue for the year.





Following the signing of the Underground Development and Financing Plan in May 2015, signing of project finance in December 2015 and receipt of notice to proceed in May 2016, construction of the Hugo North Lift 1 underground mine began in mid-2016. By the end of the year, the underground workforce was more than 2,000 people.

Average copper grades of Hugo North Lift 1 are 1.66% copper, which is almost four times the open-pit grades. Production from the first drawbell is expected in mid 2020 and first sustainable production is expected in early 2021. Given the higher copper grades of Hugo North Lift 1, Oyu Tologi only needs to reach production of 30,000 tonnes per day before it is the equivalent of 100,000 tonnes per day from the open pit.

Approximately 65 kilometres of lateral development is expected to be complete when production from the first draw bell is achieved. At the end of 2016, approximately 18 kilometres of lateral development was complete. Approximately 200 kilometres of lateral development will be required over the life of Hugo North Lift 1.

At the end of 2016, there were approximately 85 metres of sinking depth remaining to complete Shaft 2 and approximately 840 metres of sinking depth to complete Shaft 5. Both are expected to be complete in 2017. Shaft 5 will be used for ventilation and once it is complete lateral development rates are expected to increase due to additional development crews.

The surface excavation for the convey-tosurface decline was completed by the end of 2016. Development of the decline began in Q1'17.

Total expansion capital for Hugo North Lift 1 is expected to be \$5.3 billion. At the end of 2016, \$226.7 million of capital expenditures on a cash basis had been spent and Oyu Tolgoi had ongoing commitments of approximately \$640 million.

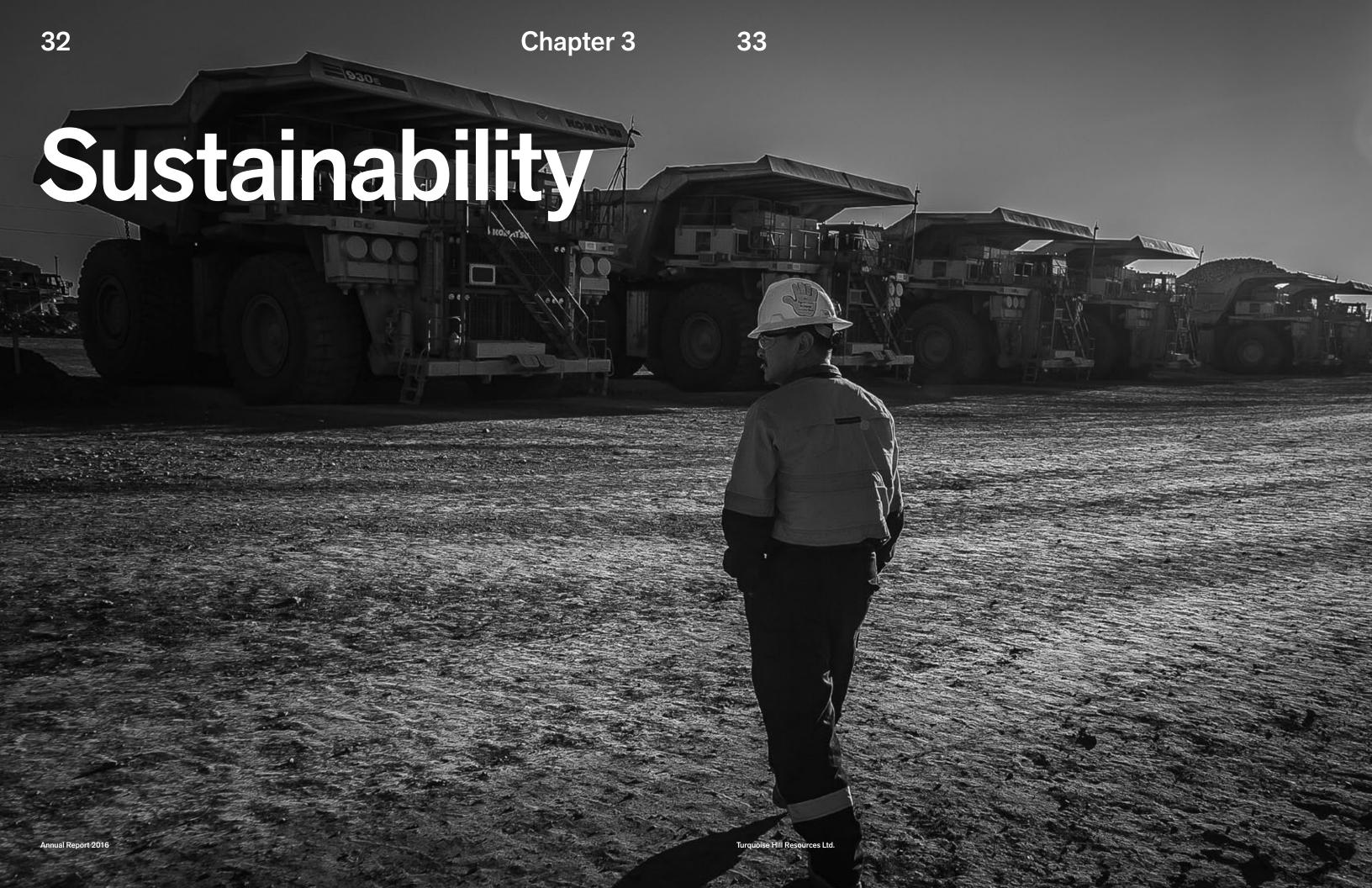
Hugo North Lift 1 and Oyu Tolgoi's open pit make up the mine's approximate 1.4 billion tonne reserves. Oyu Tolgoi's additional resources includes Hugo North Lift 2, Hugo South and Heruga. With reserves and resources of approximately 6.3 billion tonnes, Oyu Tolgoi is expected to produce copper and gold for decades.

Five Shafts of Hugo North Lift 1

	1	2	5	3	4
	Early development and ventilation	Production and ventilation	Ventilation	Ventilation	Ventilation
Total Depth	1,358 Metres	1,284 Metres	1,178 Metres	1,148 Metres	1,149 Metres
Diameter	6.7 Metres	10 Metres	6.7 Metres	10 Metres	11 Metres
Completion*	2008	2017 Expected	2017 Expected	2021 Expected	2021 Expected
Remaining*	Complete	~85 Metres	~840 Metres	Not Started	Not Started

Turquoise Hill Resources Ltd. \*At December 31, 2016





Annual Report 2016

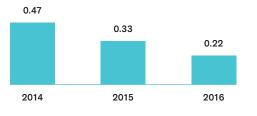
Turquoise Hill is committed to protecting the environment and to safeguarding the health, safety and welfare of all employees, contractors and communities who are affected by Turquoise Hill and Oyu Tolgoi. The Company is dedicated to performing its duties in a safe, environmentally responsible and effective manner.

Turquoise Hill supports and respects human rights consistent with the Universal **Declaration of Human Rights and** seeks to ensure that it is not complicit in human rights abuses committed by others. The Company respects and supports the dignity, well-being and rights of its employees, their families and the communities in which it operates. Turquoise Hill also sets out to build enduring relationships with its neighbours that demonstrate mutual respect, active partnership, and long-term commitment. The Company respects the diversity of indigenous peoples, acknowledging the unique and important interests that they have in the land, waters and environment as well as their history, culture and traditional ways.

#### Safety

One of the most important means of safeguarding the health, safety and welfare of all employees and contractors is through a robust safety program. Oyu Tolgoi's 2016 AIFR of 0.22 per 200,000 hours worked was an industry-leading achievement. Since 2014, Oyu Tolgoi's AIFR had declined more than 50%, which is a tremendous outcome. Oyu Tolgoi constantly works to improve the mine's safety performance.

### All Injury Frequency Rate Per 200.000 Hours Worked



#### Biodiversity

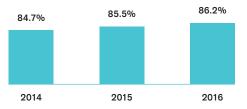
Oyu Tolgoi is committed to achieving a Net Positive Impact to offset the mine's activities. Oyu Tolgoi has received approval from the Government of Mongolia for its offset program, which includes a sustainable cashmere project and an anti-poaching initiative, that is in its third year of operation. Oyu Tolgoi has established Mongolia's first Khulan and black-tailed gazelle satellite monitoring program. The mine also has an environmental, water and biodiversity monitoring program with local herders.

#### Water

Water is a very scarce resource in the South Gobi desert. Oyu Tolgoi was designed as one of the most water-efficient mines in the world through minimal water usage and significant recycling rates. In 2016, Oyu Tolgoi achieved an average recycling rate of 86.2%, which exceeded a target of 80%. Oyu Tolgoi's 2016 water use efficiency of 0.42 significantly beat the global average of 1.2 cubic metres for comparable copper businesses.

During 2016, a 25-year water usage contract with increased amounts of water reserve was finalized. This secured one of the most important licenses for a sustainable mining operation in the South Gobi.

### Oyu Tolgoi Water Recycling Rate Target: 80%



### Oyu Tolgoi Water Use Efficiency m³ per Tonne of Ore Processed



 Global average of 1.2 cubic metres / tonne for comparable copper businesses. 36 Sustainability

### **Environmental and Social Impact Assessment Management**

In 2012 as part of project finance requirements, Oyu Tolgoi undertook a comprehensive Environmental and Social Impact Assessment (ESIA), which was performed independently. The process involved consultations with local and regional authorities, local businesses, community organizations and local community representatives.

The assessment provided an evaluation of both the direct and indirect impacts of Oyu Tolgoi's operations and project on the society, economy and environment in Mongolia. It described how Oyu Tolgoi expects to minimize and manage the mine's environmental and social impact as well as maximizing positive benefits over the mine's life. It also demonstrated a process to ensure local communities are consulted in decisions to be made throughout the life of Oyu Tolgoi's operation.

The first ESIA was published in 2013 showing a 91% compliance rate. A subsequent independent audit published in 2016 showed a 98% compliance rate. Oyu Tolgoi has no areas of non-compliance requiring immediate corrective action.

### Cooperation Agreement with Local Communities

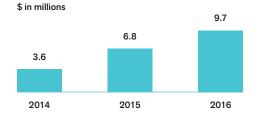
In April 2015, Oyu Tolgoi signed a Cooperation Agreement with the mine's local communities, which was the first of its kind in Mongolia. The agreement set out how the parties will work together toward sustainable development in areas such as water, environment, pastureland management, cultural heritage, tourism as well as local business development and procurement.

Subsequently in September 2015, Oyu Tolgoi established the Gobi Oyu Development Support Fund agreeing to make \$5 million contribution annually for expenditure on South Gobi sustainable development. The fund's board consists of four Oyu Tolgoi management representatives and three community representative. Funding has been approved for numerous projects, including a completed healthcare center, an animal health center, an animal disinfection program and the building of several schools.

In 2016, the Tripartite Council was established consisting of local herders, local community representatives and Oyu Tolgoi. The Council is working to address herders' concerns lodged to the International Finance Corporation Complaint Advisory Ombudsman. In 2016, the Council conducted studies on the Undai River diversion and local herder socio-economic changes.

In 2017, Oyu Tolgoi invested almost \$10 million in sustainable, long-term projects in the South Gobi community.

### Sustainable Development Projects in South Gobi Community



#### Turquoise Hill Code of Business Conduct

The Turquoise Hill Code of Business Conduct is applicable to all employees, consultants, officers and directors regardless of their position in the organization, at all times and everywhere the Company does business. The Code of Business Conduct provides that the Company's employees, consultants, officers and directors will uphold its commitment to a culture of honesty, integrity and accountability, and that Turquoise Hill requires the highest standards of professional and ethical conduct from its employees, consultants, officers and directors. In every country that Turquoise Hill operates, all personnel are expected to comply with the law, the Code of Business Conduct, and the Company's policies and standards.

Turquoise Hill takes any violation of applicable laws very seriously and any employee who violates these laws will be subject to disciplinary measures up to and including termination of employment. The Company believes that its *Code of Business Conduct* is responsive to any potential issues which such policies are meant to address and clearly demonstrates Turquoise Hill's full commitment to all of its stakeholders to act at all times as a responsible social and corporate citizen.

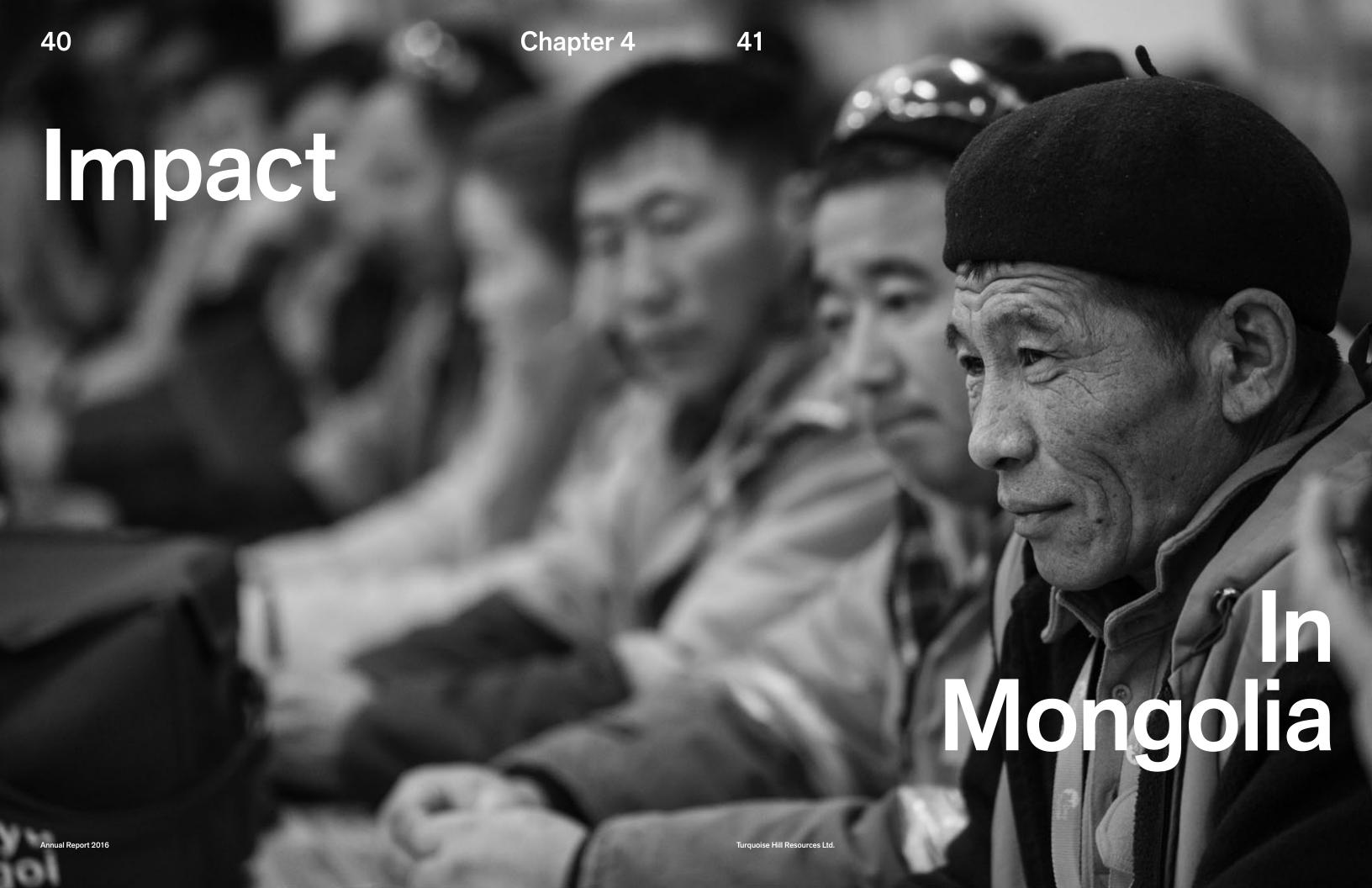
Because Turquoise Hill operates on a global scale, it is especially sensitive to monitoring situations of conflicts of interest, bribery, corruption and improper conduct by its employees, consultants, officers and directors. The Code of Business Conduct

underscores the importance of oversight of matters contemplated by the Corruption of Foreign Public Officials Act and the Foreign Corrupt Practices Act of 1977. Turquoise Hill does not offer, promise, give, demand or accept anything of value, whether directly or indirectly, to or from government officials; political candidates, parties, or party officials; community leaders or other persons in a position of public trust; or private sector employees (including a person who directs or works for a private sector enterprise in any capacity) in order to obtain, retain or direct business or to secure any other advantage in the conduct of business.

Turquoise Hill has a confidential whistleblower program. Employees are encouraged to report any suspicion of unethical or illegal practices. The Company is committed to maintaining a reporting mechanism that permits confidential, anonymous reporting of an issue, violation or complaint. Information regarding the identity of any person making such a report remains anonymous and confidential at all times unless otherwise expressly permitted by this person or as required by applicable law and is only disclosed to those persons who have a need to know such information to properly carry out an investigation of the issue, violation or complaint, in accordance with the Code of Business Conduct.

A copy of the *Code of Business Conduct* is available on the Turquoise Hill website or through SEDAR at www.sedar.com.



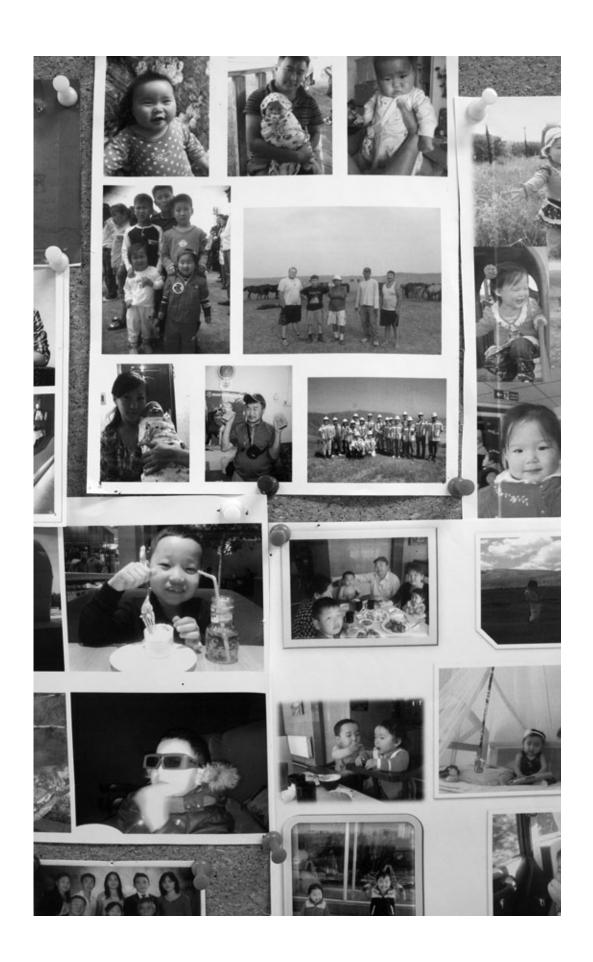


Oyu Tolgoi is one of Mongolia's leading companies and is committed to making positive contributions to the country's society and economy as well as supporting robust economic development. This commitment includes maximizing national procurement serving two purposes:

To build and promote a localized, sustainable, quality-assured supply chain within Mongolia

To meet Oyu Tolgoi's Investment Agreement commitments to develop a competitive and skilled Mongolian supplier community.

As a multi-generational project, Oyu Tolgoi's current workforce is setting the groundwork for Mongolia's young population to have professional, international-standard jobs in the mining industry.



45

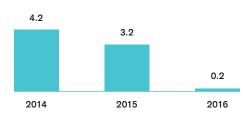
Oyu Tolgoi has had a workforce that is greater than 90% Mongolian since 2014. At the end of 2016, the Oyu Tolgoi workforce was approximately 94% Mongolian, of which 22% were from the South Gobi community. Education and training is an important part of developing and maintaining a strong national workforce.

Oyu Tolgoi has been a significant taxpayer since production began. In 2016, Oyu Tolgoi paid more than \$210 million in taxes, fees and other payments to the Government of Mongolia and in 2015 was named the country's top taxpayer. The decline in taxes, fees and other payments in 2016 is the result of reduced revenue due to lower commodity prices during the year.

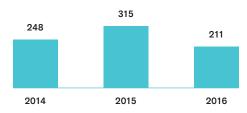
National and South Gobi procurement are a significant part of Oyu Tologi's operations. In 2016, the mine had 623 national suppliers accounting for 62% of total operational procurement spend and worked with almost 90 South Gobi suppliers.

From 2010 through the end of 2016, Oyu Tolgoi has spent over \$6.1 billion in Mongolia in the form of salaries, payments to Mongolian suppliers as well as taxes, fees and other payments to the Government of Mongolia.

### Education and Training \$ in millions



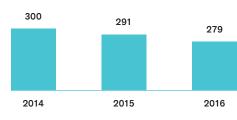
### Taxes, Fees and Other Payments \$ in millions



Taxes, fees and other payments made to the Government of Mongolia.

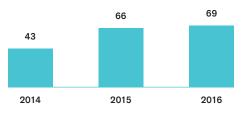
#### **National Procurement**

\$ in millions



### South Gobi Procurement

\$ in millions



**Top** – Employees on the open pit mining team review the day's plan before starting their shift.

**Bottom** – From the mine site, concentrate is shipped by truck to customers, mainly in China.





Annual Report 2016

Turquoise Hill Resources Ltd.



**Board of Directors\*** 

R. Peter Gillin – Chairman Corporate Director

Jeff Tygesen Chief Executive Officer

Rowena Albones Chief Financial Officer Growth and Innovation, Rio Tinto

James W. Gill Corporate Director/Mining Consultant

Russel Robertson Corporate Director

Maryse Saint-Laurent Corporate Director

Craig Stegman
Vice President
Operational and Technical Support
Copper and Diamonds, Rio Tinto

\* As of March 20, 2017



Turquoise Hill Resources Ltd. Suite 354-200 Granville Street Vancouver, BC, Canada V6C 1S4

TRQ: TSX, NYSE & NASDAQ



# turquoisehill.com Annual Report 2016 Turquoise Hill Resources Ltd. Suite 354-200 Granville Street Vancouver, BC, Canada V6C 1S4 TRQ: TSX, NYSE & NASDAQ Turquoise Hill is an international mining company focused on the operation and development of the Oyu Tolgoi coppergold mine in southern Mongolia.