

2021 Annual Report



TURQUOISE HILL

An aerial view of underground related surface infrastructure with Shaft 3 construction in the foreground.



Shaft 2

Shaft 4

Shaft 5

Shaft 3

Table of contents

4	Letter from the Chairman
6	Letter from the CEO
10	Company Profile
12	Operational Performance
14	2021 in Review
16	Sustainability
18	Sustainability Commitments
20	Policies
21	Environmental and Social Impact Assessment Management
22	At a Glance
24	Diversity and Inclusion
26	Health
	COVID-19 Response
	Occupational Health Programs
	Medical Preparedness and Response
32	Safety
36	Environment
	Water
	Domestic Power
	Waste Management
	Biodiversity
	Greenhouse Gas Emissions
	Land Management
54	Community Engagement
58	Responsible Governance
	Code of Business Conduct
	Board of Directors
	Board Composition
	Board Committees
	Human Rights
	Senior Leadership Team

Oyu Tolgoi employees at the concentrator complex.



Letter from the Chairman



The past year was a pivotal one for Turquoise Hill Resources Ltd. (“Turquoise Hill” or the “Company”), as we completed the technical requirements for the undercut decision and continued discussions with the Government of Mongolia and Rio Tinto to remove the remaining obstacles to initiating the undercut caving operations for the Oyu Tolgoi (OT) underground mine.

Following the effort in 2021, early in 2022 we reached new agreements with the Government of Mongolia to enable the commencement of caving operations at OT. This action is an essential step in unlocking the full economic potential of OT. In addition, the Company completed a revised funding agreement with Rio Tinto which provides a clear plan to finance the Oyu Tolgoi underground development to the point of sustainable production, which is now expected to be in the first half of 2023.

However, 2021 was not without its challenges. Mongolia was impacted by a COVID-19 outbreak in March that limited the ability of Oyu Tolgoi to maintain normal roster changes. Our Oyu Tolgoi team worked in close collaboration with the Mongolian authorities to implement and maintain control measures to protect the health and well-being of its workers as well as the local community. In the face of this, the team achieved another best-in-class All Injury Frequency Rate (AIFR) of 0.14. Considering the incremental challenges brought on by COVID-19, this is an outstanding achievement.

With regard to the open-pit production, the Oyu Tolgoi team was able to efficiently re-allocate the reduced workforce and as a result met the revised 2021 production guidance. The devotion and skill of the OT employees maintained the key critical path items of underground development required to initiate the undercut and ramp-up to sustainable production. There too, the team was able to accomplish this in spite of travel restrictions which constrained access to expatriate specialist employees and consultants.

While Oyu Tolgoi contracts expatriate professionals and experts in rotating specialised roles, we have made skills training and knowledge transfer initiatives for local Mongolian nationals a high priority. Structured professional development programs are offered to ensure high potential personnel are ready for leadership and subject matter expert roles and many personnel have had the opportunity to work at a number of Rio Tinto’s locations around the world. Moreover, Oyu Tolgoi LLC makes an annual contribution of US\$5 million to the Gobi Oyu Development Support Fund (“DSF”), an independent fund that supports sustainable community development. Since its creation in September 2015, the DSF has invested US\$32.9 million, including US\$5.7 million in 2021.

We are proud of the progress we have made on sustainability, community, diversity and inclusion initiatives. As of December 31, 2021, 53% of employees at the Company’s corporate office identify as female, and 47% of the management and executive teams identify as female. Our Ulaanbaatar based exploration team is comprised entirely of Mongolian personnel and overall over 96% of Oyu Tolgoi’s workforce are Mongolian nationals.

Oyu Tolgoi was designed as one of the most water-efficient mines in the world. The mine water comes from a deep and saline aquifer and has no impact on the supply of drinkable water in the region. Water used at the mine is continuously recycled at an average rate of 88.3%.

2021 was also a year of management changes. In March, Ulf Quellmann resigned and we recruited Steve Thibeault as interim CEO. Mr. Thibeault previously served as the Company’s Chief Financial Officer from 2014 to 2017. Mr. Thibeault worked to advance the negotiations with the Government of Mongolia and Rio Tinto resulting in the successful agreements with the Government of Mongolia and a revised funding plan with Rio Tinto. A Special Committee of the Board’s independent directors was closely involved in overseeing negotiations and recommended the final terms of the agreements for approval by the Board. The diligence and creativity the team demonstrated was crucial to achieving these major milestones.

The future for the Company looks bright. With the undercut now underway, we look forward to reaching the point of sustained underground production. Once the underground reaches full production, Oyu Tolgoi will be one of the largest copper mines in the world. It is a high-grade asset with a long mine life and production costs projected to be among the lowest in the industry.

During 2021, the Company maintained an excellent safety record, met our revised production guidance and kept the critical elements of the underground development project on track. On behalf of the Board, I want to thank our management team and employees for their continued commitment to delivering the full potential of OT for the benefit of Mongolia, our stakeholders, and our shareholders.

Sincerely,

R. Peter Gillin

Letter from the CEO



In early 2021 the Turquoise Hill Board approached me to take on the role of Interim CEO of Turquoise Hill with the stated objective of working with the Government of Mongolia and Rio Tinto to move the Oyu Tolgoi underground mine into production. As I had been the CFO of Turquoise Hill from 2014 – 2017, I was well aware of the massive

upside for all stakeholders in bringing the underground into production, and welcomed the opportunity to once again work on behalf of Turquoise Hill shareholders to unlock the benefits of the Oyu Tolgoi underground mine.

Shortly after my return to Turquoise Hill, the COVID-19 outbreak in Mongolia reached Oyu Tolgoi. This necessitated a significant slowdown of the underground operations to allow us to recalibrate how to continue to advance Oyu Tolgoi while protecting the health, safety and well-being of our employees and the neighbouring community in the face of the incremental challenges presented by the pandemic. I am extremely proud of how the Oyu Tolgoi team adapted to the many COVID-19 related restrictions and kept the underground development moving forward.

Safety performance and COVID-19 response

The health and safety of our people and neighbouring communities remains our first priority.

Oyu Tolgoi's safety performance has steadily improved since 2013, and Turquoise Hill is proud to rank among the safest operators in our sector. This trend continued in 2021, with an All Injury Frequency Rate (AIFR) of 0.14 per 200,000 hours worked at the Oyu Tolgoi mine site, the best full-year AIFR the site has achieved.

Since the initial outbreak of the COVID-19 pandemic in 2020, Turquoise Hill has worked closely with the Mongolian authorities to protect the health and safety of all its employees and the wider community, and maintained strict safety controls and public health protocols at our operations. The precautionary measures instituted by Oyu Tolgoi included a rigorous vaccination program, extensive rapid testing, social distancing practices and mandatory wearing of masks. We continue to adapt to the ever-changing requirements that are needed to manage this pandemic.

Production review

The lockdowns imposed by the Mongolian government in response to the 2021 COVID-19 outbreak limited our ability to maintain normal roster levels at site, and resulted in major reductions in our workforce at site from March onward. During the second quarter our personnel numbers were at times less than 25% of planned requirements, and in the third quarter averaged only 50% of planned requirements.

Despite the significant impact of these workforce shortages in 2021, our crews ended the year within our revised guidance range for both copper and gold production, with production of approximately 163,000 tonnes of copper (vs. guidance of 150,000-180,000 tonnes) and approximately 468,000 ounces of gold (vs. guidance of 400,000-480,000 ounces).

Underground Development

Underground development was also significantly impacted by the COVID-19 constraints on-site and in Mongolia, including restrictions on movement of both domestic and international expertise.

In spite of these constraints, by July 2021 our underground development team had resolved all the technical criteria necessary for the start of the undercut - the commencement of blasting to start underground mine production, and a critical step to unlocking the value potential of the underground mine. Following the resolution of all outstanding non-technical issues with the Government of Mongolia, blasting of the undercut began in January 2022 which brought the underground mine officially into production.

Key approvals clear the path to the future

During 2021 we faced a number of challenges including rebuilding our relationship with the Government of Mongolia, resolving the outstanding issues to allow us to initiate the underground production, securing a long-term power agreement for Oyu Tolgoi, and negotiating a funding arrangement with Rio Tinto to fully fund the underground development. In December 2021, the Parliament of Mongolia approved a resolution ("Resolution 103") that allowed the Government of Mongolia, Turquoise Hill and Rio Tinto to finalise new agreements and approvals in January 2022, which was followed by the Oyu Tolgoi LLC Board of Directors unanimously approving the commencement of the undercut, opening the next chapter in the history of Oyu Tolgoi.

In addition, Turquoise Hill and Rio Tinto agreed to a comprehensive and binding, amended funding arrangement that provides a pathway forward to address Turquoise Hill's estimated funding requirements, while Oyu Tolgoi LLC signed an Electricity Supply Agreement to provide Oyu Tolgoi with a long-term source of power.

Benefits to Mongolia

Since 2010, Oyu Tolgoi has invested over US\$13 billion in Mongolia, the largest foreign investment in the country to date. 96% of our employees are Mongolian nationals, and we have committed over 79% of Oyu Tolgoi underground direct project contract and procurement packages to Mongolian companies. Contributions to the Gobi Oyu Development Support Fund have sponsored 304 sustainable development projects and programs, and among other benefits to the local communities, have resulted in the creation of over 480 permanent jobs and scholarships for 324 students.

We also remain committed to responsible mining. Our dedication to running a sustainable operation covers a wide range of criteria, but a good example is water - a pressing issue in the water-stressed Gobi region. Oyu Tolgoi was designed as one of the most water-efficient mines in the world, using less than one-third the average of water per tonne of ore processed for similar mines.

Building a once-in-a-generation mine

It has been an honour to work among such a skilled and committed team, whose achievements in an unusually challenging year have been nothing short of remarkable.

It is also gratifying to leave the Company knowing that we have completed what was set out to be done, with a successful conclusion to negotiations with the Government of Mongolia, the commencement of undercut blasting and initial underground production, and agreement on a clear funding plan for the underground development.

These accomplishments set the stage for completing the construction of a once-in-a-generation mine that will create long-term value for shareholders and the people of Mongolia.

In closing, thanks to the Board, my fellow employees, our partners, and shareholders for your support over the past year. I join all our stakeholders in looking forward to a very exciting future at Oyu Tolgoi.

Steve Thibeault

Civil works supporting underground booster fan installation.



Company Profile

Oyu Tolgoi Open Pit Mine - a world-class copper and gold mine in operation since 2012. In 2021, 106 Mt of material was moved by the open pit operation's team.



Turquoise Hill is an international mining company focused on the operation and continued development of the Oyu Tolgoi copper-gold mine in Mongolia, which is the Company's principal and only material mineral resource property.

The Company's ownership of the Oyu Tolgoi mine is held through a 66% interest in Oyu Tolgoi LLC; the remaining 34% interest is held by Erdenes Oyu Tolgoi LLC (Erdenes), a Mongolian state-owned entity. Oyu Tolgoi is one of the world's largest new copper-gold mines and is located in the South Gobi region of Mongolia, approximately 550 kilometres south of the capital, Ulaanbaatar, and 80 kilometres north of the Mongolia-China border.

Consisting of four known mineralized deposits, the first of those (the Oyut deposit) was put into production as an open-pit operation in 2013.

The upper portion of a second deposit, Hugo North is currently under development as Lift 1. Potential future developments include Hugo North Lift 2 as well as two other identified mineral resources, Hugo South and Heruga.

When the Hugo North (Lift One) underground reaches peak production, Oyu Tolgoi is expected to be one of the world's largest copper mines.

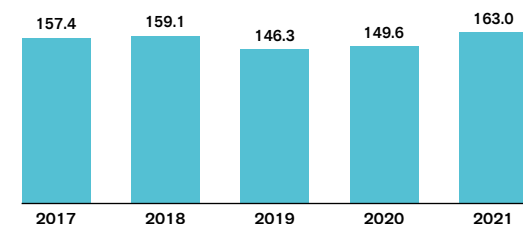
Operational Performance

In 2021, Oyu Tolgoi continued to progress and deliver important milestones for the underground mine development and make a significant contribution to the Mongolian economy, passing US\$13.4 billion of in-country spend. As of December 31, 2021, over 96% of Oyu Tolgoi's workforce of 14,400 were Mongolian.

Copper production for 2021 of 163 thousand tonnes was within the Company's revised guidance of 150 – 180 thousand tonnes, while gold production of 468 thousand ounces was at higher end of the Company's revised guidance.

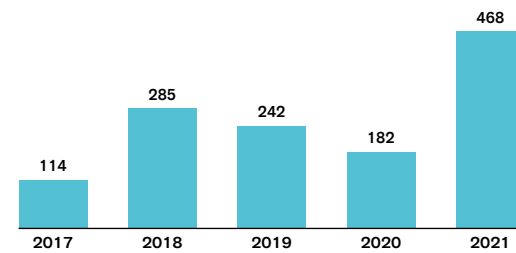
Production of Copper in Concentrates

('000 tonnes)



Production of Gold in Concentrates

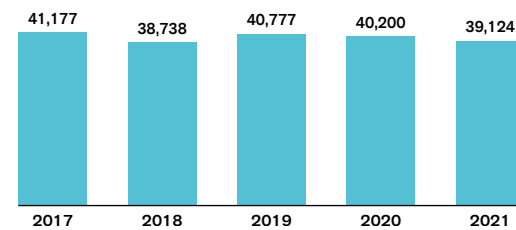
('000 ounces)



Ore treated in 2021 was slightly lower than 2020 due to the processing of harder ore. Over the last four years, Oyu Tolgoi has consistently exceeded the concentrator's name-plate capacity of approximately 100,000 tonnes of ore processed per day.

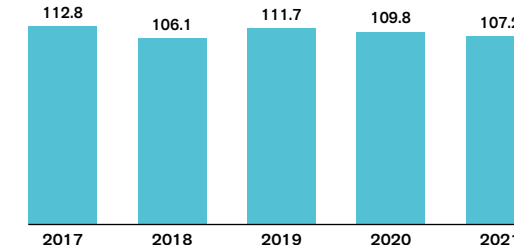
Ore Treated

('000 tonnes)



Average Daily Concentrator Rate

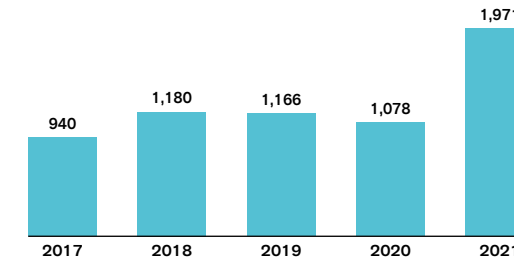
('000 tonnes per day)



Revenue of \$1,971 million in 2021 increased 82.8% over 2020 due to higher production with the scheduled move into higher-grade areas of Phase 4B and higher average prices for copper and gold.

Revenue

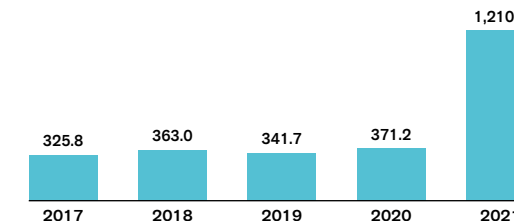
(\$ in millions)



Cash generated from operating activities before interest and tax of \$1,210.8 million in 2021 increased 226.2% over 2020, which was mainly driven by higher revenue.

Operating Cash Flow

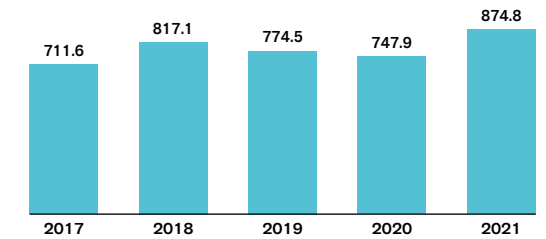
(\$ in millions)



Total operating cash costs¹ of \$874.8 million in 2021 increased 17.0% over 2020, driven by higher royalty costs from increased sales revenue, additional COVID-19 related costs and higher consumption and power costs, partially offset by lower power study costs.

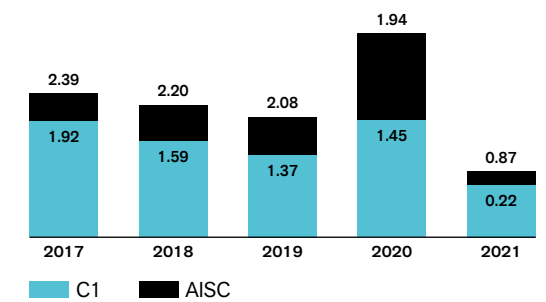
Total Operating Cash Costs¹

(\$ in millions)



C1 cash costs of \$0.22 per pound of copper produced² in 2021 decreased 84.8% over 2020, primarily driven by the impact of higher gold credits due to the higher gold revenue in 2021. All-in sustaining costs of \$0.87 per pound of copper produced² in 2021 decreased 55.2% over 2020, impacted by the same factors as C1 cash costs¹ offset by a 40.7% increase in open pit sustaining capital expenditure.

C1 and All-In Sustaining Costs per pound of copper produced²



Note:

(1) Total operating cash costs is a non-GAAP financial measure which is not a standardised financial measure and is not intended to replace measures prepared in accordance with IFRS. Please refer to the Non-GAAP and Other Financial Measures section of the Company's MD&A for the year ended December 31, 2021.

(2) C1 cash costs per pound of copper produced and all-in sustaining costs per pound of copper produced are non-GAAP ratios which are not standardised financial measures and are not intended to replace measures prepared in accordance with IFRS. Please refer to the Non-GAAP and Other Financial Measures section of the Company's MD&A for the year ended December 31, 2021.

2021 in Review

A Breakthrough Year for Turquoise Hill

Turquoise Hill made significant progress in moving forward the underground production in 2021. Highlights included a renewed partnership with the Government of Mongolia and an agreement with Rio Tinto on a funding plan to complete the Oyu Tolgoi underground mine. This funding plan was later revised to align with the terms of the new agreements with the Government of Mongolia and with the provisions of Resolution 103 passed by the Parliament of Mongolia, in December 2021.

Subsequently, the Oyu Tolgoi LLC ("OT LLC") board of directors, on January 24, 2022, approved the blasting of the undercut to start underground production. The OT underground mine is on track to achieve sustainable production in the first half of 2023.

Revised Guidance Met

Another notable achievement in 2021 was that, despite the many challenges caused by COVID-19, the OT team succeeded in meeting its revised production guidance. This was no small accomplishment since at times during the year manning levels at site were as much as 75% below plan. The OT team creatively redeployed the workforce to sustain production while keeping the underground development moving forward.

Safety

Safety is the Company's number one priority and OT's All Injury Frequency Rate (AIFR) was 0.14 per 200,000 hours worked at the Oyu Tolgoi mine site, the best full-year AIFR the site has achieved. Consistent with the Company's

commitment to health and safety, OT implemented strict COVID-19 protocols and launched a comprehensive vaccination campaign. At year-end 2021, all OT employees had been double vaccinated and a third round of vaccinations was underway.

Underground Development

The Company had met all the technical criteria necessary to initiate caving operations by July 2021. Critical underground infrastructure to support sustainable production by H1 2023 remained on schedule with the breakthrough of the service decline and the Material Handling System 1 ("MHS1") construction completed and commissioned. Construction of the first on-footprint truck chute is well advanced and is scheduled to be commissioned during February 2022.

Following progress in negotiations with the Government of Mongolia, all undercut readiness criteria were considered to be achieved on January 24, 2022. Subsequently, on January 25, 2022, a ceremony was held at the mine site to coincide with the commencement of undercutting.

A Clear Path to a World Class Mine

At its peak, the OT mine is forecast to be the fourth largest copper mine in the world. It is expected to be a large-scale producer and one of the lowest cost mines in its sector. The mine will generate significant benefits for the Company's shareholders and economic and employment benefits for Mongolia for years to come.

Bags of Oyu Tolgoi copper-gold concentrate ready to be loaded onto trucks for transportation to customers



39 Mt
Ore milled

163 Kt
Copper produced

468 Koz
Gold produced

Sustainability

Oyu Tolgoi personnel walking through the concentrator complex with SAG mills in the background.



Sustainability Commitments

Turquoise Hill is committed to unlocking the Oyu Tolgoi project as being developed by Oyu Tolgoi LLC's full potential and advancing value for our investors, the Government of Mongolia and the people of Mongolia.

To achieve this, we are committed to:

- Conducting our business in a safe, sustainable and environmentally responsible manner;
- Minimising and mitigating the mine's operational impact on the environment;
- Respecting and supporting the dignity, well-being and rights of our employees, their families and the communities in which we operate; and
- Building enduring relationships with these communities while respecting and acknowledging the unique and important interest that Indigenous peoples have in the land, waters and environment, as well as their history, cultures and traditions.

Turquoise Hill has delegated the day-to-day management responsibility over how Environmental, Social and Governance (ESG) issues are operationally managed at Oyu Tolgoi to our world-class project manager, Rio Tinto, however, Turquoise Hill maintains oversight over all relevant governance issues.

Oyu Tolgoi is also committed to minimising and mitigating the mine's operational impact on the environment while continuing to uphold the highest environmental standards and drawing on the advice of environmental experts as well as local communities.

Since 2010, Oyu Tolgoi has developed a Health, Safety and Environmental management system in compliance with ISO 14001 Environmental and OHSAS 18001 Occupational Health and Safety management standards. Oyu Tolgoi was independently audited and received certification on these standards in 2013 and again in 2018.

In 2020, Oyu Tolgoi was awarded the Copper Mark – the first and only program for responsible production in the copper industry. As part of this program, Oyu Tolgoi has also made a series of commitments about the way it operates, how it contributes to Mongolia's society and economy, and how it manages environmental impacts. These commitments are underpinned by a number of policies, procedures and an approach which recognizes that Oyu Tolgoi has a role to play in supporting the long-term development of Mongolia and sustainable supply chains. Copper Mark participant sites are re-assessed every three years against updated criteria. Oyu Tolgoi plans re-assessment by Q2 2022.

Oyu Tolgoi is currently pursuing the International Council of Mining and Metals (ICMM) validation by meeting the Mining Principles of ICMM. It plans to complete the independent assurance and validation process by Q3 2022. With their strong focus on sustainability performance, including environment, health and safety, due diligence, governance and social performance, Oyu Tolgoi will continue to pursue the highest standards of the Copper Mark and ICMM validation.



Originally developed by the International Copper Association (ICA) with inputs from a broad range of stakeholders, including customers, NGOs and producers, the Copper Mark is now an independent entity with a multi-stakeholder council. In order to qualify, Oyu Tolgoi successfully met over 30 criteria for responsible ESG operating practices.

Herders in the Gobi Desert, Umnugobi



Policies

Turquoise Hill is dedicated to performing our duties in a safe, sustainable and environmentally responsible manner.

Turquoise Hill's Health, Safety, Environment and Communities ("HSEC") Policy affirms its commitment to protecting the environment and to safeguarding the health, safety and welfare of people affected by it or its subsidiaries, including employees, contractors and communities in which we operate.

Khongoryn Els sand dunes in the extreme south of the Gobi Desert



Environmental and Social Impact Assessment Management

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

The study 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 minimise 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, which provides the project baseline, was published in 2013 showing a 91% compliance rate and 26 non-conformances. Subsequent audits have shown improved compliance rates with only two non-material non-conformances of the lowest category outstanding in the latest 2021 audit. In 2021 a water audit was completed per agreement requirements. The last bi-annual Mongolian environmental law and regulation audit was completed in 2020 with all environmental activities of Oyu Tolgoi found to be in compliance with relevant national legislation. Oyu Tolgoi continues to engage with various stakeholders regarding areas that are of heightened community concern.



Environmental monitoring in Khanbogd soum

At a Glance

Turquoise Hill



53%

of employees at the Company's corporate office identify as female, and 47% of the management and executive teams identify as female.

From 2014 to 2020,

149 exploration wells

had been sealed, rehabilitated and handed over to the local government and the Galba Oosh Dolood Gobi Basin Administration.

Turquoise Hill, through its wholly owned subsidiaries, Asia Gold Mongolia LLC, Heruga Exploration LLC and SGLS LLC, **operates an exploration program in Mongolia** on licenses that are not part of Oyu Tolgoi.

Turquoise Hill delivered hay to 32 Khanbogd herder families.

OyuTolgoi



Oyu Tolgoi was designed as

one of the most water-efficient mines in the world.

Over 96%

of Oyu Tolgoi's workforce is Mongolian, of which **22%** are from the neighbouring communities in Umnugobi province.

Oyu Tolgoi's best-in-class All Injury Frequency Rate (AIFR) is **0.14** per 200,000 hours worked.

Oyu Tolgoi has reached

US\$13.4 billion in total in-country spend

since 2010, marking the largest foreign investment in the country to date.

Oyu Tolgoi has committed over

79% of underground direct project

contract and procurement packages to Mongolian companies.

Oyu Tolgoi employee at the tailings thickener



Diversity and Inclusion

At Turquoise Hill, we recognize the benefits of promoting diversity, both within the Company and at the level of the Board of Directors.


We believe that we are more than just a collection of individuals, and we celebrate bringing together a diverse range of perspectives, experiences and expertise.

In an increasingly complex global marketplace, the ability to draw on a wide range of viewpoints, backgrounds, skills and experience is critical to our success. At the Company's corporate office, 53% of employees identify as female, and 47% of the management and executive teams identify as female. Our Ulaanbaatar based Exploration Team is comprised entirely of Mongolian personnel.

By bringing together people from diverse backgrounds and giving each person the opportunity to contribute their skills, experiences and perspectives, we believe that we are better able to develop solutions to challenges and deliver sustainable value to our stakeholders.

We recognize the importance of diversity at all levels of our organization and decision-making process. We believe having diverse backgrounds, skills, and experiences nurtures creative thinking. We are committed to building a workplace where our employees feel valued, where their opinions matter, and where they can advance their careers in a safe and respectful environment.

Construction Supervisor at conveyor 2005



Materials Handling System 1 includes conveyor 2005 which is **1.4 kilometres long** and transports ore from the footprint to Shaft 2 for hoisting to the surface

Health

Turquoise Hill complies with Rio Tinto-wide occupational health standards and Mongolian occupational health regulations to improve the identification and management of health risks. Rio Tinto performance standards are integrated with HSEC management systems to ensure consistent application across the Project.

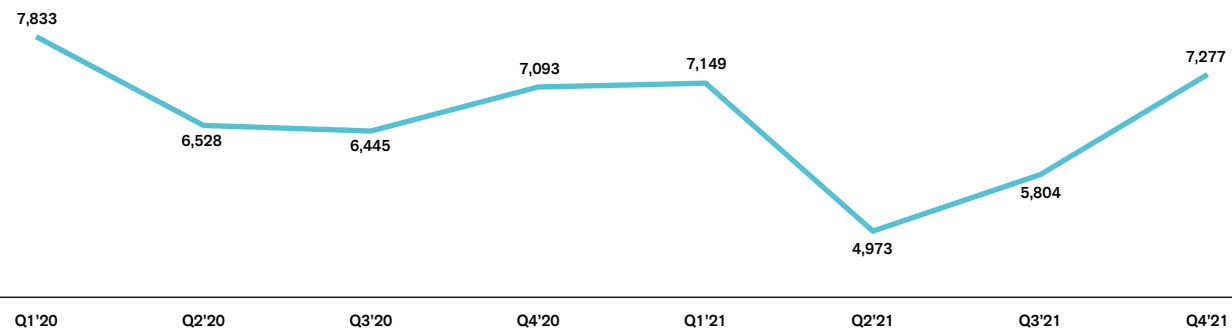
COVID-19 Response

Turquoise Hill continues to remain vigilant in the fight against COVID-19 and to monitor the evolving situation. We continue to take the necessary steps to ensure that our global employees are protected, while adhering with local governmental guidelines.

Due to the unprecedented and ongoing nature of the pandemic and the fact that response to the pandemic is evolving in real time, estimates of the overall economic impact remain inherently uncertain at this time.

Effects of COVID-19 were felt significantly from late Q1 2021 through to early Q4 2021. The reduced site workforce in 2021 led to reduced progress in the stripping of the next open pit work area, Phase 5, as well as reduced progress on underground development construction work fronts, particularly those reliant on a higher proportion of out-of-country workers, such as shaft sinking activities.

Quarterly Hours Worked
(Hours Worked ('000))



COVID-19 related restrictions continued to impact availability on personnel on site during 2021.

Oyu Tolgoi LLC continues to comply with the Government of Mongolia directives and is working closely with the Mongolian authorities to prioritize the health and safety of its employees and the community in which it operates. Since the onset of the pandemic, Oyu Tolgoi LLC put in place strict controls to minimise the COVID-19 risks at site and to manage cases as they arise. Onsite COVID-19 controls include social distancing practices, mandatory wearing of masks, hand washing and temperature measurements in high traffic areas. Four rapid testing screening hubs have been implemented to monitor the exposure of the workforce to COVID-19.

Turquoise Hill and Oyu Tolgoi are focused on the health, safety and well-being of our employees and contractors amid the restrictions on domestic and international travel and will continue to rotate employees when safe to do so.



Vaccination campaign at the Oyu Tolgoi mine site

Occupational Health

Turquoise Hill's approach to managing occupational illness is focused on taking proactive measures and implementing strong occupational surveillance programs coupled with controls to minimise occurrences of illnesses that may develop as a result of conditions and exposures in the workplace, and is demonstrated through:

- Understanding and assessing employees' workplace exposure hazards;
- Identifying individuals and work tasks with the highest occupational illness risks;
- Implementing occupational hygiene surveillance programs; and
- Using surveillance data as the foundation for implementing best prevention and mitigation strategies.

These control procedures may include the substitution of harmful or toxic materials with less dangerous ones, changing of work processes to minimise work exposure, installation of exhaust ventilation systems, good housekeeping and the provision of proper personal protective equipment.

Oyu Tolgoi's SOS Medical Centre, Oyu Tolgoi



Programs

In collaboration with its health service provider, International SOS, HR and Training Department, Oyu Tolgoi LLC conducts health and hygiene awareness training and programs and runs campaigns addressing health related matters, including programs directed at mental health, wellbeing, and infectious disease, the Employee Assistance Program and seasonal flu vaccination and COVID-19 booster campaigns. These programs are developed reflecting public health risks in Mongolia and the results of studies of the Oyu Tolgoi population. These initiatives greatly increase knowledge of health issues at Oyu Tolgoi.

Individuals with underlying health conditions are identified and provided with support. Health topics share the spotlight in the monthly HSEC themes, and healthy meal choices are provided on site. Other activities, such as the accessible gym and cinema, have been impacted by the ongoing global pandemic.

Oyu Tolgoi on-the-job training for underground employees and contractors



Medical Preparedness and Response

Due to the remoteness of the Oyu Tolgoi site, it is important to ensure our employees and contractors have access to timely emergency medical services.

In addition to Oyu Tolgoi LLC's dedicated Emergency Response Team, it also maintains an onsite medical facility managed by International SOS that provides a range of services, including:

- 24/7 medical clinic access and services;
- Internationally-trained expatriate and local doctors;
- A fully-equipped emergency room with resuscitation and monitoring areas;
- Adherence to Advanced Cardiac Life Support standards;
- In-house diagnostics;
- Medical evacuation services; and
- COVID-19 treatment services.

Medical care provided to employees at the Oyu Tolgoi mine site



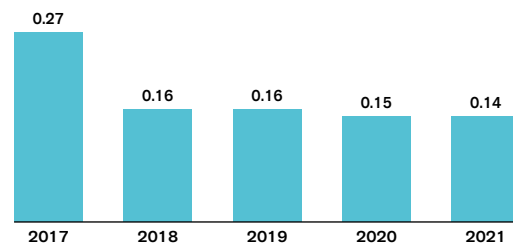
Sporting Complex, Oyu Tolgoi



Safety

At Oyu Tolgoi, the safety and health of those on site are our first priority. With risk identification and control at its core, safety systems extend from inductions and training to major facility engineering audits. Some types of mining environments increase the complexity of managing safety, which reinforces the need for a comprehensive safety management system.

5-year AIFR* Results at Oyu Tolgoi
(Per 200,000 hour worked)



*The All Injury Frequency Rate (AIFR) is an indicator of workplace health and safety and provides insight into an organization's efforts to protect its workforce from work-related hazards.

The integrated safety system at Oyu Tolgoi LLC leverages comprehensive safety standards covering our specific workplaces and is supported by assurance program. There is a strong focus on risk assessment and controls to prevent accidents. Systems are designed to prevent low-probability but high-consequence events that can cause fatalities as well as reducing and preventing injuries.

Oyu Tolgoi's safety performance is underpinned by a rigorous approach to safety consisting of the following areas:

Leadership – Oyu Tolgoi LLC's leadership team creates and promotes a safe work environment by being present in the field and highly engaged with their teams. A number of tools are utilised to help leaders integrate safety into their activities and to become champions of safety improvements. Employees are encouraged to become safety leaders within their own teams and to take personal responsibility for their own safety and that of their colleagues.

Culture – Oyu Tolgoi LLC aligns organizational and employee values to create a positive culture that drives consistent behaviour. All individuals at Oyu Tolgoi should feel comfortable to stop work if they feel it is unsafe to continue. Every meeting at Oyu Tolgoi starts with a "safety share" – a chance for employees to describe any safety-related issue and to listen to constructive advice from colleagues. Risk-based task planning has been normalised and is used in the field assessments by team members and leaders to identify hazards that need to be addressed.

Systems & processes – Oyu Tolgoi LLC seeks to adopt best practice safety management systems to deliver world-class safety performance. Oyu Tolgoi's safety standards are aligned with broader corporate and enterprise-wide safety standards, providing a framework to measure, monitor and continuously drive improvement in safety performance. Oyu Tolgoi LLC has successfully embedded the Kaizen process into business improvement activities to enable teams to identify and eliminate elements of work that do not add value or are obstacles to efficiency or safety. Examples of Kaizen process initiatives include elimination of root causes that may trigger failures of critical controls and identification of opportunities to improve the concentrate bagging process and border procedures.

Risk management – Given the scale and complexity of Oyu Tolgoi, the workforce faces a range of risks that must be managed carefully. Proactive measures are taken to control risks at a range of levels in the organisation from a strategic to daily workplace level by identifying hazards, assessing the risks they pose and using controls to prevent damage and harm. Oyu Tolgoi LLC's systems use risk assessments and controls for all tasks and utilise a variety of different tools to help manage risks in their workplace. An example of risk management innovation is the integration of the geographic information mapping system with high-risk work activities to provide the Emergency Response Team live location and work status. Oyu Tolgoi LLC has a strong focus on critical risk management, controlling the risks that are the most serious, i.e., those that could lead to fatality or permanent injury.

Over 122,800 critical risk management verifications were completed during 2021 as part of Oyu Tolgoi's proactive fatality prevention program.

Training and awareness – Oyu Tolgoi LLC provides each employee with relevant classroom courses and on-the-job training to ensure that they have the skillsets, tools and knowledge needed to succeed safely. In 2013, Oyu Tolgoi LLC opened a risk demonstration centre, the first of its kind in Mongolia, which uses interactive demonstrations and activities to show the potential consequences of the risks faced. Safety campaigns run continuously throughout the year to highlight key operational risks including working at heights, hand safety, electrical safety and others.

Employee and contractor engagement – Oyu Tolgoi LLC actively encourages employee and contractor participation in all aspects of safety management. Contractors are required to adhere to the same safety standards as Oyu Tolgoi LLC employees with a team dedicated to managing contractor safety performance. Regular contractor engagement conferences provide an additional forum to share safety approaches with contractors.



Drill hole preparation, underground undercut apex level

Underground Materials Handling System 1,
Primary Crusher 1 bottom shell installation



Environment

At the heart of the mine's operations and future development strategies is respect for the environment.

All partners including Oyu Tolgoi LLC, Rio Tinto and Turquoise Hill are committed to preventing and mitigating environmental impacts from the mine's operations.

The Gobi Desert has unique natural formations that need to be protected. Our overall goal is to minimise impacts on the environment and, where possible, implement measures that benefit the environment.

The Aegypius monachus, listed as Near Threatened by the IUCN Red List, is the largest bird in Mongolian Gobi



To achieve this goal, Oyu Tolgoi implements a variety of activities and monitoring programs in the areas of water, air, biodiversity, waste management and land management and complies with the following laws and requirements, including:

- Environmental requirements and standards of project lenders - International Finance Corporation (IFC), European Bank for Reconstruction and Development (EBRD);
- Applicable environmental laws, regulations and standards of Mongolia;
- Internationally recognized standards (ISO14001);
- Rio Tinto's environmental policies, strategies and standards; and
- Regular monitoring of environmental performance and adherence to internal environmental monitoring programs.

The annual Camel Festival in Khanbogd soum, sponsored by Oyu Tolgoi, contributes to the preservation of culture for future generations.



Water

In the South Gobi Desert, water is a precious natural resource. To ensure ongoing availability of surface water, Oyu Tolgoi is committed to using water carefully, balancing the mine's operational needs while ensuring water is fully available for local residents and future generations.

Oyu Tolgoi was designed as one of the most water-efficient mines in the world and operates to a demonstrated high standard of water conservation. The water used by Oyu Tolgoi comes from a deep saline aquifer and is not suitable for consumption by humans and livestock. Hydrogeological modelling indicates that even after 40 years of extraction, the deep aquifer system will remain confined and is unlikely to have an impact on the streambed aquifers. Drawdown will be continuously monitored, and the aquifer model will be updated and refined as more data becomes available. As necessary, abstraction from the boreholes will be adjusted to optimize drawdown characteristics and protect the shallow groundwater resources.

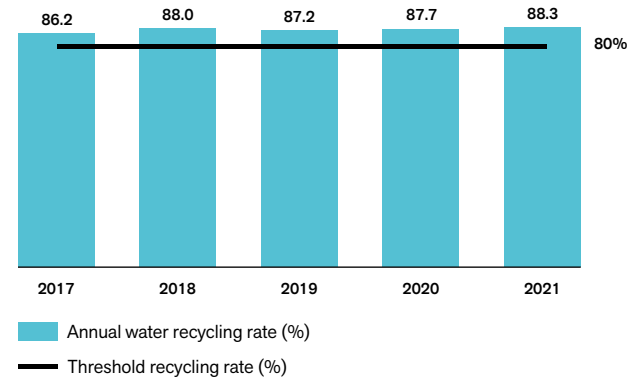
Consumption rate of 0.38 cubic metres of water per tonne of ore processed is below the global average and demonstrates Oyu Tolgoi's commitment to water efficiency and sustainability.

An independent water audit is undertaken every five years, with the most recent audit completed in 2021. A diverse process including inspections from the Government of Mongolia as well as local community field monitoring ensures Oyu Tolgoi's continued compliance with water management and conservation policies, standards and legislation.

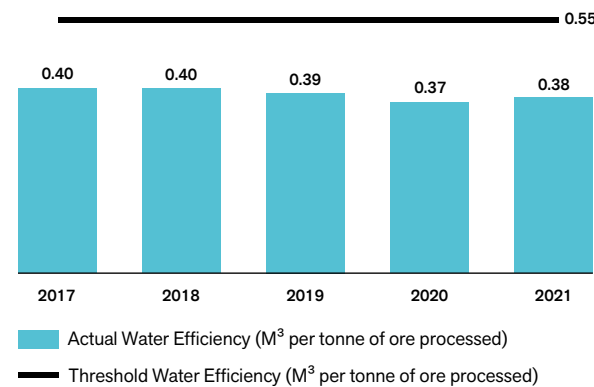
This audit found that Oyu Tolgoi LLC continues to comply with the requirements under Mongolian law on water and other relevant laws and procedures during the period covering 2016-2020, inclusively. Further, it concluded that Oyu Tolgoi is fulfilling its commitments under the Investment Agreement.

Since 2014, Oyu Tolgoi has consistently achieved annual water recycling rates above the mine's targeted recycling rate of 80%. In 2021, water used by Oyu Tolgoi has been continuously recycled at an average rate of 88.3%.

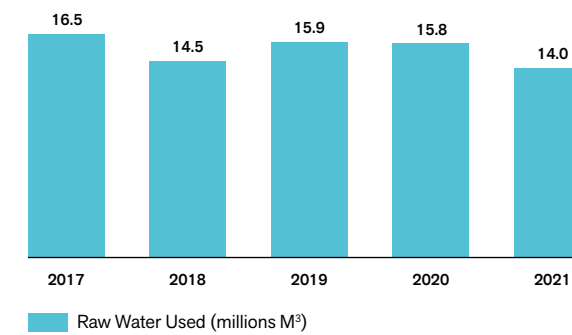
Annual Water Recycling Rate



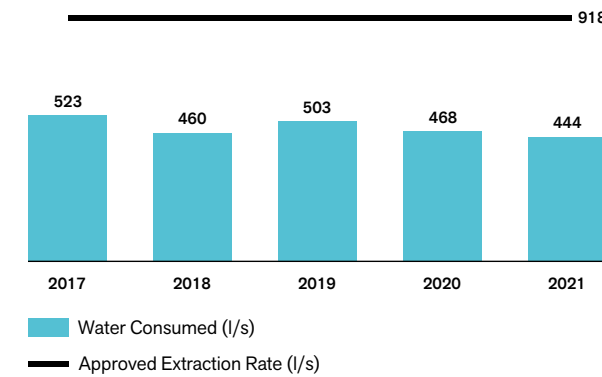
Annual Raw Water Use Efficiency



Total Annual Raw Water Use



Annual Raw Consumption Rate



From 2014 to 2020, 149 exploration wells have been sealed, rehabilitated and handed over to the local government and the Galba Oosh Dolood Gobi Basin Administration. Unfortunately, in 2021, monitoring bores drilling, and exploration boreholes could not be sealed due to the unprecedented circumstances of COVID-19.

Oyu Tolgoi LLC undertook various activities in 2021, including:

- Two clean-up initiatives for local water sources;
- Building industry coordination and information sharing on water management through the development of a Voluntary Code of Practice (VCP); and
- Conducted water monitoring reviews.

Aerial view of the water efficient tailings thickeners at Oyu Tolgoi



A Government water monitoring group
at Oyu Tolgoi's tailings thickener



Domestic Power

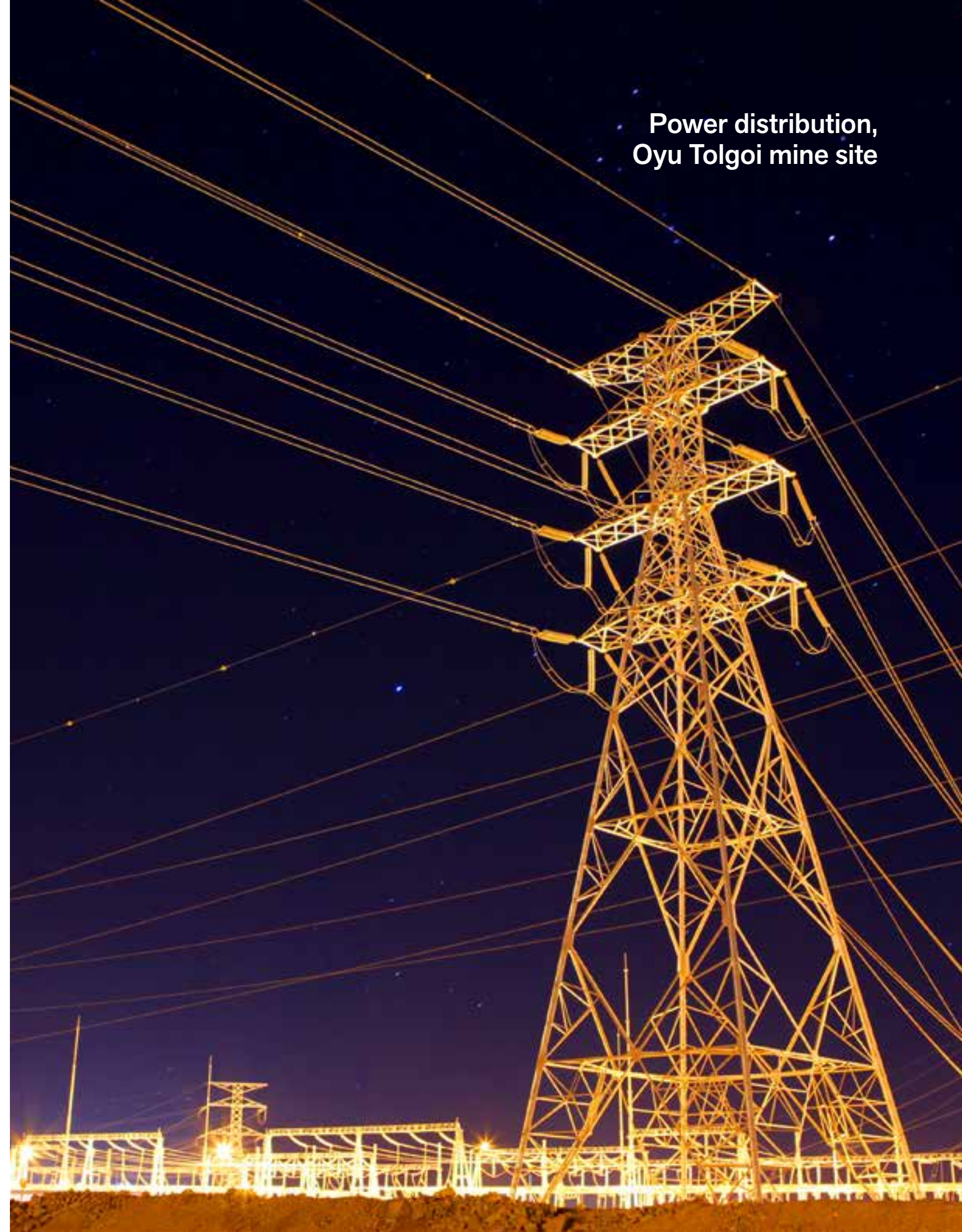
The Oyu Tolgoi LLC Board of Directors has approved the signing of an Electricity Supply Agreement to provide Oyu Tolgoi with a long-term source of power from the Mongolian grid on terms fully agreed with the Government of Mongolia. This agreement provides the framework for Oyu Tolgoi LLC to obtain access to a reliable and secure domestic power source and, therefore, assists in providing Oyu Tolgoi LLC with a pathway to satisfy its power sourcing obligations under the Investment Agreement.

While the Mongolian grid undergoes an upgrade to be in a position to provide stable and reliable power to the Oyu Tolgoi mine, OT LLC will continue to import its power from Inner Mongolia, China. An agreement in-principle has been reached between NPTG and IMPIC for a three-year fixed term extension to 2026, potentially followed by an extension up to 2030, if required. The outstanding commercial terms are in the process of being finalised.

Water monitoring program at a herder's well.



Power distribution, Oyu Tolgoi mine site



Waste Management

The mining process produces mineralised waste which is pumped into storage areas for long term storage. Every effort is made to minimise the footprint of these facilities to reduce non-productive land area as much as possible.

One way to minimise the footprint is to maximize density of the tailings through thickening, or reduction in water content, and by designing storage facilities to maximise water drainage and collection for re-use. Minimising the footprint not only positively reduces environmental impact on land area and water use, but also minimises costs for the operations.

Tailing Storage Facility

Oyu Tolgoi LLC stores mineralised waste in tailings storage facilities, which are engineered structures designed to minimise the impact on the local environment. Tailings Storage Facility 1 has been in use since 2013 and is currently 56.2 metres high. In 2021, 38 million dry metric tonnes were pumped to the tailings' storage facility, meeting the

anticipated level rise of 6.5 metres. The Oyu Tolgoi tailings facility uses the downstream method of wall construction and the latest independent review of the facility was carried out in November 2020.

Oyu Tolgoi LLC's tailings risk is managed in a structured way with three levels of assurance used to monitor and reduce risk.

1. The first level of assurance is based on the work of site teams and processes.

2. The second level of assurance is provided by the project manager, Rio Tinto, with in-house specialists providing technical reviews and monitoring the application of Rio Tinto's Global Standard.

3. The third level of assurance is provided by regular external reviews of the facility. The facility has been risk reviewed against the Australian National Committee on Large Dams framework and actions have been taken to reduce risk.



Oyu Tolgoi employees volunteer at local cultural heritage sites

Non-Mineralized Waste Management

As a result of the development of the underground portion of the mine, the amount of waste generated at Oyu Tolgoi has significantly increased. Oyu Tolgoi LLC has focused on continuous improvement of non-mineral waste management through the development of the long term non-mineral waste management strategy and the reduction of the waste that goes to the Waste Management Centre by improving the ability to reuse and recycle waste materials and segregating waste in the work areas.

Oyu Tolgoi LLC has successfully established relationships with national recycling contractors and a Memorandum of Understanding was signed with the local Red Cross to allow Oyu Tolgoi LLC to send the re-usable items, such as wood, to local communities.

In 2018, Oyu Tolgoi LLC also started a program to prepare organic compost using food waste and since 2020 operations of the composting facility have been managed by the Oyu Tolgoi Infrastructure team. In 2021 Oyu Tolgoi LLC purchased a composter machine which has the capacity to compost 5 tonnes of food waste daily.

Over the last two years, OT implemented a number of improvement works for hazardous substance and dangerous goods management and for reducing hazardous waste generation from hazardous materials. Notably, Oyu Tolgoi:

- Clarified the role and responsibility of teams involved in hazardous substance and dangerous goods management processes;
- Added the planning stage on the process flow;
- Started considering the hazardous substance and dangerous goods management from the procurement stage, and the procurement process only after the ChemAlert approval;
- Improved the hazardous substance and dangerous goods registration and control;
- Included the "Waste Management Plan" submission requirement on Oyu Tolgoi Supplier Database registration and proposed management is considered in tender evaluation process; and
- Updated the relevant management plan and procedures.

- **19.7% of total waste was diverted from the Waste Management Centre through reuse and recycling.**
- **The amount of waste landfilled per person per day has decreased from 6.7 kg to 2.3 kg as of 2021.**
- **1531 tonnes of food waste, wood scraps, cardboard were used for composting and 7.7 tonnes of prepared compost was used for the first time in rehabilitation.**
- **Over 2025 tonnes of wood was reused in cooperation with the local Red Cross Primary Committee.**

OT non-mineral waste data	2020		2021	
	Amount/tn	Percentage, %	Amount/tn	Percentage, %
Generated waste				
Hazardous and controlled waste	1,628	3.90%	1,396	3.10%
Non-hazardous waste	40,658	96.10%	43,218	96.90%
Total	42,286	100%	44,614	100%
Re-used and recycled waste				
Hazardous and controlled waste	1,469	3.50%	1,222	2.70%
Non-hazardous waste	9,083	21.50%	7,559	16.90%
Total	10,552	25.00%	8,781	19.70%
Landfilled waste				
Landfilled in WMC	6,564	15.50%	4,430	9.90%
Landfilled in Inert waste pit	24,703	58.40%	30,612	68.60%
Total	31,267	73.90%	35,041	78.50%
Stored hazardous waste	378	0.80%	395	0.90%

Biodiversity

Oyu Tolgoi is committed to minimising the mine's operational impact and contributing to biodiversity conservation to ensure that the region will benefit from the mine's presence.

Oyu Tolgoi LLC supports landscaping and greening of Khanbogd and has donated over 11,700 individual saplings to the local community and neighbouring soums and aimags.

Oyu Tolgoi LLC works with international non-government organisations ("NGOs"), including Global Biodiversity Conservation (GBC), Wildlife Conservation Society (WCS), consultants and university researchers to ensure a net positive impact on biodiversity (habitat, wildlife and pasture land) in the mine area. The annual biodiversity monitoring programs provide information to assess the effectiveness of the mitigation strategies that have been incorporated into the Oyu Tolgoi LLC operational management plans.

In 2020 the Core Biodiversity Monitoring Program ("CBMP") contract was renewed for an additional five years to 2024. Despite the COVID-19 pandemic, overall CBMP activities have progressed well in 2021 although travel restrictions have impacted the Khulan collaring program and priority plants survey on-site; however, all 2021 planned field works were completed successfully.

Oyu Tolgoi LLC has implemented several biodiversity offsetting projects that contribute to making a net positive impact on biodiversity and ecosystem services in the region.

Other offsetting projects include powerline insulation in order to reduce bird mortality, development of sustainable cashmere and modification of railroad fencing to promote khulan movement and extend their habitat. Additionally, Oyu Tolgoi LLC organizes scientific symposiums (i.e. Gobi Gracious 6) and alternate nature conservation activities (i.e. celebrating international nature conservation days such as International Migratory Bird Day, etc.) to raise awareness among the public and to share information.



The Mongolian wild ass (*Equus hemionus hemionus*), Khanbogd soum, Umnugobi

Khongor sand dune, Umnugobi



1

Anti-poaching offsetting project: Since 2015, Oyu Tolgoi LLC has been collaborating with local government agencies on this successful initiative. A Multi-Agency Team and a Mobile Anti-Poaching Unit were formed to improve and solve the difficulties that patrols face. The Anti-Poaching Unit consists of East, Central and West teams and patrol the Umnugobi and Dornogobi aimags. In addition, the rangers of the Small Gobi Strictly Protected Area A and B also carry out patrols in the protected areas close to Oyu Tolgoi.

2

Spatial Monitoring and Reporting Tool ("SMART"): An important component of the anti-poaching project, this software package is used to plan patrol efforts, monitor patrols and document the location of carcasses found by the patrols. The information collected is used to assess patrol efficacy. The effectiveness of the SMART system has led the Government of Mongolia to develop a working group to examine the expansion of SMART into other protected areas in Mongolia.

3

Poaching rate research: In order to further support the anti-poaching programs and the overall management of endangered species in the region, Oyu Tolgoi also conducts research on poaching in Southern Gobi using acoustic devices. Acoustics recording devices are placed near watering points with the highest poaching rate probability. The devices record gun shots to evaluate the poaching rate and determine locations being used by the poachers.

Greenhouse Gas Emissions

Oyu Tolgoi has implemented an Atmospheric Emissions Management Plan that outlines the applicable national, Rio Tinto and international standards and defines Oyu Tolgoi's key management atmospheric emissions controls. The plan also includes monitoring and reporting procedures. One of the key management controls is reporting on Oyu Tolgoi's greenhouse gas emission performance against the estimated emission targets. Oyu Tolgoi has a comprehensive greenhouse gas inventory and reporting process and continues to explore energy-saving opportunities through a registry focused on energy saving and greenhouse gas reduction initiatives.

Oyu Tolgoi LLC has been measuring monthly greenhouse gases ("GHG") emissions since 2012 and completes an annual GHG workbook. Greenhouse gas emission control is constantly monitored and performance for the year ended December 31, 2021 was 2.31 tonnes CO₂/unit product against an annual forecasted intensity of 2.69 tonnes CO₂/unit product. These emissions include Scope 1 (direct emissions from owned and controlled sources) and Scope 2 (indirect emissions from the generation of purchased energy).

Moreover, in October 2021, Rio Tinto announced that they will bring forward their target of reducing their Scope 1 and 2 emissions by 15% to 2025. Oyu Tolgoi LLC is collaborating with the Rio Tinto Copper Group Energy Development team to support the GHG reduction pathways.

Oyu Tolgoi's tree nursery



Since 2015, Oyu Tolgoi LLC has been implementing programs and activities to support the reduction of its GHG emissions and to save energy. Such activities include:

- Ending the use of diesel generators for remote infrastructure by providing permanent power supply at:
 - Training center, Khanbogd soum, Umnugobi province (2015);
 - Marshall yard, OT mine site (2017);
 - Power camp, OT mine site (2018);
 - Emulsion plant, OT mine site (2018); and
 - Khanbumbat permanent airport (2018).
- Installing solar energy powered walkway lighting for the Oyut Camp to the Bagging Plant and the Northgate, which resulted in thirty-four sections of walkway lightings being installed in 2019;
- Installing runtime management equipment on air conditioners in various facilities, which resulted in reducing over 7,000 units' runtime thereby decreasing 30% in energy use for these units;
- Installing LED lights in numerous buildings at site, thereby saving 689 mWh/year electricity and 729 tCO₂-e emissions; and
- Reducing testing period on 20 standby diesel generators each with a capacity of 2 MW from weekly to twice weekly, which saved 106t of diesel in this year and resulted in an annual abatement of 284t CO₂-e.

	2017a ²	2018a ²	2019a ²	2020a ²	2021a ³
Total emissions (tonnes CO ₂ -e)	1,572,355	1,514,205	1,596,287	1,604,224	1,738,426
Emissions intensity (tonnes CO ₂ -e per tonne of concentrate) ¹	2.18	2.06	2.38	2.32	2.31
Emissions intensity (kg CO ₂ -e per tonne of ore milled)	38.2	39.1	39.1	39.9	44.4

Note:

⁽¹⁾ The emissions intensity per tonne concentrate produced is impacted by variability of the grade of the ore mined, which is a function of the orebody.

⁽²⁾ The figures for 2014-2020, inclusively, exclude the underground development project emissions.

⁽³⁾ The figures for 2021 represent the sum of both operations and underground emissions as underground material begins to be processed as Oyu Tolgoi moves towards sustainable production. Over 1 million tons of underground material was processed in 2021.

Land Management

As part of Oyu Tolgoi's sustainable land management policy, the mine's closure and rehabilitation plans have been developed in accordance with Mongolian laws and standards. This keeps land degradation to a minimum.

Land Disturbance Management

In order to ensure minimal land disturbance, Oyu Tolgoi requires an environmental inspection and assessment before any land disturbance occurs. A permit for work is only approved after protective actions identified in the assessment are completed. This process eliminates or minimizes potential impact on local water, biodiversity, the community, cultural heritage and many other areas. It also ensures compliance with environmental and other relevant legislation. This procedure also applies to Oyu Tolgoi sponsored projects.

Topsoil Management

The Oyu Tolgoi topsoil management plan is one of the most important elements in rehabilitating land affected by the mine's operations and infrastructure development, helping to restore vegetation and biodiversity. Before the start of any land disturbance activity, Oyu Tolgoi strips and stores the topsoil so it can be used to rehabilitate the land after the work is complete.

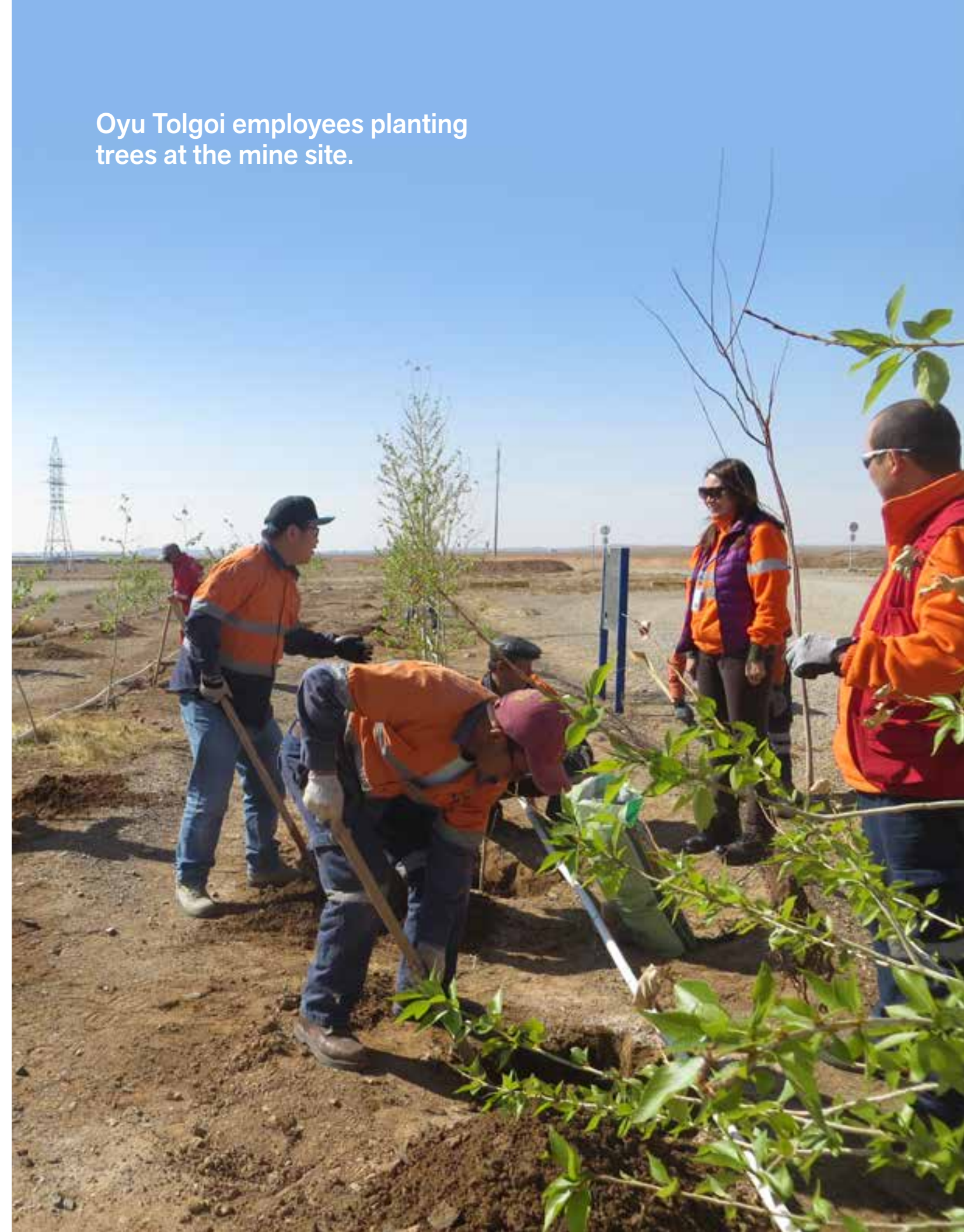
Environment Rehabilitation

Areas that were disturbed during exploration, development and operations are rehabilitated during and after the project, including through the development of a mine closure plan at the start of the construction phase. Making disturbed areas safe for people, animals and the environment is one of the main reasons for proper rehabilitation. To make an area safe, technical rehabilitation has to be completed to high standards. Oyu Tolgoi has a dedicated team to work with contractors to monitor rehabilitation.

Oyu Tolgoi continued its comprehensive environmental monitoring program and maintained compliance with key environmental programs. In 2021, planned biological rehabilitation was completed on 35.64 hectares of land associated with off-site construction works such as road construction and including the planting of almost 48,018 individual saplings from 18 species grown by the Native Plant Propagation Centre (NPPC) in Khanbogd. In 2020, over 52 hectares of biologically rehabilitated land were handed back to local government.

Technical rehabilitation was completed on 27.26 hectares in 2021, bringing the total to 1,706.17 ha between 2010 and 2021.

Saxaul trees in the rehabilitation area of Khanbogd, Umnugobi



Oyu Tolgoi employees planting trees at the mine site.

Water monitoring with
a local herder



Community Engagement

Oyu Tolgoi has reached US\$13.4 billion in total in-country spend since 2010, marking the largest foreign investment in the country to date.

The total in-country spend has substantially contributed to the country's economic development through taxes, fees, national and local procurement, salaries and other contributions provided to communities and the society over the past 11 years.

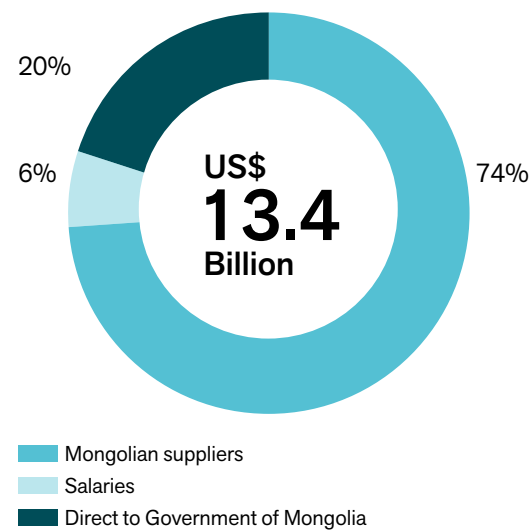
Oyu Tolgoi LLC continues to work collaboratively with national and local suppliers to increase capability to ensure the highest international standards. The purchase of goods and services from Mongolian suppliers represents 74% of the total spend.

Oyu Tolgoi has also made a significant investment in people through not only employment but also the development of the workforce. Over 96% of Oyu Tolgoi's workforce are Mongolian nationals, exceeding the commitment made under longstanding agreements with the Government of Mongolia of 90% during operations. Many employees have been given the opportunity to work at Rio Tinto operations in Australia, the United States, UK, Canada and Singapore through a development program designed to build comprehensive mining industry skills in the Oyu Tolgoi workforce.

Oyu Tolgoi contracts expatriate professionals and experts in rotating specialised roles; however, the development of skills for local Mongolian nationals is a high priority – structured professional development programs are offered to ensure high-potential personnel are ready for leadership and subject matter expert roles.

Total In-Country Spend (2010 - Q4 2021)

Since 2010, Oyu Tolgoi has spent US\$13.4 billion in-country in the form of salaries, payments to Mongolian suppliers, taxes and other payments to the Government of Mongolia.



Surrounding Communities

The Cooperation Agreement signed in 2015 by the Umnugobi aimag, Khanbogd soum and Oyu Tolgoi LLC (the “Cooperation Agreement”) supports Oyu Tolgoi’s continued relationship building and nurturing of communities surrounding the mine, as well as partner communities, Khanbogd, Manlai, Bayan-Ovoo and Dalanzadgad soums.

In Khanbogd, the partnership with Oyu Tolgoi LLC led to:

- The connection of the town to a permanent power supply;
- Construction of a new water supply system with the capacity to support 13,000 residents;
- Sealing of local roads (the Oyu Tolgoi LLC funded construction of a 35.1 kilometre sealed road between Oyu Tolgoi and Khanbogd which opened in 2019);
- Funding of new educational and healthcare facilities; and
- Programs to help improve social conditions.

Moreover, Oyu Tolgoi LLC makes an annual contribution of US\$5 million to the Gobi Oyu Development Support Fund (“DSF”), an independent fund that supports sustainable community development. Since its creation in September 2015, the DSF has invested US\$32.9 million, including US\$5.7 million in 2021, in 304 sustainable development projects and programs, which have resulted in the creation of over 480 permanent jobs, and scholarships for 324 students, among many other achievements.

Examples of projects implemented through the DSF include:

- Construction of a 1,200-student capacity school and 200-student capacity kindergarten in Dalanzadgad;
- Construction of a health care center in Tsogt-Ovoo soum to provide better health service to local community;
- A micro loan provided to 51 small businesses of Umnugobi to support their growth and sustainable development;
- Construction of a health-care center in Mandal-Ovoo soum to provide easier access to health services;
- Construction of a new museum in Umnugobi aimag, as well as the provision of required equipment;
- Co-funding of an integrated health care program to provide health-related support to Umnugobi aimag women and youth; and
- Maintaining a strong partnership with local stakeholders and working together to protect communities during the unprecedented COVID-19 pandemic, as well as coordinating a series of contributions to improve local emergency response capacity while enabling uninterrupted business operations.



Educational Program

(Scholarship and other programs)

Since 2011, **3,603 students** have enrolled in our educational programs.



Youth Development Program

Since 2013, **1,210 students** have participated in the program.



“Gobi Oyu” Fund & Herder Families Scholarship

Since 2010, **432 Umnugobi students** received scholarships.

Since 2019, Oyu Tolgoi has partnered with the National Police Agency on road safety projects focusing on reducing deaths and injuries on the local roads.

In 2019 and 2020, Oyu Tolgoi co-organised the “No need to rush” and “Do not be a mule, play by the rules” campaigns with the National Police Agency to promote road safety and responsible driving on rural intercity roads. Oyu Tolgoi worked closely with police departments in all aimags and soums to raise public awareness through media campaigns and installed speedometers on roads where accidents caused by speeding were prevalent.

In 2021, Oyu Tolgoi continued the partnership, launching the “Let’s protect our future” – a two-month campaign focused on preventing traffic accidents and child passenger safety. As a result of the campaign, the total number of traffic accidents decreased by 5%, injuries by 25.2% and deaths by 33.3%. Child deaths also decreased 33.3%.

Khanbogd school and kindergarten opening ceremony funded by the Gobi Oyu Development Support Fund



Oyu Tolgoi also supports several other community programs, including:

- The Khanbogd Development Strategy which OT developed to maximise shared values and lasting benefits for employees and communities to a catalyst for Khanbogd development in coming decades, and to provide funding to update Khanbogd Master Plan as approved by local parties;
- Livelihood and economic diversification initiatives for communities in Khanbogd through the Local Agribusiness Support Strategy and collaborating on initiatives with herders’ cooperatives and local government to improve livestock health services, increase productivity of livestock, vegetable and dairy production, strengthen market linkages and nurture entrepreneurial mindsets amongst local communities;
- Sustainable livelihood pilot projects in Khanbogd including a partnership to create a new local brand of camel milk, angus cattle breeding, Gaviluud sheep breeding, vegetable growing and sewing business;
- Hay and fodder donation provided to help local herder households to survive harsh winters;
- Herder support program to help herders access water and which repaired and constructed wells and connections to solar power sources;
- Partnerships with local herders to monitor hand wells since 2012 under the Participatory Environmental Monitoring (PEM) program administered by a local NGO established by Khanbogd community members involving 86 local herders monitoring 87 hand wells; and
- Continued constructive community engagement with local stakeholders through the Khanbogd Tripartite Council (TPC) and implemented 74% of agreed actions under the Herder Complaint Resolution Agreements as of end 2021.

Responsible Governance

Khanbogd road construction funded by the Gobi Oyu Development Support Fund



Code of Business Conduct

Turquoise Hill's Code of Business Conduct reflects our strong commitment to a culture of integrity and accountability and requires that all employees, consultants, officers and directors adhere to the highest standards of professional and ethical conduct.

The Code of Business Conduct specifically addresses questions of health, safety and environmental performance. Turquoise Hill also sets out to build enduring relationships with our neighbours that demonstrate mutual respect, active partnership, and long-term commitment. We respect 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.

Board of Directors

Having a Turquoise Hill Board of Directors ("Board") with strong professional and industry-sector representation as well as effective dialogue and decision making processes contributes to the long-term success of our company.

The Company respects and supports the dignity, well-being and rights of its employees, their families and the communities in which we operate.

We consider good corporate governance practices to be an important factor in the success of the Company and we are committed to adopting and adhering to high standards in corporate governance.

Board Composition

The Board of Turquoise Hill is constituted of a minimum of three and a maximum of 14 Directors, as provided for in the Company's Restated Articles of Incorporation.

The Board comprises a majority of Directors who are independent under applicable securities laws and stock exchange requirements. Additionally, the Audit Committee, the Compensation & Benefits Committee and any constituted Special Committees are composed solely of independent Directors.

For the purposes of Board and Executive Team composition, diversity includes, but is not limited to, characteristics such as gender, age, disability, as well as the inclusion of Indigenous peoples and members of visible minorities ("Designated Groups").

We recognize that diversity is important to ensure that the profiles of Board members and named executive officers ("NEOs") provide the necessary range of perspectives, experience, and expertise required to achieve effective stewardship and management.

In particular, we acknowledge the important role that women play in contributing to the diversity of perspective, not just on the Board and in NEO positions. Turquoise Hill will seek to achieve a target of not less than 30% of women on the Board at or prior to its 2023 annual general meeting of shareholders.

The Company commits to appointing members of Designated Groups on the Board and in NEO positions.

On an annual basis, the Nominating, Corporate Governance and Sustainability Committee assesses the effectiveness of the nomination process at achieving the Company's diversity objectives, measures the annual and cumulative progress in achieving its diversity objectives, and monitors its implementation.



Peter Gillin
Chairman
Corporate Director



Russel C. Robertson
Corporate Director



George R. Burns
President and Chief
Executive Officer,
Eldorado Gold



Maryse Saint-Laurent
Corporate Director



Alfred P. Grigg
Acting General
Manager, Energy
and Joint Ventures,
Aluminium
Rio Tinto



Steve Thibeault
Interim Chief Executive
Officer



Stephen Jones
Managing Director,
Planning, Integration
& Assets
Rio Tinto Iron Ore

Board Committees

The Board's oversight responsibilities are carried out through the four standing committees, which report to the Board on their activities on a regular basis.

The committee charters set out the roles and responsibilities of each committee along with the composition requirements and procedures for the committee meetings. All charters include a duty for the chair of each committee to report to the Board on the activities of the committee.

These charters can be found on our website:

<https://turquoisehill.com/investors/company/corporate-governance/default.aspx>

The four committees which meet as often as necessary, but no less than four times per year, are as follows:

1. Audit Committee
2. Compensation and Benefits Committee
3. Nominating, Corporate Governance and Sustainability Committee
4. Health, Safety, Environment, Communities and Operations Committee

The Nominating, Corporate Governance and Sustainability Committee oversees the adoption and disclosure of ESG-related processes and procedures, while the Health, Safety, Environment, Communities and Operations Committee assists the Board in carrying out its oversight responsibilities with respect to operations and development activities of the Company.

Human Rights

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. Turquoise Hill respects and supports the dignity, well-being and rights of its employees, their families and the communities in which it operates.

Senior Leadership Team

Steve Thibeault
Interim Chief Executive Officer

Luke Colton
Chief Financial Officer

Jo-Anne Dudley
Chief Operating Officer

Dustin S. Isaacs
Chief Legal Officer & Corporate Secretary

Roy McDowall
Head of Investor Relations & Corporate Communications

Made in Canada

© Turquoise Hill Resources Ltd., Montreal 2021

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

Oyu Tolgoi's concentrator complex



2021 Annual Report

Turquoise Hill Resources Ltd.
Suite 3680, 1 Place Ville-Marie, Montréal, Québec,
Canada H3B 3P2

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.

Turquoisehill.com