

## **Mongolia: Oyu Tolgoi Project**

### **Technical Briefing for Executive Directors**

*Washington DC January 17, 2013*



# Meeting Objectives

## *Present Project Highlights and Staff Responses to Stakeholder Concerns (20 mins)*

### *Part 1: Project Overview*

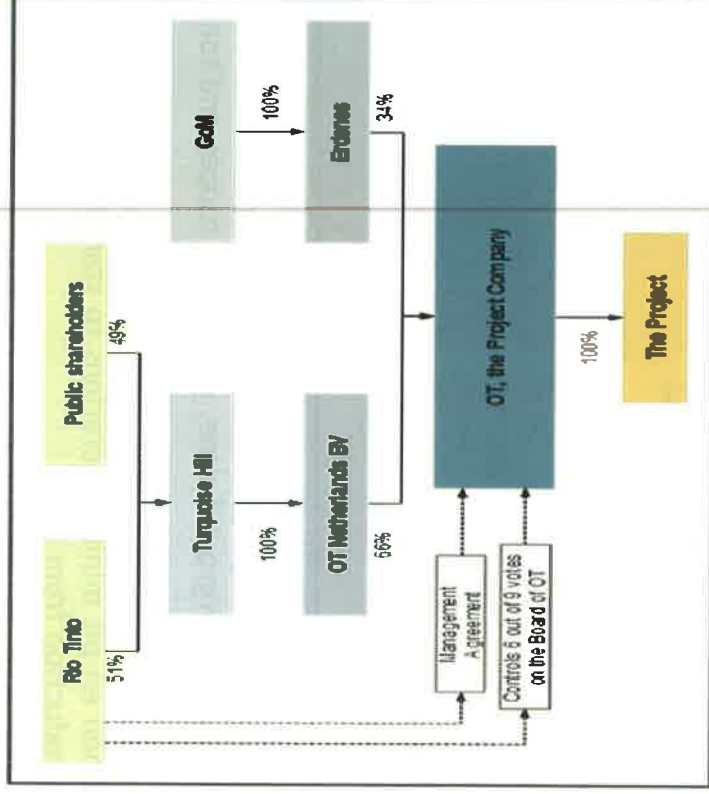
- Project overview
- Project Drivers
- Proposed IFC/MIGA financing
- Expected Development Impact
- Strategic Fit

### *Part 2: Environmental & Social (E&S) Issues and Staff Response*

- Key E&S issues and Stakeholder Concerns
- Staff Response

## *Discussion/Questions & Answers (40-60 mins)*

# Project Sponsors & Ownership Structure

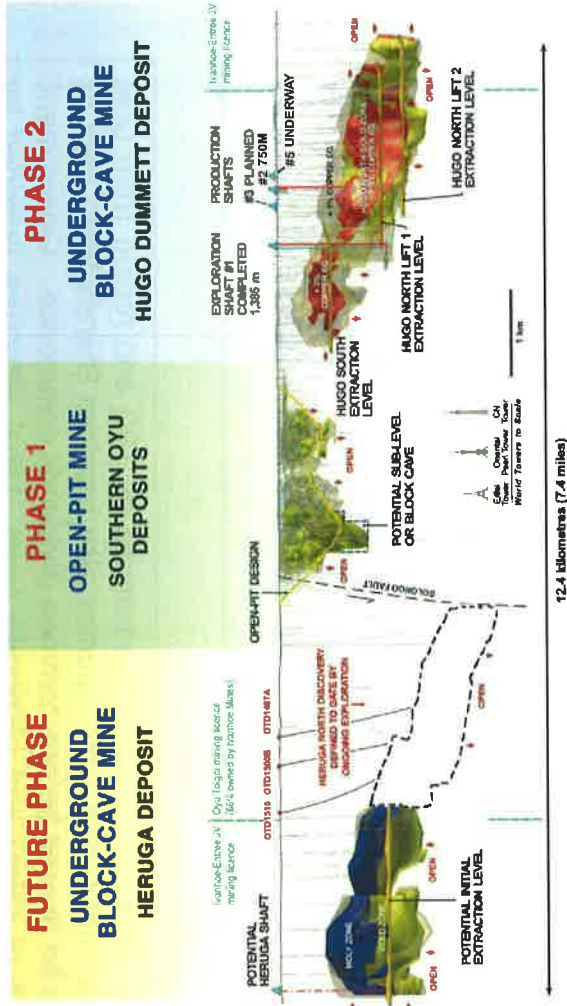
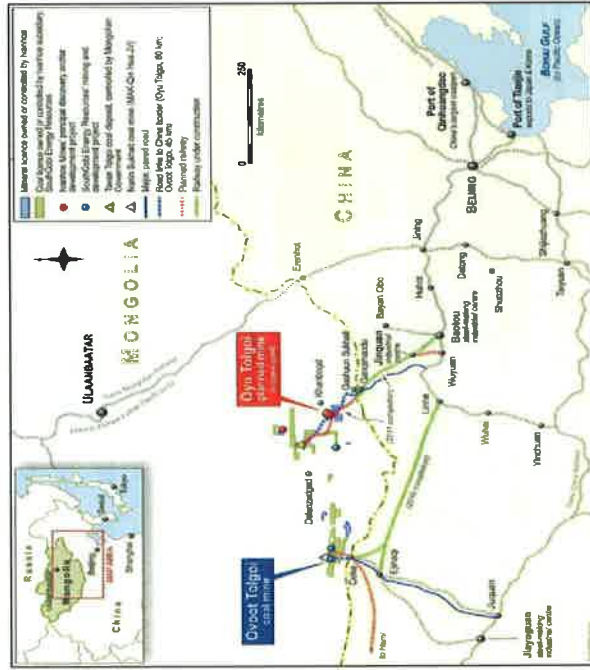


- **Turquoise Hills (“TRQ”)** formerly Ivanhoe Mines (“IVN”) bought the mining rights from BHP Billiton in 2000. Discovered the underground orebody in 2003. Completed exploration and initial mine development until 2010, when Rio Tinto (“Rio”) took over Project management. After gradual build of equity stake Rio took 52% majority control of IVN in January 2012, replacing management and founder Robert Friedland.

- **Rio Tinto** world’s third biggest mining company by market cap (US\$90 billion). World leader in specialized block caving (high capital cost, long development time, but low operating cost) which will be used underground mine. Long term strategic partner with IFC including in Escondida (Chile) and Simandou (Guinea). Industry leader in sustainable mine development.

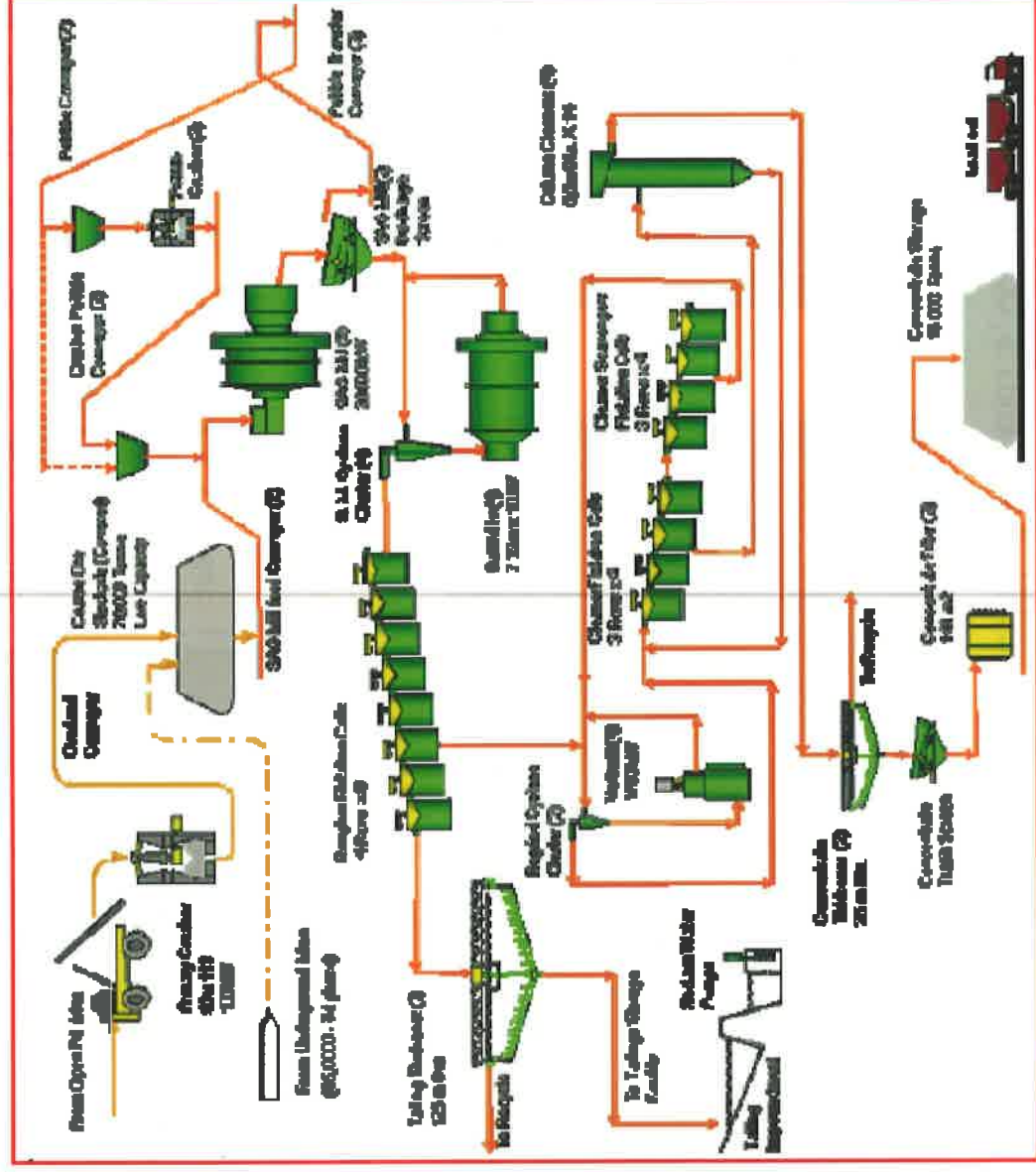
- **Government of Mongolia** holds 34% equity share. GoM equity stake is advanced by TRQ and repaid from GoM share of Project cash flow. Advance bears interest at LIBOR plus 6.5%. Sponsor also provides Shareholder Loans at LIBOR plus 6.5%. Shareholder advances and loans to be retired before common dividends commence. Government earns duties (US\$800 million to date), royalty (5% of sales) and corporate taxes. Legal structure provided by *Investment Agreement* (IA) and *Shareholders Agreement* negotiated over 5 years and passed by Mongolian parliament bi-partisan vote in July 2006.

# Project Overview



- Two phase development of an open pit and underground copper deposit in South Gobi desert (80 km from Chinese Border). Average grade of open pit mine 0.6% copper (comparable with other world scale copper mines, e.g. in Chile). Underground mine, grade 2.2% copper and tonnages (50 plus years of mine life) is what makes OT exceptional.
- Concentrator and associated mine infrastructure (airport, water pipeline, road to border) complete. Mining from open en pit mining operations to start from January 2013. Mining from underground will start 2016, ramp up to full production from 2020.
- Project spend to date (Dec 2012) is US\$7.5 billion, financed by lead Sponsor Rio Tinto and other equity investors. Remaining Project spend to completion of underground is US\$12.5 billion

# Process Overview



- **Mining** Ore from open pit and underground mine moved to primary crusher then transported by conveyor to mill
- **Milling** Ore is ground and milled to powder then fed to floatation cells
- **Separation** Ground ore is fed into separation tanks, mixed with water and reagents and mechanically agitated. Copper bonds to bubbles on surface for recovery as concentrate. Waste (>97.5% of solid content) is removed as slurry from base of floatation tanks
- **Waste** tailings are piped (1 km) to a lined tailings facility with dammed sides, where it is deposited in layers. Water is retained in tailings or evaporates, some is recover
- **Copper Concentrate** dry powder (circa 30% Cu by volume) is shipped in bags by truck 80 km to border post with China for further processing by smelter customers

# Return Drivers: 15 Years to fully develop Block Cave

Mine Scale: Open Pit & underground v Eiffel Tower



Block Cave: Tunnel Network (220 km !)



OT: Underground Construction *IFC Photo*



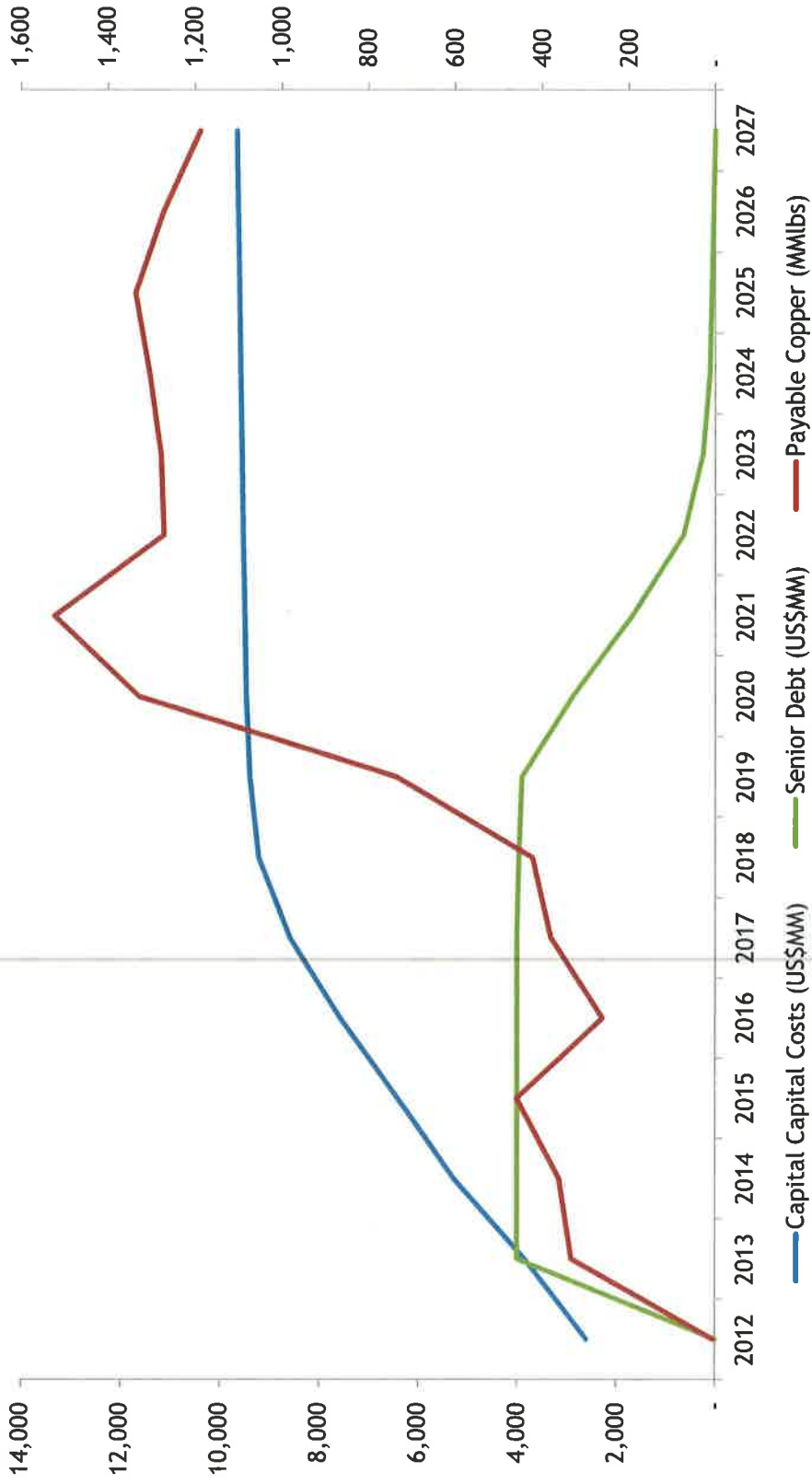
OT: Underground Hoist



Block caving is technically very challenging, currently 12-18 block caves operating worldwide, only 6 close to scale of OT. 10 more in development, but OT by far the largest ever attempted at start up. Rio and Freeport are the world's leaders. This is highly specialized mining, can only be done by a handful of companies, OT will need engineering support from parent for years to come.



# Copper Production versus Investment and Loan Requirements: Open Pit Versus Underground Development Phase



## Drivers of Financial Structure

- **Scale** With start up at 100,000 t/day ore processing, Oyu Tolgoi will be among the largest copper mines in the World.
- **Capital Requirements** With sunk costs already of some \$7.5 billion until Dec 2012 and additional total capex requirements of close to \$12.5 billion through end of 2019
- **Time To Development** 12 years have already passed since IVN began active exploration; 10 years since the key discovery of the underground ore body; 7 years since negotiations initially began on the IA and feasibility study completed; 6 years since Rio becomes strategic partner and major site works begin; 3 years since signing of the IA; 2 years since start of Project financing process.
- **Time to “Project Completion”** Start up of open pit operations Q1 2013. Initial underground production will start in late in 2014, but will only achieve capacity by 2021 (Project Completion).
- **Open Pit** at an average grade of 0.6% Cu, OT open pit is in principle economic, but with additional capital requirements of underground OT is NOT self sustaining financially until underground is completed in 5 years. Underground Mine with ore grades initially around 2.4%, OT is the World’s richest world scale copper development but it is a massive engineering undertaking: 15 years from shaft sinking to full production.
- **Price and other uncertainties.** Commodity prices are high but potentially volatile. Lenders and investors are making a huge first investment in Mongolia



## Project Cost and Financial Plan

Project Costs (until 2019)	US\$MM	%	Financing Plan	US\$MM	%
Sunk Costs (until Dec 2011)	4,700	23%	IFCA Loan	400	2%
Mining Expenditure	5,300	26%	EBRDA Loan	400	2%
Concentrator	850	4%	IFC B Loan	1,000	5%
Infrastructure	950	5%	EBRD B Loan	1,000	5%
Owners/Indirect/Management Costs	1,200	6%	EDC	750	4%
Sustaining Capex	940	5%	USEXIM	300	1%
Taxes, VAT, Duty & GoM Fees	1,180	6%	EFIC	100	0%
Total Interest & Fees & DSRAs	4,800	24%	MIGA	800	4%
Principal Repayments	130	1%	Other	1,750	9%
<b>Total Uses</b>	<b>20,050</b>	<b>100%</b>	<b>Total Debt</b>	<b>6,500</b>	<b>32%</b>
			Equity	11,670	58%
			Account Releases	300	1%
			Operating Cash Flow	1,580	8%
			<b>Total Equity</b>	<b>13,550</b>	<b>68%</b>
			<b>Total Sources</b>	<b>20,050</b>	<b>100%</b>

## Highlights of the Project Financing

- **Borrower** OT LLC.
- **Terms and Tenor** Very long grace period (5 years) to accommodate long development of underground. Commercial bank tranche 12 years. IFI tranches 14-15 years.
- **Financial Support** IVN will guarantee debt service obligations until project completion (likely in 2021), Rio Plc will guarantee IVN's obligations to lenders. Rio/IVN will be released from obligations in event of "Expropriatory Act" or "War and Violence".
- **Flexibility** Structure has aspects of a typical project financing (e.g. partial recourse until Project Completion) as well as a corporate financing (e.g. flexibility on additional spending, borrowing and distributions). Many non-standard features to fit unique needs of Project. In particular, recognizing importance of early retirement of any shareholding advances in order to free up ordinary dividends, lenders allow distributions pre-completion. Lenders get a share (25%) of any pre-completion distributions to compensate for very extended grace period and long tenor. Also flexibility on additional spending for expansion and associated facilities, flexibility for additional borrowing.
- **Syndication** process has begun, prospective commercial bank participants have been given initial information, full package (info memo, lenders model, lenders technical reports) will be provided mid-January 2013, with firm bids due February 2013. This is a competitive bidding process to arrive at an overall average price of the commercial bank tranches. IFI tranches will price directly from the commercial tranche. There will be an additional spread to account for the longer tenor of the IFI tranche. Lenders are exposed to political risk, this will be reflected in pricing which we can expect will be a hybrid between Rio risk pricing and Mongolian sovereign pricing.

## Expected Development Impact

- **Macroeconomic Impact** The Project is expected to increase Mongolian GDP by some 30% over the life of the mine. Direct revenues to government through import duties and taxes have already reached more than US\$800 million. Total flows to government over the life of the project are currently estimated, depending on price assumptions, to range between US\$17-26 billion in nominal terms, or US\$3.7-\$6 billion in net present value (10% discount rate) real terms.
- **Employment** At peak construction (Summer 2012) OT employed some 14,000 people, of whom more than 8,600 were Mongolian contractors and employees. By fulltime operations (2014) OT is expected to have more than 3,300 permanent employees, of whom 90% will be Mongolian nationals. While multiplier effects will vary by country, other IFC mining projects have shown that indirect employment multiplier can be some ten times.
- **Education and Training** OT plans to invest US\$85 million over the next five years to support Mongolian vocational education and training. This program includes: construction of training facilities and two new universities; upgrading five regional educational centers and colleges; a scholarship program for study at Mongolian and overseas universities; provision of education and training equipment for schools and vocational training centers.
- **Indirect and Local Impacts** The Company, working with local financial institutions, specialist consultants and with strategic advice from IFC is implementing a range of community development programs to stimulate regional economic development, build local skills, create jobs and improve infrastructure such as roads, schools and hospitals. OT has implemented a regional and national supplier development program which includes preferences on prices and terms for competitive local and regional suppliers, establishment of supplier development centers providing training and business development coaching as well as micro credit facilities in partnership with local banks. IFC is providing ongoing advice in support of these initiatives and will continue to provide support over the life of IFC's loan.

## History of IFC and MIGA Engagement

- 2006 IFC initial engagement on with Government of Mongolia, Rio Tinto and co-arranger, EBRD.
- 2010 IFC and EBRD jointly mandated by IVN to arrange Project Financing
  - Lenders worked with IVN and advisors to develop a project financing structure
  - Lenders engaged independent consultants to assist in appraisal and structuring (including lenders engineer, environmental consultants and international legal counsel).
  - Each arranging bank led separate appraisal tasks - IFC the Environmental and Social due diligence.
- 2011 Rio took over management of the Project and the project financing
  - Revised Project Financing, while retaining many of the features negotiated with IVN, now includes a Rio guarantee of IVN obligations to the lender group, substantially strengthening the creditworthiness for lenders.
  - This Rio credit support, as is typical, allows Rio to be released from its obligations to lenders in the case of certain events such as expropriation or war or civil disturbance.
- 2012 Project ESIA released in August 2012
  - Project consultation process and Term sheet negotiations are now substantially completed.
  - Syndication process is underway.
  - IFC and MIGA expect to seek joint Board approval January 31<sup>st</sup> 2013 with a view to closing financing March 31<sup>st</sup> 2013.

## IFC and MIGA Role

### *Core of \$4 billion Project Debt Financing*

- IFC joint lead arranger with EBRD, EDC, Standard Chartered, BNPP, US Exim, EFIC and MIGA
- \$400m loan for IFC's Own Account in long term loans
- Up to \$1 billion in loans to be mobilized by IFC from commercial banks
- Up to \$1 billion parallel debt tranche from commercial banks supported by MIGA Guarantee

### *Comfort to Lenders and Investors*

- As a long term investor with the World's Governments, including Mongolia, as their shareholders, IFC and MIGA's engagement gives comfort to co lenders and equity investors

### *Environment and Social Expertise*

- Rio has substantial E&S expertise but IFC's experience and staff can help in areas related to compliance with IFC PS
- IFC Advisory Services has provided strategic advice to Rio/IVN on community investment strategy, regional business and community development and broader stakeholder engagement on key issues (eg water).

### *Long Term Partnership*

- We expect to be a partner with GoM on this project for 15 years, MIGA for 12 years. IFC and MIGA will conduct regular supervision and audits covering all aspects of operation, from monitoring of financial performance, input on investment decisions and incurring additional financial obligations and most importantly, extensive and continuing audit and supervision of environmental and social performance.

## Fit With World Bank Engagement

- **Bank Strategy** In anticipation of OT and other major mine developments, starting in 2005, WB focused engagement with GOM around macro governance framework to manage revenues flows from mining, support for associated infrastructure, capacity building for the Ministry of Mines, and transparency
- **Macro Governance** Building on WB's engagement from mid-1990's on around capacity building for budget management, WB organized TA and education on best practice natural resource governance regimes (eg including study tours for policy makers to Chile). Work accelerated after balance of payments crisis following 2008 commodity crash. Working closely with IMF WB helped develop landmark fiscal stability and integrated budget law which came fully into force this year. Framework puts caps on budget deficits, public expenditure and depth, and overhauls public budgeting and management processes, including governance of newly created Development Bank of Mongolia.
- **Infrastructure** Bank is providing technical assistance for infrastructure planning and project development
- **Capacity Building** Expanded technical assistance program to Ministry of Mining in place since 2004.
- **Transparency** Bank has provided technical assistance to GOM for Mongolia's full compliance with requirements of Extractive Industries Transparency Initiative. Mongolia's fifth annual EITI report, providing comprehensive review of all mining company flows to government, with independent audit process, released to public in November 2012.

# Why IFC and MIGA Support the Project

## *Substantial Development Benefits for Mongolia for 50+ years*

- Boosts GDP by 35% over medium term. \$12 to \$26 billion in nominal revenues to Government over life of mine, depending on price assumptions
- \$80 + billion in Exports (undiscounted) Demand for Local Suppliers of Goods and Services with significant direct and indirect impact on job creation and skill levels
- Demonstration impact for Mongolia of successful development and operation of the one the World's largest mining investments
- Local employment and regional development

## *Commercially Viable Private Sector Project*

- IFC and MIGA's mandate is to support viable private sector businesses that provide positive economic benefits to host countries

## *Meets our E&S and other Standards*

- OT development will comply with IFC and MIGA's E&S policies and standards

## *World Bank Engagement*

- Builds on significant World Bank and IMF engagement with GoM which put in place best practice governance (modeled on Chilean framework) to address macro risks
- Substantive and long standing WB advisory engagement for capacity building for mining & transparency

## Project Public/Private Split: Key Findings

- At spot prices Project FRR and ERR are 19% and 22% respectively. At lender prices Project FRR and ERR are 9% and 13% respectively.
- In all scenarios IFC has reviewed GOM/Sponsor split is well above 50% for GOM and applying even a relatively a low discount rate in the lenders prices case, GOM takes more than 100% of project NPV.
- Even with the higher case price scenario, using IFC's usual ten percent discount rate, the share of project NPV that accrues to government is very high (close to 80%).
- The combination of royalty, corporate income taxes and dividends under the IA ensures that once financing costs are recovered the GOM share of any incremental revenues is always higher than 50%.
- OT has the potential for significant direct financial benefits for both GOM and the Sponsors. In the near term, for GOM these consist of duties and royalties, while Sponsors must wait. However, some portions of return, namely corporate taxes and dividends to GOM and retirement of shareholder advances and dividends to Sponsor, are quite far in the future.
- The delay in corporate taxes is explained entirely by the nature of the mine, in particular the very long development time and capital cost of the underground. Delay in dividends is explained both by the mine intrinsics (there is no meaningful distributable net income until the underground is fully operational) and the fact that the GOM has to fund its ownership stake by borrowing against future mine proceeds. This is a normal feature of a “carried interest” ownership arrangement, it is not unique to OT (indeed most mining legal frameworks have no government ownership requirement).



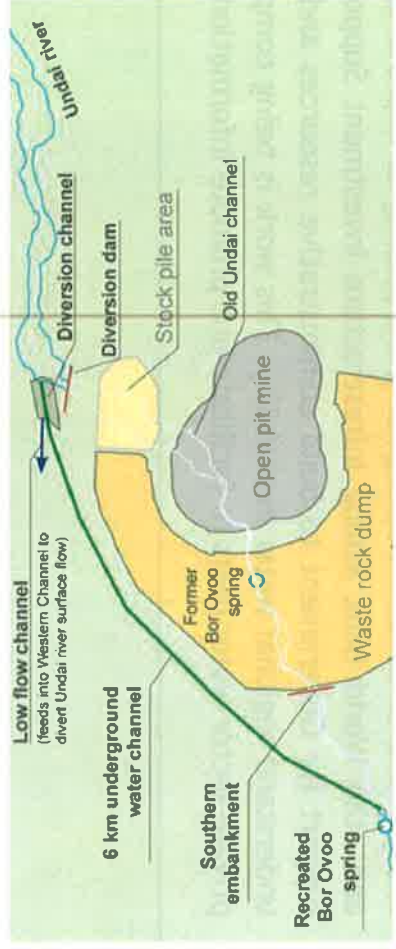
## Environmental and Social: Appraisal Process and Key Issues

- IFC's environmental and social review began in May 2010 and includes all aspects of the mine development and associated infrastructure including the open pit and underground mine, the processing plant and associated infrastructure including sites for tailings and waste rock disposal, access roads, administration and training buildings, mine equipment maintenance, waste disposal areas, medical centre, fire station, heating plant, fuel storage and warehouse facilities; water borefield and pipeline to the mine site; water treatment facility and potable water bottling plant; mine infrastructure including airport, roads, power lines, housing (temporary and permanent).
- IFC lead the arranging bank environmental and social due diligence process, working with arranging banks and external consultants to assist the Company and Sponsor in the preparation of a comprehensive environmental and social impact assessment which was released for stakeholder review in August 2012. MIGA has reviewed the project documents and conducted its own site visits while working closely with the IFC social and environmental team. As MIGA performance standards are the same as IFC's, MIGA has relied on IFC's environmental and social due diligence. Lenders independent E&S advisor (ERM) has completed independent review including two site audits. Site audit and review to ensure ongoing compliance with IFC Performance will continue for life of loans.
- Key E&S Impacts identified at appraisal and of interest to stakeholders are: impacts on Local Communities; Water; Power Supply; Biodiversity; Timing and Completeness of ESIA. The Company has prepared comprehensive responses to stakeholder questions and concerns which can be found at <http://ot.mn/en/feedback-esia/response-ngo>.

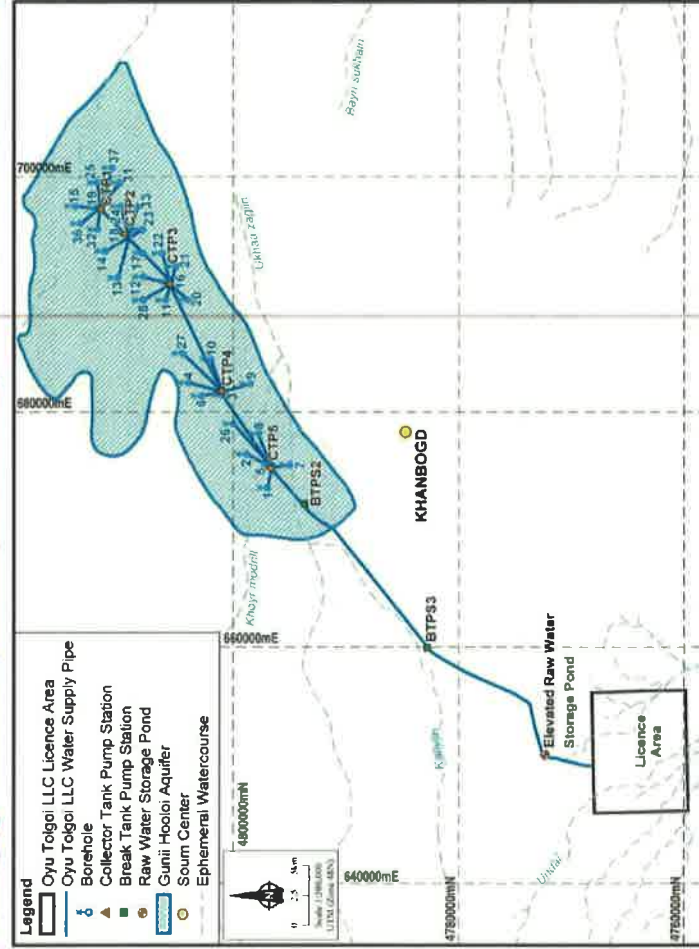
## E&S: Impacts on Local Community

- *Resettlement* A total of 94 households (400 people) were identified as being either physically displaced (10 households comprising 16 families or 61 people) or economically displaced (84 households) by reduced access to and/or loss of summer pastures disruption to herding activities; loss of wells and other impacts to water availability/quality (e.g. impeded access to wells); and overall reduction of pastureland caused by development of the Project site and associated road, power and airport infrastructure.
- Extensive negotiations were held during 2004 with each herder household to develop and agree a Herder Relocation Program which provided individual resettlement and compensation packages for physically displaced households. In September 2004, tripartite agreements were signed between the affected households, the regional government, and IMMI. By end 2005 all families had been successfully relocated and provided with a comprehensive relocation package, including replacement assets, compensation and livelihood restoration assistance. This framework was expanded into the Resettlement Action Plan (RAP) disclosed with the ESIA which, in accordance with international best practice, provides for comprehensive monitoring of the livelihoods of resettled and economically displaced households. The RAP will be updated periodically to reflect results from ongoing monitoring.
- In October 2012, a complaint was filed by OT Watch, a local NGO, on behalf of nomadic herders who reside close to the project site. The complainants' main concern is the project's use of land and water, which they claim disrupts their nomadic way of life, and puts in jeopardy their indigenous culture and livelihood. The complainants contend they have not been compensated or relocated appropriately, and question the project's due diligence, particularly around the issue of sustainable use of water in an arid area. CAO complaint assessment is ongoing. The Company is cooperating fully in process. Staff have met with NGO and considered earlier comments (received October 2010 and substantively in line with most recent comments) during appraisal process. Staff position is relocation program as designed and implemented complies with IFC Performance Standards and that issues raised have been adequately addressed in ESIA and in Management Plans already prepared or under preparation.

## E&S: Impacts on Water Availability



- Project requires 7km diversion of ephemeral stream from mine site. Will directly impact one herder spring which will be recreated. Monitoring program put in place to identify and address any additional impacts.
- Project will draw process water by pipeline from underground aquifer 30 km from Project site.
- Drawdown of 20% of available water anticipated over initial 40 years



- Aquifer source (at depth of 150-400 meters) is brackish, non potable, no other current or prospective uses.
- Aquifer was discovered and delineated by Company, drawing right confirmed under IA.
- Water tariff will be aligned with national tariff regime for similar uses.
- Some limited interconnectivity of sub surface aquifer with surface aquifers confirmed. Will be addressed by continuous monitoring program, grievance/rehabilitation process between affected herders and company. No herder wells on top of aquifer, limited number primarily on SW edge. Agreed principle is for any shortfalls to be made whole. Prospective amounts for any shortfall negligible in relation to total water demand.

## E&S: Other Water Related Issues raised by NGO's

- **Tailings Disposal** Mine waste consisting of crushed ore from the mill and concentrator will be deposited by pipeline in a tailings storage dam consisting of two 2kmX2km clay lined pits located 1km from the mine. Tailings losses account for 82% of total water usage by the mine. OT will use industry established treatment optimized to achieve 65% solids.
- An alternative tailings management system known as dry stacking has been advocated in NGO comments. Only a very limited number of mines worldwide have adopted this approach (which although referred to as dry, still means 18% water content), with nothing of this scale attempted in a cold climate. This stack alternative was considered at design stage but rejected as technically unfeasible principally due to scale and issues with freezing during plant downtimes.
- **Water Use in Regional Context** NGO comments highlight a World Bank Study "Groundwater Assessment in the South Gobi" (January 2009) which identifies regional supply potentially of only 10-12 years. However this conclusion (which takes as a basis a minimum supply estimate versus a maximum demand estimate) relies on limited and dated supply and demand information. Recognizing the priority to improve information and address issues around water availability and the World Bank Mining Infrastructure Investment Support (April 2011) (in partnership with AusAid) includes support for Government to build administrative resources and undertake additional hydrogeological work to better understand regional water availability. This work is being complemented by and IFC Advisory engagement with other private sector water users to facilitate and promote information exchange around water resources.

## E&S: Project Long Term Power Supply

- **Initial and Long Term Power Sourcing** For the initial 4 years of operations the Project, which has a peak power requirement of up to 300 MW base load (plant would be 450 MW to provide redundancy), will rely on power imported from the Inner Mongolia power grid in China. The Investment Agreement provides that within 4 years of startup of production the Company will be required to source power domestically, either from a coal-fired plant developed or funded by the Company; a coal-fired plant developed or funded by a third party; or from the Mongolian grid.
- **Consistency with WB Coal Guidelines** After a 2 year negotiation process the Company entered into a supply agreement with Inner Mongolia Power Company (China) November 2012. As these negotiations proceeded Rio began work on an alternative to fast track development of a power plant at site, seeking guidance at the time from IFC on how this prospective development should be approached given recognized sensitivities around climate change. Staff review concluded that the prospective captive power plant, which would be an associated facility and not part of an IFC financing, would not formally fall under World Bank coal guidelines. However, notwithstanding this conclusion, staff proposed (with the agreement of the WB Presidents office) and the client agreed that if a power plant development did go ahead in addition to the normal performance standard requirements to complete an ESIA, the client would follow the substance of the coal guidelines and would prepare an expanded alternatives analysis, which would be subject to independent review, to validate the choice of coal and the chosen technology.
- **Current Sponsor Plans** With power supply now secured and with differing preferences between Rio and Government of Mongolia - Rio would prefer a plant at site, government would prefer a larger plant to be located at the coal fields of Tavan Tolgoi (which would have the benefit for example of reduced impact on sensitive desert habitat), a power plant decision has been put on hold for up to 2 years.

## E&S: Power Supply Alternatives: Provisional Findings to be expanded and validate by alternatives review

- While additional work needed to finalize conclusions, provisional technical review identifies the following issues:
- **Hydropower** OT is in a flat area, only feasible site would require supply power lines some 800km long, cost, substantial transmission losses, very extended project lead times
- **Natural gas or LNG** Mongolia has no natural gas resources or gas pipeline. Capital cost/logistics/timing for a pipeline plus gas cost prospectively 5 times that of coal.
- **Nuclear/geothermal/biomass** Mongolia has no current nor prospective nuclear power capacity. No geothermal capacity, some limited potential in North of country. Scale and cost issues. Biomass: scale, supply, logistics and cost issues.
- **Solar** Northern latitude (half the average solar energy of typical equatorial solar plants, plant yield reduces by half again during winter); energy losses during winter (collectors need heating); dust storms, abrasiveness would lead to very significant design and efficiency losses; prohibitive cost of batteries, so nighttime (Chinese grid) power still needed.
- **Wind** Abundant in Mongolia, but plant site is not favorable. Significant variability both diurnal and seasonal, low and high winds would reduce availability. Battery storage not technically feasible. While Mongolia has potential for wind power, which IFC has supported, this is not a viable solution for the scale of the Project's base load power needs. No major mines in the world rely on wind power, OT would have to depend on permanent backup from China, at prohibitive cost to maintain idle backup supply.



## E&S: Biodiversity

- The Project and in particular road to border is close to biodiversity sensitive areas for mammal species such as Mongolian wild ass and bird populations, which have already been impacted by other regional mine developments. The ESIA identified deficiencies with baseline data, creating challenges to catch-up with Project construction and meet IFC and Rio's corporate commitment to achieve net positive impact over the life of the mine. Some retroactive adjustments were needed to Project components e.g. creation of road underpasses, to mitigate Project impacts.
- Deficiencies with baseline biodiversity data were recognized early in the E&S appraisal process. This is not an unusual situation, the Project had been developed to meet Mongolian legislative requirements and in the rapidly evolving field of biodiversity assessment further work was needed to meet international good practice, Performance Standards and Rio Tinto commitments to achieve net positive impact. Lenders acted quickly with the agreement of the client, as the Company engaged world experts to ramp up baseline studies. A Biodiversity Monitoring and Evaluation Program is being developed for priority and critical habitat qualifying species. Monitoring results will enable the Project to take an adaptive management approach with respect to managing impacts.
- The Company has committed to a comprehensive mitigation program. Local measures include the installation of bird flight diverters on all power lines, insulation works on medium and low voltage lines, traffic control measures and restrictions to minimize the impacts associated with the Project road use, hunting and collecting control measures, rehabilitation and restoration of disturbed land, establishment of a native plant nursery, and support to and engagement in sustainable regional development initiatives.
- OT has also committed to a very significant biodiversity offsets program. This program, which is now being completed, is designed to compensate over time for the impacts of the Project on biodiversity of the southern Gobi region. Mitigation and offset objectives, actions and targets will be clearly defined in the Biodiversity Action Plan (BAP), integrated into the Environment Management System and subject to lender audit and compliance monitoring.

## E&S: Community Consultation, ESIA Timing and Coverage

- **Community Consultation** From 2003 onwards, as activity shifted from exploration to project feasibility and development, OT began a comprehensive local stakeholder engagement process. An initial census of 15 herder households and their associated assets within a 20 km radius of the proposed mine site was prepared. Information from this census was included in the Detailed Environmental Impact Assessment (DEIA) prepared for the Mine & Processing Area in 2004. Follow-on E&S due diligence, for instance around water, supported by a Socio Economic Impact Assessment (2009) identified additional households who would be economically impacted. A broad base community engagement process with some 30 plus local meetings in a range of formats was conducted from 2010-2011. Parallel outreach was conducted in respect of the local environmental impact assessment; infrastructure development; water; community and regional development programs and other key impacts (reference Chapter A6 of the ESIA at [http://ot.mn/sites/default/files/documents/ESIA\\_OT\\_A6\\_CC\\_EN.pdf](http://ot.mn/sites/default/files/documents/ESIA_OT_A6_CC_EN.pdf))
- **ESIA Timing and Coverage** The ESIA builds on extensive prior due diligence by the Company from inception to comply with Mongolian E&S requirements. Combining and updating these documents to produce a standalone ESIA has taken significant time and tradeoffs between early disclosure and completeness. IFC's approach has attracted NGO criticism, on the one hand that the ESIA is being released too late and on the other, that certain components, for example some of the management plans (eg for mine closure) are not yet complete. However, IFC's procedures allow for this dynamic process, recognizing that on many transactions our involvement (as in this case) post dates the start of development, and that components of the extensive ESIA will have different milestones (as for instance in this case where certain action plans which are now in draft need to be completed as conditions of loan disbursement).



## External Communications

- **Civil Society Engagement** - Over the last two years, IFC, in coordination with MIGA, and WB communications staff, has engaged with civil society organizations interested in the Project, including bilateral meetings and broader outreach, keeping key organizations abreast of project updates and responding in writing to detailed questions submitted by interested stakeholders. In Mongolia, IFC has held meetings with leading civil society organizations to describe IFC's investment process and answer questions concerning our role. IFC has continued to fully engage with the civil groups to hear areas of concern and ideas for improving the project, explain that the project complies with IFC guidelines and demonstrate that is fully in line with the WBG's mission.
- **Media** - Mongolia's mining boom, the country's economic growth and the Oyu Tolgoi project have been featured in international media outlets including the New York Times, National Public Radio, the Financial Times and the Wall Street Journal. Most reporting has focused on the transformational nature of Oyu Tolgoi to Mongolia's economy, concerns surrounding water use in Mongolia and the juxtaposition of mining with the lifestyles of traditional herders. IFC and MIGA's potential role's have not been the focus of major stories to date. Most recently the focus of international reporting has been on the prospective use of coal power. IFC, working with the World Bank communications team, has explained how the project fits with World Bank guidelines on support for coal for thermal power generation, explaining that in advance of any investment the Company will produce an ESIA with an expanded, independently reviewed alternatives analysis to validate the choice of coal as a power source.
- **Public Communications Tools**- IFC has created a public webpage to give stakeholders, including interested media, a succinct overview of the development impact of the Project, a description of IFC and MIGA's proposed roles and access to fact sheets on a number of key issues, including the projects power source. The Company also has an active media engagement which has included a local TV, radio and billboard campaign to raise awareness of the economic benefits as well as an active on-line presence with fact sheets, Q & A at [www.ot.mn](http://www.ot.mn). As the project moves forward IFC will continue to showcase the WBG's positive role in Mongolia's mining sector and engage in an open dialogue with local and international civil society organizations.

## Other Project Risks & Issues

- *Mining and Market Risk* OT is a complex, massive mine. Operational performance can vary, possibly significantly (especially in block cave), investment requirements, as has been demonstrated to date, can increase substantially. OT will have cost risk on key inputs (energy), market risk on copper demand and potentially highly volatile and cyclical prices on outputs over the life of the mine.
- *Political Risks* While civil society groups that oppose mining altogether have very little support within Mongolia, public opinion is much more divided about private investment in the sector, especially foreign, and there is a strong current of resource nationalism. Since the OT investment agreement was ratified by Mongolia's parliament in 2006 (after 4 years of negotiations) there have been several efforts by politicians to re-open the agreement, and this will be an ongoing concern. Mining is a hugely capital intensive, long life business. Major mining countries like Chile, the US, Canada and Australia demonstrate clearly that stability for investors is essential to promote sustained investment and optimum development outcomes. Government support for the legal framework is essential. Staff meetings with relevant GOM ministers were held by IFC, MIGA and the Bank in December 2012, with ongoing follow-up with government to maintain continuing support for the proposed project financing
- *Broader Development Objectives* Development impact needs to be broader than OT. Rio will need to continue significant investment in training, boosting local sourcing, supporting downstream development and assisting with infrastructure needs, both around the mine and regionally.
- *Managing Expectations* OT is a massive mine in relation to Mongolia's GDP with potential to generate significant revenues for GoM, for employment and for broader economic growth. Nevertheless, large as it is, OT is just one investment. Rio will need to continue active engage with civil society to manage broader expectations in Mongolia on the potential Project benefits. IFC and MIGA and the broader World Bank group can help with this engagement.

OT is a transformational investment for Mongolia. The proposed financing is an opportunity for the World Bank Group to partner with Government of Mongolia and Rio to support a 21<sup>st</sup> century mining industry in Mongolia

