

Sustainability- WATER & ENVIRONMENT



Water

In the South Gobi desert, water is the most 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 operates some of the best water conservation standards worldwide, using less than half the global average of water per tonne of ore processed for similar mines. This means all of the water at Oyu Tolgoi is used and reused until it is lost through evaporation. This has been achieved through a number of measures:

- High-efficiency tailings reclaim;
- 100% cooling water reuse;
- 100% mine water recovery and reuse;
- 100% treated domestic waste water reuse;
- 100% truck wash water reuse;
- Measures to prevent evaporation;
- Ongoing water conservation measures; and
- A zero direct discharge policy, meaning that no waste water will be directly released into the environment.

Given the dry nature of the South Gobi region, coupled with the requirements of an operational mine and growing population, Oyu Tolgoi has undertaken detailed hydrogeological investigations in the region

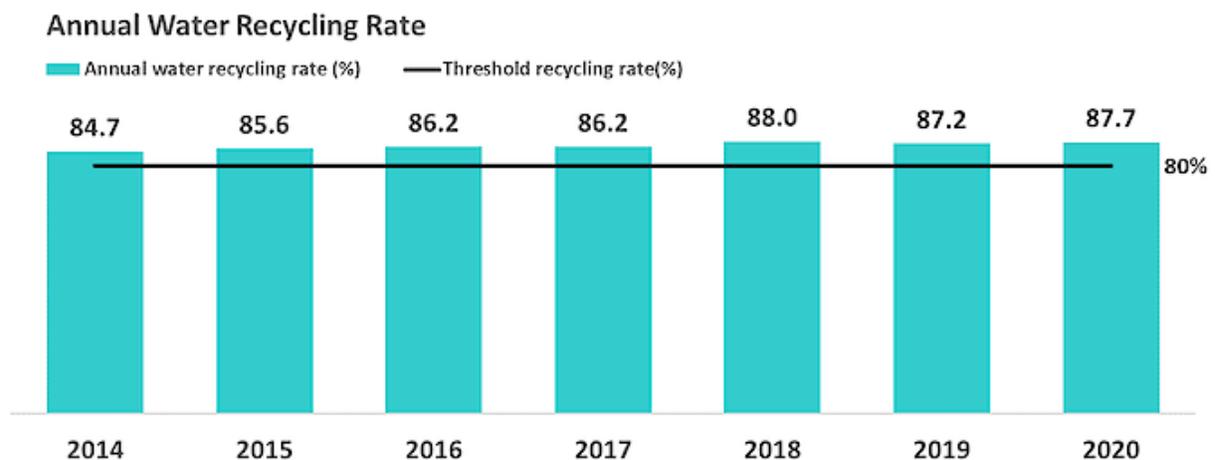
Sustainability- WATER & ENVIRONMENT

since 2003. Through these programs Oyu Tolgoi has identified two large aquifers, geological formations containing underground water, which are at least 150 metres below the surface - far deeper than the surface water sources used by local people and animals.

Detailed hydrogeological investigations of the Gunii Hooloi aquifer have concluded that it has water reserves of 6,800,000,000 cubic metres. Under Oyu Tolgoi's water permits, the mine can only use less than 20% of the aquifer over 40 years, ensuring that the majority of the water remains underground for future generations.

Oyu Tolgoi's reserves have also been identified by hydrogeological surveys and water exploration efforts. With proper water management at Oyu Tolgoi, sufficient water resources will be available for the needs of both the mine and local communities. Oyu Tolgoi operates a comprehensive water monitoring program that incorporates hydrogeological modeling and prediction of water drawdown of the Gunii Hooloi aquifer.

Since 2014, Oyu Tolgoi has consistently achieved annual water recycling rates above the mine's targeted recycling rate of 80%. Oyu Tolgoi has been designed as one of the most water-efficient mines in the world with average water use of 0.37 cubic metres of water per tonne of ore processed in 2020. The water used by Oyu Tolgoi comes from a deep and saline aquifer and has no impact on drinkable water in the region. In 2020, water used by Oyu Tolgoi has been continuously recycled at an average rate of 87.7%. An independent water audit is undertaken every five years, with the last audit completed in 2016. Compliance with water management and conservation policies, standards and legislation in 2020 was ensured through diverse processes including inspections from the Government of Mongolia as well as local community field verifications.

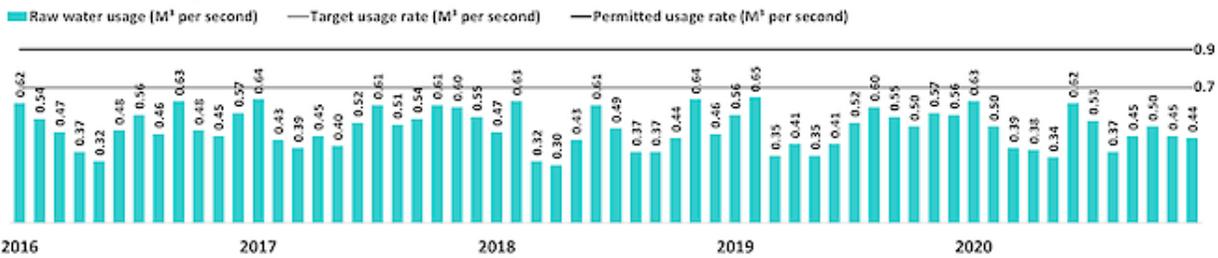


During the course of 2020, Oyu Tolgoi successfully sealed and rehabilitated 32 exploration water bores. These areas were handed over to the local government in cooperation with local communities. In addition to the above and as part of the Water Communication Plan, Oyu Tolgoi LLC undertook various activities in 2020, including:

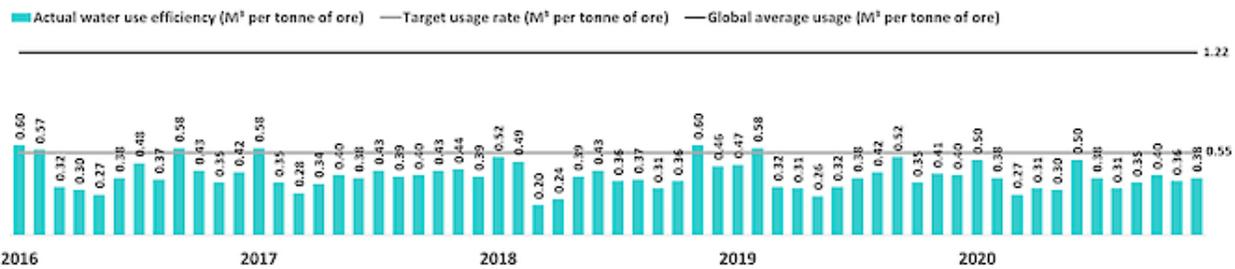
- two clean-up initiatives for local water sources; and;
- creation of a short video outlining the value of water published on social media to provide information on water usage and standards.

Sustainability- WATER & ENVIRONMENT

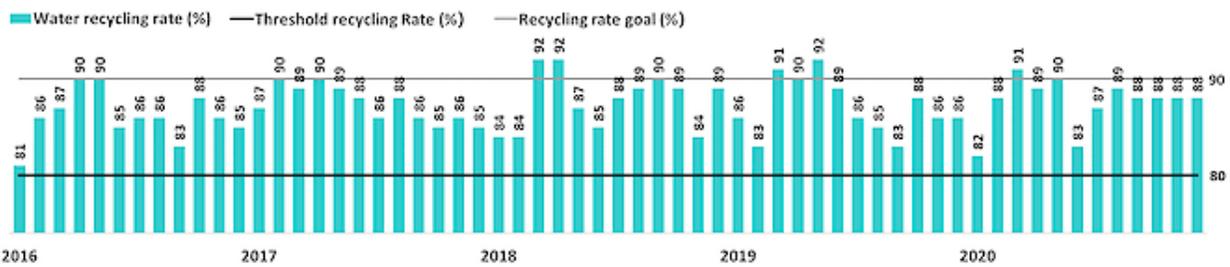
Raw Water Usage



Raw Water-Use Efficiency



Monthly Water Recycling Rate



Environment

Greenhouse Gas Emissions

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 fourth 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. Oyu Tolgoi undertook a powerline insulation pilot project that resulted in the successful reduction in mortality of raptors by 85%. The mine expects to expand the insulation project to non-Oyu Tolgoi powerlines and continue working with the national powerline committee in order to offset impacts on local bird populations.

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

Sustainability- WATER & ENVIRONMENT

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 the performance for the year ended December 31, 2020 was 2.32 tonnes CO₂/unit product against an annual target of 2.75 tonnes CO₂/unit product. These emissions include both Scope 1 (direct emissions from owned and controlled sources) and Scope 2 (indirect emissions from the generation of purchased energy).

The following table highlights Oyu Tolgoi's emissions intensity per unit of production and total emissions.

	2014 a	2015 a	2016 a	2017 a	2018 a	2019 a	2020 a
Emissions intensity (actual)	2.40	1.85	1.70	2.18	2.06	2.38	2.32
Total emissions actual (tonnes CO₂-e)	1,353,130	1,463,002	1,429,626	1,572,355	1,514,205	1,596,287	1,604,224

Notes:

- (1) The emissions intensity per tonne of product measures reflect the tonnes of metal concentrate produced and is impacted by variability of the grade of the ore mined, which is a function of the orebody.
- (2) All figures exclude the Underground development project emissions.

Oyu Tolgoi LLC has been implementing programs and activities aiming to reduce its GHG emissions and to save energy since 2015. Such activities include:

- ending the use of Diesel generators for remote infrastructure, as providing permanent power supply at:
 - training centre, 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).
- the installation of walkway lighting powered by solar energy on the way from the Oyut Camp to the Bagging Plant and the Northgate. Thirty-four sections of walkway lightings were installed in 2019 ;
- the installation of runtime management equipment on air conditioners in various facilities. Over 7,000 units' runtime has been reduced which represents a decrease of 30% in energy use for these units; and
- in 2020, replacement of existing lighting with more efficient LED lights at numerous buildings at site was implemented and will be completed in 2021.