# EDC PROJECT REVIEW SUMMARY: Oyu Tolgoi Copper Project

Project Description	Oyu Tolgoi Copper Project
Sponsors	Turquoise Hill Resources Ltd.
Country	Mongolia
Project Category	Α
Canadian Exporter(s)	Turquoise Hill Resources Ltd.
Description of capital goods and/or services	Copper
EDC Product	Limited Recourse Financing
Date of publication on EDC's website (dd/mm/yy)	20/08/2012
Date of Signing (dd/mm/yy)	15/12/2015

## **Project Categorization**

The Oyu Tolgoi (OT) Project, located approximately 550 kilometers south of Mongolia's capital city of Ulaanbaatar is considered to be one of the world's largest copper-gold deposits, containing approximately 40 billion pounds of copper and 20 million ounces of gold, plus further-identified reserves of silver and molybdenum resources that will support an initial 40-year mine life. The Project is 66%-owned by Turquoise Hill Resources Ltd. (formerly, Ivanhoe Mines Ltd.)<sup>1</sup>, and 34% by Erdenes OT LLC<sup>2</sup> with Rio Tinto acting as the mine developer and operator. The project was classified to be a Category A project (Category definitions can be found here, see D3 Environmental & Social Reporting).

#### Summary of EDC's Review

EDC reviewed the Project in accordance with our Environmental and Social Review Directive (ERD) and the Equator Principles, and has determined that the Project has been designed in compliance with applicable host country environmental requirements and with the Equator Principles. To reach this conclusion, EDC reviewed a Project Environmental and Social Impact Assessment, various independent due diligence reports and project management plans.

Key environmental and social issues associated with the project, and related mitigation measures reviewed by EDC include, but are not limited to, the following:

Biodiversity: The Project is located in the Gobi Desert, an area characterized by arid conditions, water scarcity, and flora and fauna populations that include a number of globally and/or nationally threatened species such as the Asiatic wild ass (or khulan), goitered gazelle and numerous rare plants (e.g. Mongolian Chesney). The project has the potential to impact specific habitat and movements as a result of the mine, ancillary facilities and linear infrastructure such as roads and transmission lines.

Mitigation measures included: The Project has developed an overarching Biodiversity Strategy, which includes a series of onsite and offset mitigation measures, monitoring and offset measures detailed in the Biodiversity Monitoring and Evaluation Progam. To address residual impacts and meet its biodiversity commitments, the Project has also developed an Offset Management Plan which details the approach to implementing and sustaining various offset management strategies with the aim of further reducing impacts on key priority species.





Water Resources (ecosystem services): The development of the Project has the potential to result in direct impacts to surface and groundwater resources within the Project's area. To meet the Project's water demand, the Project sources its water from the Gunni Hooloi basin, a deep water aquifer which is cut off from the shallow groundwater wells that are typically used by local herders. For the development of the Oyu Pit and waste dumps, the Project resulted in the realignment of the Undai River and relocation of the Bor Ovoo spring, an important source of water for local herders and their families.

**Mitigation measures included:** The Project has developed various mitigation measures to reduce regional impacts to water and subsurface water. Specific to the Undai River diversion and relocation of the Bor Ovoo spring, the Project committed to creating a functional diversion channel and reinstating the Bor Ovoo spring further downstream, outside the mine boundary and accessible to local herders and wildlife. These commitments, as well as other mitigation and monitoring measures, including a *Participatory Water Monitoring Program* run by herder families and a *Monitoring and Evaluation Program* for water impacts on vegetation, pasture quality, and critical ecosystem, are formally captured in the Project's *Water Resources Management Plan*.

### Land acquisition, resettlement and economic displacement:

Due to large-scale land requirements, the Project had to relocate ten households in 2004 from the mining area and caused the economic displacement of eighty-nine households due to ancillary infrastructure construction (e.g. international airport, 220kV power line to China and water supply pipeline to the Gunnii Holoi borefield) in the period of 2011-2013.

**Mitigation Measures included:** Under the Project's former resettlement program, the ten physically resettled households received a compensation package for loss of winter camps and grazing land, including new livestock winter shelter, livestock assistance, education tuition, employment opportunities and additional training for herder family members. A comprehensive *Resettlement Action Plan* was formalized in 2011 through the work of a Compensation Working Group whose role was to define the impacts on economic displacement households and negotiate compensation and livelihood support measures. The economic displacement compensation included education assistance for secondary school children and employment and training opportunities. Now that the majority of entitlements have been delivered to directly-affected herder households, the focus of the resettlement program is on implementing livelihood restoration activities and supporting program for Khanbogd-wide herders through the *Sustainable Pastureland Management Programme* and the *Herder Livelihood Improvement Programme*. The Project monitors the resettlement program through the *Stakeholder Engagement Plan* and *Community Grievance Mechanism*.

#### **Documentation Reviewed:**

The following is an illustrative list of key documentation that was reviewed as part of the current confirmation of the ERD.

- 1. Environmental and Social Management System
- 2. Environmental and Social Management Plan OT-10-PLN-0003 (September 2013)
- 3. Air Quality Monitoring Plan OT-10-E2-PLN-0002-E (December 2013)
- 4. Biodiversity Management Plan OT-10-E9-PLN-1001 (October 2013)
- 5. Community Health, Safety and Security Management Plan OT-10-PLN-0001 (released 26 September 2013)
- 6. Mine Closure Plan (June 2012)
- 7. Land use management Plan OT-10-E9-PLN-0001-E (September 2013)
- 8. Stakeholder Engagement Plan OT-05-PLN-0001 (September 2013)
- 9. Resettlement Action Plan RD-10-PLN-0006-E (September 2015)
- 10. Environmental and Social Action Plan (2015)
- 11. Biodiversity Action Plan (2015)
- 12. Water Resources Management Plan OT-10-E10-PLN-0001-E (September 2013)
- 13. IESC site visit / audit reports produced regularly from 2013 to 2015.

## Applicable International Finance Corporation (IFC) Environmental and Social Standards used by EDC (in addition to host country requirements):

- Performance Standard 1: Social and Environmental Assessment and Management Systems
- Performance Standard 2: Labour and Working Conditions
- Performance Standard 3: Pollution Prevention and Abatement
- Performance Standard 4: Community Health, Safety and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- Performance Standard 6: Biodiversity Conservation and Sustainable Natural Resource Management
- Performance Standard 8: Cultural Heritage

EDC has considered the relevant aspects of the World Bank General EHS Guidelines (April 2007) and the EHS Guidelines for Mining (December 2007).

3

<sup>&</sup>lt;sup>1</sup> Turquoise Hill Resources Ltd is majority-owned (51%) and controlled by Rio Tinto Plc, a leading global mining group which will also serve as the mine operator. <sup>2</sup> Erdenes Oyu Tolgoi is wholly-owned by the Government of Mongolia.