

SECTION C: IMPACT ASSESSMENT

CHAPTER C9: EMPLOYMENT

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9 EMPLOYMENT

9.1 INTRODUCTION

This Chapter of the ESIA describes the potential impacts of the Oyu Tolgoi Project on direct and indirect employment within the Project Area of Influence. The Chapter considers direct impacts associated with employment by Oyu Tolgoi and its contractors, together with indirect impacts associated with secondary/induced employment through the provision of goods and supply of services to the Project. Impacts associated with increased influx to the Project Area of Influence (i.e. the impacts of a large, additional workforce in the area) are discussed in *Chapter C8: Population & Influx*; impacts associated with changes to traditional livelihoods are discussed in *Chapter C11: Cultural Heritage*.

As the Project is already in the advanced stages of construction, there has already been significant employment (both directly by Oyu Tolgoi and indirectly through goods and services provision); numbers of employees and contractors, including those sourced from *Khanbogd soum*, are well understood. In order to manage this process, and to maximise the local labour content of the Project, Oyu Tolgoi has developed a series of hiring and recruitment policies and procedures and conducted extensive studies of labour availability through a Labour Census.

Local labour content is also governed by the Oyu Tolgoi Investment Agreement and other key legal documents which require a majority of Mongolian nationals through all stages of the Project.

Throughout the operations phase and through to decommissioning, Oyu Tolgoi will continue to apply its labour management, hiring and recruitment policies. Specific employment measures, including recruitment and hiring, working conditions for employees and contractors, training and retrenchment/demobilisation provisions are described in detail in *Chapter D17: Labour Management Plan*.

9.2 SCOPE

9.2.1 Definitions

Impacts are considered for both direct and indirect labour as defined by IFC Performance Standard 2 (PS2) 'Labour and Working Conditions' and in EBRD Performance Requirement 2 (PR2) 'Labour and Working Conditions'. The following definitions have been used:

- Employees – includes direct employees (staff/personnel) of Oyu Tolgoi;
- Contractor workers – refers to workers who are engaged with the Project through contractors or other intermediaries, and who perform work directly related to core functions and activities essential to Oyu Tolgoi's products or services for a substantial duration of time; and
- The supply chain includes any suppliers of goods and services to the Project. The remit of suppliers is recognised as an area where Oyu Tolgoi has no direct authority for interference, but can exert influence in terms of policy and enforcement of good practice.¹

9.2.2 Spatial Scope

The assessment covers direct and indirect employment within *Khanbogd soum* together with the wider *Omnogovi aimag* and South Gobi region. Due to the scale of the Project and the forecast labour requirements, employment benefits are likely to be felt on the national and international scale. The targeted proportion of Mongolian nationals versus expatriate employees in the Project's total workforce has been determined through the specific requirements of the Oyu Tolgoi Investment Agreement (IA).

9.2.3 Temporal Scope

The temporal scope of the assessment covers the construction phase, the life of the mine (operations or 27 years), and post-mine legacy.

¹ International Finance Corporation's (IFC) Guidance Notes: Performance Standards on Social & Environmental Sustainability. Guidance Note 2 'Labour & Working Conditions' [July 2007].

9.3 IMPACT ASSESSMENT

9.3.1 Summary of Impacts

Employment impacts arising from the construction, operations and closure phases of the Project are as follows:

- Generation of direct employment by Oyu Tolgoi and Project Contractors; and
- Creation of indirect employment by companies that participate in the Oyu Tolgoi supply chain.

A summary table of residual impacts following the application of mitigation measures is provided at the end of the Chapter (see *Table 9.5*).

9.3.2 Direct Employment Opportunities

Description of the Impact

The peak total workforce for the Oyu Tolgoi Project during construction (including all Oyu Tolgoi employees and contractors) was approximately 14,800 in December 2011, making the Project the largest employer in Mongolia at that time. Almost 10,000 workers, equaling 67% of the total workforce were Mongolian citizens. In addition, Oyu Tolgoi is undertaking training for an additional 3,300 Mongolian workers from which it can recruit staff, while providing additional trained workers into the Mongolian economy.

Construction is expected to last approximately 3 years until the third quarter of 2012 (having started in mid-2009). The workforce is now starting to diminish. Monthly employment records, supplied by the Human Resources Department, indicate that Oyu Tolgoi managed to recruit a sufficient labour force to supply the peak demand (contradictory to the challenges which may have been anticipated with respect to labour supply). The peak labour force number includes all employees recognising that some 500 were actually based in Ulaanbaatar (i.e. not all are at site) at the peak. As the total number of employees has now started to reduce, the company does not anticipate future labour supply issues.

A period nearer the end of the construction phase will mark a substantial and rapid reduction in the workforce demand when the personnel numbers will reduce by around 70% (over a 1-2 year period). Such a sharp decline in the workforce will have a detrimental effect on the local and regional communities for whom employment is one of the primary benefits of the Project. The unavoidable retrenchment resulting from the completion of planned construction works may also result in the weakening of public support for the Project.

During operations, the workforce will number between 3,000 to 4,000 people each year of which not less than 75% of the contractor workforce will be Mongolian nationals².

Closure of Oyu Tolgoi operations will lead to a major reduction in employment and eventually the full cessation of employment opportunities. The consequences of mine closure will be monitored over a period of time and a detailed plan for re-training and re-employment developed as the Project approaches that stage. As shown in *Table 9.1* below, the number of expatriate workers will gradually reduce over time and, by 2020, the foreign component of the workforce is expected to comprise 3% of the Project total.³

Employment levels at Oyu Tolgoi to date show that a significant number of Mongolian nationals and Khanbogd *soum* residents have already obtained jobs with the Project. At the end of 2010, 629 people from Khanbogd *soum*⁴ had been employed by Oyu Tolgoi and its contractors, of whom 346 were women and 283 men (out of the total *soum* population of 3,552). This gives total employment as 18% of the total population and 31% of the total working population (estimated at 2,018 from the CSP2010-2011 Social

² As per the Oyu Tolgoi Investment Agreement, *Clause 8.5.2 'For mining and mining-related work, not less than 75% of the entities' employees will be citizens of Mongolia'*.

³ As per the Oyu Tolgoi Investment Agreement, *Clause 8.4 'In accordance with Article 43.1 of the Minerals Law, not less than 90% of employees will be citizens of Mongolia'*.

⁴ These figures include people of Khanbogd origin, and do not count people now residing in Khanbogd who have migrated into the area from elsewhere in Mongolia.

Mapping Database). The majority of the 629 employed residents of Khanbogd were employed by contractors: at September 2011, 102 Khanbogd residents were employed by Oyu Tolgoi directly – 71 males and 31 females. The average monthly wage of those employed directly was \$438 for males and \$453 for females.

Women from Khanbogd *soum* are employed by Oyu Tolgoi contractors in catering positions in the camp mess facilities on site, as well as in administrative positions. To date, men have been predominantly employed as drivers, labourers and security guards. A number of Khanbogd residents are also engaged in professional employment with Oyu Tolgoi. In Ulaanbaatar, the urban headquarters of Oyu Tolgoi, women are employed in numerous professional positions.

Table 9.1: Project Workforce Estimate, 2009 to 2018*

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Construction				Operations					
Mongolian Nationals	1,009	4,331	11,722	6,184	3,533	2,903	3,116	3,168	3,218	3,230
Expatriates	170	1,634	6,182	3,844	561	477	389	319	324	326
Total Workforce	1,179	5,964	17,904	10,028	4,094	3,378	3,506	3,487	3,542	3,556
% Mongolian Nationals	86%	73%	65.5%	62%	86%	86%	89%	91%	91%	91%

Source: Estimate from Oyu Tolgoi Workforce Database *Note: Oyu Tolgoi maintain a monthly update of all employees, contractors and subcontractors; Oyu Tolgoi 2011 data provided by Oyu Tolgoi HR Department (comprising actual figures for 19th December 2011).

Despite the considerable employment opportunities offered by Oyu Tolgoi, local communities are limited in their ability to take advantage of them. The level and range of skills and applicable working experience available in the communities in Khanbogd *soum* and across much of the *aimag*, particularly in rural areas, is limited by a poor skills base. Workers from the cities such as Dalanzadgad and Ulaanbaatar are generally educated to a higher level and, therefore, have better access to more skilled employment within the firm.

Without targeted training support from the Project, the ability to acquire a position, and successful performance once hired, will favour experienced (skilled) personnel for professional roles, the majority of whom would come from the country's urban and industrialised areas. This limitation may not only undermine Oyu Tolgoi's goal of improving livelihood conditions for the host communities in the Project Area of Influence, but may also create conflict between in-migrants and the local population. On the broader level, Mongolia has a shortage of skilled technicians, professional engineers and operators who can adequately meet the labour market demand in the mining sector (i.e. covering all of the current and planned natural resources projects). Competition for skilled labour will mean that qualified graduates in Mongolia have a high chance of professional employment.

Moreover, although Mongolian women are typically educated to a higher level than men (who are often removed from schooling at a younger age to provide assistance with tending the livestock), there have been some legal barriers to the roles that women can undertake in the workplace (see Article 101 of the Labour Law).⁵ A proposal is currently under discussion to amend this Law, allowing women to work in underground mining operations and to drive heavy vehicles and machinery.⁶ Local attitudes toward women working outside the household have also changed over recent years as an increasing proportion of women in Mongolia are becoming income-earners.

⁵ Oyu Tolgoi Project Socio-Economic Impact Assessment, Final Report, September 2009. Centre for Policy Research, Population Training and Research Centre, School of Economic Studies, Mongolia National University.

⁶ At present, under Article 101 of the Labour Law, women are prevented from participating in a number of heavy duty activities. This Article is under review with the Mongolian government but it still remains in force.

Mitigation Measures

Oyu Tolgoi has implemented a number of measures through early construction to close the skills gap, to support local hiring and to ensure equitable employment conditions. These measures are discussed below.

Facilitating Local/National Employment

Oyu Tolgoi is committed both to preferential local hiring and to equitable employment, in concurrence with its Investment Agreement (IA) with the Government of Mongolia. Specifically under the IA framework, Oyu Tolgoi is committed to the following employment targets:

- Oyu Tolgoi will use its best endeavours to ensure that **not less than 60%** of the total Oyu Tolgoi Project construction workforce engaged at site will be Mongolian nationals during the construction period and any expansion periods;
- in direct mining operations, Oyu Tolgoi must ensure that **not less than 75%** of mining contractors are Mongolian nationals;
- for the remainder of the operating workforce from the commencement of production, **90% will be Mongolian nationals**; and
- within five years from the commencement of production, Oyu Tolgoi will use its best endeavours to ensure that **no fewer than 50%** of its engineering personnel are Mongolian nationals and, within 10 years of the commencement of production, no fewer than **70% of its employed engineers** are Mongolian nationals.

Oyu Tolgoi will also prioritise the employment of local residents from the *soums* within the Project Area of Influence – Khanbogd, Manlai, Bayan Ovoo and Dalanzadgad *soums*, as well as from other areas in the South Gobi region.

Labour Census

The Oyu Tolgoi recruitment procedure and training strategy have drawn on an initial labour skills census of the population in the South Gobi. Oyu Tolgoi partnered with Millennium Challenge Account of Mongolia to fund this labour census which was completed at the end of 2010.

Since 2010, The Oyu Tolgoi Human Resources (HR) Department have continued to assess labour skills and availability through the Project Area of Influence. The *Labour Skills Survey* is an ongoing process that enables community members to enrol onto a database for people seeking employment at Oyu Tolgoi. Information is gathered on their education and training, experience and desired employment. The Communities & Social Performance Department forwards the registrations each month to HR and also to contractor companies such as CAML so that they can see what local skills are available to recruit. This has resulted in additional local people being employed by Oyu Tolgoi and its contractors. Results of the recent survey are presented below. As of end of November of 2011, 8,819 Mongolian people were recruited by Oyu Tolgoi and its contractors.

Table 9.2: Results of Labour Skills Survey as at August 2011 (since August 2010)

Soum	Registered	Employed (hired)
KB	155	27
ML	164	119
BO	94	32
DZ	468	34
Total	881	212

Employment data to the end of November 2011 is provided in the table below.

Table 9.3: Number of employed, by residential origin, people, by November 30 2011

Gender	Khanbogd	Bayan Ovoo	Manlai	Dalanzadgad	South Gobi	Rest of Mongolia	Total
Oyu Tolgoi, Nov 30 2011							
Male	83	5	8	74	20	789	979
Female	34	1	2	29	6	424	496
Sub-total	117	6	10	103	26	1,213	1,475
Others, Nov 30 2011							
Male	508	38	150	385	41	4,728	5,850
Female	254	5	71	248	8	908	1,494
Sub-total	762	43	221	633	49	5,636	7,344
Total							
Male	591	43	158	459	61	5,517	6,829
Female	288	6	73	277	14	1,332	1,990
Total	879	49	231	736	75	6,849	8,819

Results from this work are being used for the following purposes:

- To identify best ways to equip the local workforce with the skills necessary for employment at the Oyu Tolgoi Project, as well as with other mining and industrial projects in development within Mongolia;
- To ascertain training gaps and needs, and to develop tailored curricula in conjunction with the existing vocational training centres in Omnogovi aimag and Mongolia; and
- To guide Oyu Tolgoi in working with a number of partners, including training institutes and NGOs, to facilitate and implement widespread training and skills development.

For lower skilled people, as revealed through the Labour Skills Survey, support programmes are being implemented. With respect to actions being taken to help local people obtain employment or improve their livelihoods, training programs are underway as shown in the table below. Plans are being made to engage specialist 'job readiness' trainers to help upskill herders and unskilled people. From the November 2011 CSP departmental report, specific vocational training has been provided as follows:

Table 9.4: Number of participants (cumulative) who received technical training sessions

Soums	Vegetable growing	Felt making	Bakery	Cooking	Tailoring	Milk processing and hygiene	Financial book keeping	Work place safety	Total
KB	8	7	2	1	2	26	16	7	69
DZ			2	2	3		10		17
ML	8		1	2		8	5	6	30
BO	11		2	1	1		8		23
Total	27	7	7	6	6	34	39	13	139

Equitable Salaries and Wage Levels

Oyu Tolgoi will monitor its workforce wages to ensure that they are equitable and appropriate in the Mongolian context and are based on the premise of fairness and equal remuneration as per the principles of International Labour Organisation (ILO) and IFC/EBRD standards.

As described in *Chapter B1: Introduction*, by 2020, the average real wage in Mongolia is forecast to be 30% higher under the Oyu Tolgoi scenario compared to a model variant without the Oyu Tolgoi Project.⁷ Wages paid to Oyu Tolgoi employees will be based on annual salary and benchmarking surveys.

Vocational Training

In accordance with *Clause 8.12 of the Investment Agreement*⁸, Oyu Tolgoi has developed a *5-Year Training Strategy and Plan* for the period of 2010-2014. This Plan pursues a number of key objectives. These include the following:

- Enhancing the qualifications of Mongolian nationals, thereby enabling them to obtain and sustain permanent positions with the Project; and
- Assisting those less qualified with gaining access to Project employment and with undertaking specialist roles.

From 2010-2014, Oyu Tolgoi will deliver 2.8 million hours of training to develop mining capabilities for Mongolian citizens. This includes training in the following disciplines:

- Operators (850 people);
- Trades persons (700 people);
- Professionals and technicians (600 people); and
- Administration and Management (1,100 people).

The *Training Strategy and Plan* was submitted to and approved by the Government of Mongolia in 2010. The Plan commits Oyu Tolgoi to invest a minimum of US\$50 million over the next five years in the following areas:

- Training facilities, infrastructure and training equipment;
- Development of vocational and professional training and education in Mongolia utilising international institute partnerships;
- Design of training delivery;
- Training management and co-ordination; and
- Specific programmes for staff development (graduate scholarships, professional development courses etc).

Also under the Training Strategy, Oyu Tolgoi has signed a Memorandum of Understanding with Mongolia's Ministry of Education to undertake the following:

- Provide 150 to 230 university scholarships over a five-year period;
- Refurbish five existing technical and vocational (TVET) colleges and to establish two new TVET colleges in Dalanzadgad and Ulaanbaatar⁹; and
- Establish a New Employee Scheme to train 3,300 Mongolian workers per year.

Most of the training during the construction phase has focused on raising the skill levels of Oyu Tolgoi employees to equip them better for the operational phase. During Project operations, Oyu Tolgoi will continue to provide training for the national workforce, to prepare Mongolian staff for an efficient move into operational roles initially held by expatriate personnel. This will involve the following:

⁷ "The development of the Oyu Tolgoi copper mine: an assessment of the macroeconomic consequences for Mongolia", School of Economic Studies/ BAEconomics, 2011.

⁸ "The Oyu Tolgoi Training Strategy and Plan will focus on training skilled workers for the Oyu Tolgoi Project and training them for professions, and improving their vocational and professional skills, applicable to the Oyu Tolgoi Project and mining in Mongolia generally and specifically in the Southern Gobi region".

⁹ The cost for this is estimated at US\$50 million. Oyu Tolgoi has pledged US\$5million and will seek to collaborate with other mining companies and industries on these infrastructure initiatives.

- Training for operators, trades people, professionals and technicians will utilise various forms of training delivery, including classroom, online resources, and on-the-job training. As described above, 2.8 million hours of training will be provided on a classroom basis;
- Oyu Tolgoi will have access to the full suite of Rio Tinto online and classroom-based mining education modules covering the skills required for copper mine operations;
- The level of professional skill/expertise of all Oyu Tolgoi employees will be tracked in a purpose-built database that will compare actual versus required competencies, thereby helping identify specific training needs and implement tailored training;
- All university and vocational training curricula will include English and Mongolian language courses. Currently the major mining-related universities and training institutions within Mongolia use a number of curricula that are not specific to the Oyu Tolgoi Project (e.g. Russian content and methodology); and
- English language instruction will permit Mongolian employees to become eligible for international assignments/exchange positions within the wider Rio Tinto group. Oyu Tolgoi will provide opportunities for employees and graduates to take secondments to existing Rio Tinto mining operations overseas.

Local Worker Training

Oyu Tolgoi is collaborating with Rio Tinto to develop a range of bridging /job-readiness training packages for potential local employees. This training programme commenced in early 2011 with a focus on preparing local residents in the Project Area of Influence for industrial level employment, as well as for shift-type work.

Local residents from Khanbogd *soum* and other South Gobi residents will be given preference for vocational training at the Khanbogd Vocational Training Centre that is being built and which will be run by Oyu Tolgoi. This centre is expected to be operational in 2012 and aims to significantly increase opportunities for local worker training.

Employment of Women

Under the current Mongolian Labour Law, there are some restrictions in place over the types of employment which women can undertake for Oyu Tolgoi or its contractors (see Article 101 of the Labour Law).¹⁰ Although this Law is currently under review, the Oyu Tolgoi recruitment and employment strategy abides by the current restrictions. Legal barriers aside, Mongolian women are typically educated to a higher level than men (who are often removed from schooling at a younger age to provide assistance with tending the livestock) and, hence, are a critical resource for Oyu Tolgoi. Local attitudes toward women working outside the household have also changed over recent years as an increasing proportion of women in Mongolia are becoming income-earners.

To date, women from Khanbogd *soum* are employed by Oyu Tolgoi contractors in catering positions in the camp mess facilities on site, as well as in administrative positions. A number of female Khanbogd residents are also engaged in professional employment with Oyu Tolgoi. In Ulaanbaatar, the urban headquarters of Oyu Tolgoi, women are employed in numerous professional positions, fulfilling roles and team supervisors and discipline leaders. To further reduce any barriers to employment, a recent labour force survey conducted by has shown that from the total of 114 trainees currently undergoing job readiness training in Khanbogd, 79% of the trainees are represented by women and 21% are men. Women are consistently regarded as a key element of the Oyu Tolgoi workforce and, clearly, efforts are being made to proactively recruit women. This target must be seen against the limitations of both the Labour Law and the need to balance household demands i.e. without placing undue pressure on child care and other household demands by recruiting female heads of household where this is inappropriate.

Retrenchment and Demobilisation

Oyu Tolgoi has developed policies and procedures to guide the retrenchment of employees in accordance with the Labour Law of Mongolia. For construction demobilisation, the following measures will be implemented as a minimum:

¹⁰ Oyu Tolgoi Project Socio-Economic Impact Assessment, Final Report, September 2009. Centre for Policy Research, Population Training and Research Centre, School of Economic Studies, Mongolia National University.

- Local (Project Area of Influence) and regional (South Gobi) construction employees will be prioritised for operations roles, and will be provided with the training required to help them transition from construction to operations;
- Oyu Tolgoi will promote the utilisation and deployment of the mine site construction workforce in regional infrastructure and development projects that are being funded/supervised by the Company, as well as by its suppliers and service providers, such as developers involved with delivering housing stock in Khanbogd for the operations workforce;
- Oyu Tolgoi intends to avoid Collective Redundancies (as defined in EBRD PR2). Oyu Tolgoi will require its construction contractors to manage demobilisation of their Mongolian personnel and sub-contractors to avoid Collective Redundancies and to ensure that large numbers of workers are not retrenched simultaneously where possible;
- Where retrenchment is unavoidable, notification periods, consultation provisions and severance packages will be compliant with the Labour Law of Mongolia and the requirements of IFC PS2/EBRD PR2;
- As part of the demobilisation, all mine site construction employees will be provided with transportation back to their place of origin to avoid them remaining at the site or in the local communities in search of other work opportunities; and
- All Chinese contractor workers will be recruited, mobilised and demobilised in China once their assignment has been completed. A number of Chinese contractors engaged in the Oyu Tolgoi Project also employ some Mongolian workforce, mainly unskilled or semi-skilled workers. In such cases, the Mongolian nationals are hired in-country and are mobilised to the site according to a standard contract procedure.

At the end of the commercial life of the Project, it is anticipated that Mongolian operations workers will have become an established part of the local community due to the long life of the Project (i.e. a 27 year life of mine) and that the planned housing model will encourage workers to establish their own homes in Khanbogd. Through the economic growth and development of Khanbogd and the wider Omnogovi *aimag*, it is expected that opportunities for waged labour and income sources will have significantly increased, thereby helping abate the negative effects of mine closure.

Support to Female Employees

The Oyu Tolgoi 'Hiring Policy and Procedure' encourages the hiring and training of female workers wherever possible both as direct employees and contractor staff. Oyu Tolgoi will cooperate with applicable local NGOs to promote female employment through training programmes (including business skills training) and will seek collaboration with local business entities set up and operated by women (e.g. local cooperatives).

As part of its *Local Business and Economic Development (LBED)* and *Local Supplier Development* initiatives Oyu Tolgoi will also be providing training and support to local businesses, many of which will develop as a result of the growing demand for goods and services from mining activities. Oyu Tolgoi will encourage the employment of women by local businesses and suppliers within the framework of the aforementioned programmes.

Impact Significance

The Oyu Tolgoi Project will have a major **positive** impact on employment during construction and operations, both in the Project Area of Influence, in the wider South Gobi region and in Mongolia, i.e. of **widespread** extent. Considerable employment opportunities for Mongolian nationals and local communities have already been generated and are therefore **certain**. Providing that preferential recruitment and employment procedures continue to be applied, and training of the workforce is undertaken in accordance with the IA commitments and the Training Strategy and Plan described in the sections above, the overall benefits of direct employment will be **medium-term or at least through the expected life of mine**.

As the Project moves towards decommissioning and closure, there will be a rapid decrease in the workforce requirements. Through the development of the Labour Management Plan, Oyu Tolgoi will seek to avoid multiple retrenchment and will develop a detailed plan for the gradual release, retraining and support of employees whose services are no longer required. It is **certain** that retrenchment will be required and there is **very likely** to be a **major adverse** impact on income levels within the *soum*. Oyu Tolgoi will mitigate these effects through the development of a detailed decommissioning and

retrenchment plan and through the redeployment of the workforce wherever possible. Results are, however, expected to be **medium-term**.

9.3.3 Indirect Employment

Description of the Impact

Oyu Tolgoi and its contractors will require numerous vendors, suppliers and service providers to meet the daily operating needs of the Project together with the domestic needs of its employees. Oyu Tolgoi and its contractors have already sourced and procured numerous goods and services during early construction, including catering, laundry, supply of vehicles and transportation services, provision of food supplies, security patrols, as well as some construction equipment from within Mongolia.

In addition, the Project will induce secondary/tertiary economic activity due to the influx of migrants from outside the Project's Area of Influence who will require housing, food, and other types of resources and services.

There will be opportunities for utilising local goods and services for the Project and related activities (e.g. aggregates / sand, concrete, building materials, timber, equipment hire, food and transport services, etc.). Many of these opportunities, such as the supply of vehicles and materials, will be let through supply and procurement contracts, while others will depend upon a purchasing strategy of individuals, such as the catering manager of the construction camp.

Services and resources provided to the Project will include the following:

- Implementation of works and provision of supplies related to construction, operation and closure of the mine and ancillary facilities;
- Provision of transportation, freight and storage services to the Project;
- Provision of food supplies, catering, and cleaning services;
- Provision of building and auxiliary materials and accessories, engineering, installation and maintenance;
- Provision of white goods, electronic appliances, communications and measurement equipment;
- Security personnel;
- Accommodation, laundry and clothing;
- Retail services;
- Provision of fuel; and
- Recreation and entertainment.

Typically, 1.5 - 2.5 jobs in service and supply sectors are created for each direct job generated by a mining project.¹¹ At the local and regional levels this is likely to stimulate interest from local agricultural producers, as well as induce growth in light industries (e.g. mechanics) and services such as retail, hospitality, transportation, etc.

At the national level, a range of goods and services are already being provided to the Project by Mongolian companies including vehicles, construction equipment, and fuel. From January 1 2010 until August 15 2010, Oyu Tolgoi had signed 98 contracts with Mongolian companies amounting to an overall value of US\$206 million. A number of these contracts were with local and regional suppliers.¹²

In-migration to the Project Area of Influence triggered by the Oyu Tolgoi development will also result in local businesses benefiting from the growing demand for resources, goods and services. Small and medium-sized enterprises are likely to gain from the movement of people into the area, particularly those engaged in the accommodation, food service and other domestic supply sectors. It is expected that this will lead to some businesses from elsewhere in the Omnogovi *aimag*, South Gobi region and other

¹¹ This figure is derived from international experience of other mining projects in a remote setting; The International Council for Mining and Metals (ICMM) Toolkit (2006) states that induced employment is typically in the range of 165-250% of the sum of direct and indirect employment.

¹² Information from Oyu Tolgoi Procurement Department, 2011.

provinces of the country moving into the *soum* to offer their products and services in response to the increased demand induced by a rising population. These businesses are likely to require a small but steadily growing workforce, thereby generating further opportunities for employment.

Although the rising demand for various goods and services has potential to stimulate the growth and diversification of the business base, local businesses in Khanbogd and Dalanzadgad do not presently have the capacity to meet Project demands in terms of the quantity, quality, and/or availability of the goods and services required. As a result, a portion of goods and services will need to be outsourced from Ulaanbaatar or from elsewhere in Mongolia, or imported from China or other countries, until local traders and entrepreneurs can offer sufficient quality and reliability of supply.

Supply of agricultural produce is one example of such constraints. Oyu Tolgoi has significant and diverse demands for agricultural products, however the local agricultural sector is small-scale, and most of the agricultural items that can be purchased locally are staples derived from pastoral practice, (i.e. mainly meat and milk with minimal commercial crops). Improvements to local agricultural practices and technologies coupled with a major boost of production that is required to adequately meet the existing demand, are unlikely to be implemented in the short-term, but the potential exists for long-term development of the agricultural sector to support Project operations.

Mitigation Measures

Oyu Tolgoi Procurement Principles and Policies

The Oyu Tolgoi *Procurement Principles and Policies* is a corporate commitment of Oyu Tolgoi to prioritise the national and South Gobi regional content of Project procurement. This initiative has been developed to fulfil the terms of the Investment Agreement commitments as outlined below:

Clause 4.12 – *“The Investor shall support special business development programmes to assist in starting and growing local businesses so they can supply the Oyu Tolgoi Project, as well as the expansion and diversification of Mongolian business partners so that they are not fully dependent on the Oyu Tolgoi Project.”*

Clause 9.9 – *“The Investor shall provide reasonable assistance to regional development, assistance to local regions and creation of new business and employment opportunities.”*

National Supplier Development Policy

This policy is established to facilitate Oyu Tolgoi’s commitment to working with and developing national suppliers. The policy assists Oyu Tolgoi in realising the dual objectives of:

- meeting the commitments of their Investment Agreement with the Government of Mongolia with respect to the development and facilitation of local suppliers; and
- providing support for the development of a long term, sustainable, localised supply chain to meet wherever practicable the life of mine requirements of Oyu Tolgoi from within Mongolia.

To be eligible for classification as a National Supplier, a business must:

- be a Mongolian Registered Company;
- pay Value Added Tax (VAT) and any other applicable or associated taxes required by Mongolian Law; and
- transact in MNT (local currency).

While national suppliers are typically more mature than South Gobi suppliers, they are still largely unfamiliar with the requirements and expectations of the resource sector, and in many instances this has prevented their effective participation in competitive tenders for Oyu Tolgoi’s requirements. The Policy is designed to address those areas where Oyu Tolgoi can provide support to help these suppliers be able to participate in Oyu Tolgoi procurement.

To facilitate the growth of national suppliers within Mongolia, Oyu Tolgoi utilises a range of tools including:

- **Qualification support and capacity-building** to allow suppliers to bid effectively for Oyu Tolgoi contracts;
- **Transparency on expenditure plans** to allow suppliers to better target their capability and services to meet Oyu Tolgoi’s needs;

- Oyu Tolgoi will provide **feedback to suppliers** who do not succeed in being awarded tenders. This will educate suppliers by providing feedback on areas that they can improve so that they may become more competitive in any future tenders for similar requirements;
- All goods or services greater than USD\$20,000 in value, will be subject to **competitive bidding**. This competitive bidding facilitates the development of national supply; the promotion of supplier diversification; equitable spread of wealth across Mongolia and the development of competitive supply chains in Mongolian companies;
- Oyu Tolgoi has developed a **supplier recognition programme**, whereby Oyu Tolgoi rates and awards their key suppliers for their effectiveness and satisfactory performance against key contractual deliverables;
- Oyu Tolgoi will **identify category targets for National Supplier expenditure**. All targets will be advertised to the public annually and made available on the Oyu Tolgoi procurement website. In the spirit of maintaining the competitiveness there will never be a target greater than 80% for national suppliers;
- Oyu Tolgoi will develop **Master Service Agreements** with national suppliers, where applicable, so that they do not need to continually bid for one-off or singular tender requirements. This provides assurance to national suppliers giving them support to invest and expand their businesses;
- Oyu Tolgoi will provide **simplified terms and conditions** for local suppliers. For goods over 100,000 USD and for construction services over 10,000,000 USD, terms and conditions remain to international standards;
- **Preferred supplier status if all things equal** - when two or more tenders are technically sufficient and all components of the tender are equal, apart from a small price differential, national suppliers will be chosen over international suppliers on a preferential basis and subject to satisfactory compliance with health, safety and environment requirements; and
- A national supplier will be given an **opportunity to revise their bid price** in the following circumstances:
 - if the bid is greater than \$100,000;
 - if the goods or services are technically sufficient; and
 - if the price difference between the international supplier and the national supplier is within 10%.

South Gobi Supplier Development Policy

This policy is established to facilitate Oyu Tolgoi's commitment to working wherever possible, as a first preference, with those Suppliers classified as South Gobi by definition.

This policy assists Oyu Tolgoi in realising the dual objectives of:

- Meeting the commitments of their Investment Agreement with the Government of Mongolia with respect to the development and facilitation of local suppliers, especially in the South Gobi region surrounding operations; and
- Providing support for the development of a long term, sustainable, localised supply chain to meet wherever practicable the life of mine requirements of Oyu Tolgoi from within the surrounding region.

For the purposes of this policy, a South Gobi supplier refers to a supplier of goods manufactured or services rendered, within the Omnogovi *aimag*. This definition complies with and is derived from the Public Procurement Law of Mongolia which defines goods of Mongolian origin as follows "...goods explored, planted, grown, produced, processed or made in Mongolia, or new goods with obviously modified characteristics, purpose and for of use, created by assembling the majority of their parts".

Those suppliers who can establish that the goods they produce or services they provide meet the South Gobi supplier requirements, will be eligible for participation in the support programs outlined in the policy. For sake of clarity this policy specifically excludes trading companies located in the South Gobi.

To be eligible for classification as a South Gobi Supplier, a business must:

- Be a South Gobi registered Company;
- Pay Value Added Tax (VAT) and any other applicable or associated taxes required by Mongolian Law;
- Have the company's permanent nationwide workforce comprised of in excess of 75% Mongolian National employees located in Omnogovi aimag;
- Transact in MNT (local currency); and
- Have their business head / branch office registered in Omnogovi aimag where Oyu Tolgoi uses this office as the contacting entity.

Suppliers within the South Gobi region are currently largely unfamiliar with the requirements and expectations of the mining sector, and in many instances this has prevented their effective participation in competitive tenders for Oyu Tolgoi's requirements.

The South Gobi Supplier Development Policy is designed to address those areas where Oyu Tolgoi can provide targeted enablers to facilitate the preferential engagement of South Gobi suppliers and fast track their ability to make the adjustments to ensure greater alignment and compliance with the requisite mining sector and industry standards moving forward.

To address this, Oyu Tolgoi has identified some typical characteristics or challenges currently faced by South Gobi suppliers for diagnostic purposes, in ensuring the policy provides the correct support to facilitate their ongoing preferential engagement.

To facilitate the growth of South Gobi suppliers, Oyu Tolgoi provides and supports a number of processes for South Gobi suppliers. Outlined below are a number of development processes specifically established for South Gobi Suppliers. These processes are in addition to the development programs listed in the *National Supplier Development Policy*, which are also available to South Gobi suppliers:

- **Dalanzadgad Supplier Development Centre:** ensures that South Gobi businesses have access to training, coaching and business development support that will facilitate the emergence of suppliers capable of meeting Oyu Tolgoi's exacting supply standards and those of the wider Mongolian market;
- **Micro-credit program:** provides a micro credit program to South Gobi based suppliers to facilitate the emergence of new micro and small to medium sized enterprises and to foster the expansion of existing businesses scope and scale through supported capital acquisitions;
- **Price Premium:** provides a range of agreed pricing premiums (contingent on the category being sourced and the supplier development strategy being pursued) between 5% and 25%. These premiums will be authorised by Oyu Tolgoi management and decided by category on an annual basis and posted on the Oyu Tolgoi procurement website accordingly;
- **Category Targets:** Oyu Tolgoi will identify category targets for South Gobi spend. All targets will be advertised to the public annually and made available on the Oyu Tolgoi procurement website. In the spirit of maintaining the competitiveness there will never be a target greater than 80% for South Gobi suppliers;
- **Revised payment terms:** Oyu Tolgoi will provide revised payment terms for South Gobi suppliers (linked to progress payment schedule and achievement of agreed deliverables within nominated timeframes);
- **Preferred Supplier** – when two or more tenders are technically sufficient and all components of the tender are equal, apart from a small price differential, South Gobi suppliers will be chosen over national and international suppliers on a preferential basis and subject to satisfactory compliance with health, safety and environment requirements; and
- **Right of Reply** – a South Gobi supplier will be given an opportunity to revise their bid price in the following circumstances:
 - If the bid is greater than \$100,000;
 - If the goods or services are technically sufficient; and

- If the price difference between the national or international supplier and the South Gobi supplier is within 10%.

Local Business and Economic Development

At the local level, micro-credit funds have been established in the Project Area of Influence through the *Local Economic and Business Development (LBED) Programme*. The programme can be summarised as follows:

- The overall objective is to help communities and businesses active in the South Gobi region to produce goods and services for not only mining companies but also for other markets at the local, regional and national levels;
- The first phase of the micro-credit programme titled “Gobi Prosperity” was launched in February 2011 in Khanbogd and Manlai *soums* in collaboration with the *soum* Governor’s office, NGOs and local commercial banks. As of May 2011, Oyu Tolgoi together with its partners, had invested in **55 small businesses** and provided the first of three scheduled training courses to these participants. An additional **27 small businesses** had also participated in the ‘training only’ option;
- Micro-finance loans are being provided for commerce, animal product processing, traditional clothes making, carpentry, wool manufacturing, public transportation, bakery production, restaurants and other businesses. Interested local entrepreneurs and businesses are being targeted for this programme; and
- Herders affected by land acquisition and displacement and vulnerable people (including women headed households) are receiving priority access and additional support from Oyu Tolgoi to be involved in the Programme, such as the coverage of initial loan amount, etc.

The Programme is being administered by a number of local community-based organisations (e.g. Development Solutions and Amjiltiin Tomiyo from Dalanzadgad). Two Mongolian banks – Khaan and Xac – are also involved with the Programme. These banks have been provided with “seed” funds from Oyu Tolgoi to disburse loans.

Oyu Tolgoi has invested in the development of an agricultural cooperative in Dalanzadgad that supplies vegetables to the Project. It is expected that further crop production will be predominantly focused in Dalanzadgad at least initially, where water and other resource inputs are more readily available and cultivation already exists on a more commercial scale. By late-2011, the mine site aims to source all camel milk from Khanbogd *soum* and from other herders in the *aimag*.

Impact Significance

Indirect job generation and procurement opportunities related to the Oyu Tolgoi Project will have a **positive** impact on employment in the Project Area of Influence, wider Omnogovi *aimag*, and Mongolia as a whole, and will therefore be of **widespread** extent. Favourable conditions for national, regional and local suppliers, service providers and businesses have already been created and positive impacts are therefore **certain**. Implementation of effective local supplier and business development programmes throughout construction and operation phases of the Project will ensure that the overall benefits of indirect employment, supply and service provision will be **long-term** (i.e. given the long life of mine).

9.4 SUMMARY OF RESIDUAL IMPACTS

The main impacts related to employment have been identified as follows:

- Generation of direct employment through creating job opportunities with the Oyu Tolgoi Project and its contractors, both in the course of construction and during operation of the mine; and
- Indirect employment triggered by the Project demand for resources, goods and services, resulting in a favourable business environment and creation of spin-off jobs in the supply and service sectors.

The mitigation and enhancement measures related to the identified impacts primarily include the following:

- Fulfilment of the targets for national and local content of employment as stipulated in the Oyu Tolgoi Investment Agreement through preferential recruitment and hiring;

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- Promoting the employment of women, including for managerial and technical/engineering positions;
 - Provision of vocational/skills training and professional development for Mongolian workforce;
 - Advance planning of retrenchment and workforce demobilisation (both upon completion of construction and at the end of the mine operational life) and execution of these processes in accordance with Mongolian Labour Law and international guidelines; and
 - Implementation of the range of support and assistance programmes to strengthen the capacity and stimulate the growth of local businesses.

Providing the application of the afore-mentioned mitigation measures, the residual significance of impacts related to direct and indirect employment has been assessed as **positive**.

Table 9.5 below summarises the impacts and mitigation measures, and assesses the significance of residual impacts on employment (post-mitigation).

Table 9.5: Summary of Employment Impacts

Impact	(1) Receptor	(2) Phase	(3) Impact Categorisation	(4) Potential Significance	Design, Enhancement or Mitigation Measures	Management Plans, Policies and Procedures	Residual Significance
Direct employment by Oyu Tolgoi and contractors, skills development and training opportunities	Local, regional and national residents	Construction Operations	Duration Medium-Term Extent Widespread Likelihood Certain	Positive	<ul style="list-style-type: none"> ▪ Labour and skills census of South Gobi population and database. ▪ Targets for employing Mongolian nationals. On-the job and vocational training for construction and operations workforce. ▪ Preferential recruitment for local and Mongolian residents. ▪ Wide publication of vacancies during construction and operations. ▪ Promotion of women in employment. ▪ Job-readiness and other bridging training for local workers. ▪ Non-mining employment and business development opportunities through micro-finance and other schemes. ▪ Tailored working hours/shifts/rotations for local and Mongolian workforce. ▪ Designated employment centres and dedicated recruitment officers. ▪ Salary benchmarking surveys. ▪ Establish 2 new TVET colleges and contribute to refurbish 5 existing TVET colleges. ▪ Contractors and suppliers required to meet HR/HSE and other applicable standards. ▪ Regular audit of Oyu Tolgoi and contractors. ▪ Advance planning and management of retrenchment and demobilisation. ▪ International exchanges and secondments for employees to Rio Tinto operations. ▪ Various training initiatives for local businesses, entrepreneurs, affected herders. 	Investment Agreement (Clauses on employment & training) Oyu Tolgoi Hiring Policy and Procedure Oyu Tolgoi Anti-Discrimination and Harassment Policy Oyu Tolgoi Employee Handbook Oyu Tolgoi Camp Policy and Code of Behaviour Oyu Tolgoi 5-Year Training Strategy and Plan Oyu Tolgoi Workplace Grievance Procedure Labour Management Plan Stakeholder Engagement Plan	Positive
Indirect employment through provision	Local, regional and national	Construction Operations	Duration Long-Term	Positive	<ul style="list-style-type: none"> ▪ Identification of Mongolian suppliers and service providers available regionally and locally, and maintaining a database. 	Statement of Procurement Practice and Local Supplier Development plans	Positive

Impact	(1) Receptor	(2) Phase	(3) Impact Categorisation	(4) Potential Significance	Design, Enhancement or Mitigation Measures	Management Plans, Policies and Procedures	Residual Significance
of goods and services	residents		Extent Widespread Likelihood Certain		<ul style="list-style-type: none"> ▪ Prioritising national, regional and local content of Project procurement. ▪ Support and assistance for the development of local businesses. ▪ Cooperation with banks to fund micro-credits for small and medium size businesses. ▪ Establishing Supplier Development Centres. ▪ Provision of training and technical assistance programmes and market access activities to the existing business operators in Project Area of Influence. ▪ Priority access and additional support to herders and vulnerable people as part of Local Economic and Business Development Programme. ▪ Encouraging the development of local agricultural businesses through targeted procurement. 	Local Business and Economic Development Programme Oyu Tolgoi Supplier Development Principles and Policies Labour Management Plan	
Reduction in direct and indirect employment opportunities	Local, regional and national residents	As the Project transitions to operations And As the Project approaches closure	Duration Medium-Term Extent Widespread Likelihood Certain	Major Adverse	<ul style="list-style-type: none"> ▪ Support and assistance for the development of local businesses. ▪ Cooperation with banks to fund micro-credits for small and medium size businesses. ▪ Establishing Supplier Development Centres. ▪ Provision of training and technical assistance programmes and market access activities to the existing business operators in Project Area of Influence. ▪ Priority access and additional support to herders and vulnerable people as part of Local Economic and Business Development Programme. ▪ Encouraging the development of local agricultural businesses through targeted procurement. ▪ Provision of training to support workforce opportunities with other natural resources companies. ▪ Deployment to other internal operations (Rio Tinto/Ivanhoe Mines). 	Development of sustainable local businesses through : Local Business and Economic Development programme Oyu Tolgoi Supplier Development Principles and Policies Labour Management Plan	Moderate Adverse

Notes:

(1) Primary Receptors: Defines the Affected or Other Interested Parties

(2) Project Phase: Construction, Operations, Mine Closure

(3) Impact Categorisation:

Duration: Short-term, Medium-term, Long-term

Extent: Highly Localised; Localised; Widespread

Likelihood: Highly Unlikely; Unlikely; Likely; Certain

(4) Potential Significance: Major Adverse; Moderate Adverse; Minor Adverse; Negligible; Positive