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It is devoted to optimizing the benefits of mining to achieve poverty reduction, inclusive growth, social development and environmental stewardship.

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INTERGOVERNMENTAL FORUM on Mining, Minerals, Metals and Sustainable Development

IGF Mining Policy Framework Assessment: Mongolia

June 2017

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ABOUT THE MPF ASSESSMENT SERIES OF REPORTS

With support from the Government of Canada, the IGF is working with a voluntary selection of its member states to help them operationalize practices consistent with the IGF's Mining Policy Framework (MPF). The first assessments were carried out in 2014 in the Dominican Republic, Madagascar and Uganda. Based on the success of these initial evaluations, the IGF will conduct three to four assessments each year in response to member requests.

The MPF assessment process is made up of three main steps. First, the MPF Assessment Team evaluates relevant national, regional and international laws, policies, conventions and administrative frameworks for mining and minerals development and management relative to the six themes of the MPF: the Legal and Policy Environment, Financial Benefit Optimization, Socioeconomic Benefit Optimization, Environmental Management, the Post-Mining Transition, and Artisanal and Small-Scale Mining (ASM). This work is done through both desk- and field-based research involving diverse stakeholders. The assessment identifies key strengths and gaps in the country's mining laws and policies (compared to the international best practices outlined in the MPF), which helps measure the readiness of the member state to implement the MPF through its existing government measures.

Second, the Assessment Team validates initial findings with the host government through presenting key findings in a Validation Workshop, then takes any feedback into consideration when drafting the assessment report. Further validation is undertaken through the government's review and comment on the draft assessment report. The Assessment Team takes any further comments into consideration when finalizing the report. The final report is then published.

Building on outcomes of this assessment process, the third phase of the process involves working with the participating government to develop a capacity-building program aimed at addressing key gaps. Strengthened capacities, experience sharing and increased understanding can help improve national legislation, policies and implementation in ways that enhance the mining sector's contribution to sustainable development.

This report presents the assessment for Mongolia, with a view to helping the government target its efforts in implementing the MPF, informing capacity-building efforts and allowing for monitoring of progress over time.



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EXECUTIVE SUMMARY

This assessment was conducted by the Sustainable Development Strategies Group (SDSG), with support from the Ulaanbaatar-based Sustainable Development Research Centre (SDRC), between August 2016 and February 2017. This report summarizes our assessment of the mining law and policies of Mongolia and the country's capacity to implement the IGF MPF. The assessment involved extensive desk-based research and a 12-day field visit to Mongolia in which the Assessment Team visited large- and small-scale mine sites and met with numerous stakeholders from government, civil society, international organizations and the private sector.

The field visit began about seven weeks after elections in Mongolia led to significant changes in government, with a major shift in power from the Democratic Party to the Mongolian People's Party (MPP); the MPP won 65 seats in a 76-member parliament. Many changes in leadership within government ministries and departments followed the elections. The timing of the overall assessment provided an opportunity to engage with a new administration early in their term, but also presented challenges for the team's ability to meet with all necessary government officials during the field visit. The period of the assessment data gathering was extended to allow team members to meet with leaders as they were appointed.

The Assessment Team identified the following **major strengths** in Mongolia's mining law and policy framework:

- 1. There are many well-trained and highly competent professionals working in the mining sector in Mongolia, in both private and public entities.
- 2. Recently approved terms for a model agreement between mining companies and local administrative bodies promote integration of benefits of mining into *aimag* (province) and *soum* (district) levels.
- 3. Multistakeholder councils are increasingly common at the aimag and soum levels, and are viewed favourably by stakeholders as mechanisms to discuss and manage concerns related to the minerals sector.
- 4. There is a high level of open and transparent data on tax and royalty flows; Mongolia has 10 years of experience implementing the Extractive Industries Transparency Initiative (EITI).
- 5. The Minerals Law includes a legal framework for ASM.

The Assessment Team identified the following major gaps:

- 1. An overall lack of management of large-volume and high-risk mine wastes, including, but not limited to, their impact on water resources.
- 2. A lack of a clear system of planning and regulating mine closure and rehabilitation, including lack of financial assurance for mine closure.
- 3. A need to improve government capacity to audit complex tax returns, and to deal with transfer pricing, beneficial ownership and related issues.
- 4. A lack of clear criteria as to which deposits should be classified as mineral deposits of strategic importance.
- 5. A lack of clarity and transparency regarding funding budgets of mining aimags and soums, and distribution and use of revenues.

The major strengths and gaps from each of the six themes of the MPF are summarized in the table below.



TABLE 1: MAJOR STRENGTHS AND GAPS OF EACH THEME OF THE MPF

MINING POLICY FRAMEWORK THEME	LEVEL OF IMPLEMENTATION	STRENGTHS	GAPS
Legal and Policy Environment	MEDIUM	Geological information is made available to the public for a reasonable fee. Mining codes and standards are revised and updated to reflect changing knowledge and best practice. The Law of Mongolia on Hygiene (2016) Chapter Three requires a health impact assessment to be made in accordance with the Law on Environmental Impact Assessment (EIA). ElAs must include baseline studies.	 Mining codes and standards are revised and amended frequently; while occasional improvements to the legal framework may be necessary to address gaps and make improvements based on lessons learned, frequent changes may negatively impact perceptions of a stable law and policy environment for foreign investment. The proliferation of laws and policies results in confusion and lack of clarity among stakeholders. Mine closure requirements and financial assurance requirements, and related monitoring, are insufficient. The level of consultation with communities and other stakeholders during the assessment and planning process is limited. Elements of the electronic permit application process are frustrating to applicants. There is a lack of clarity and transparency regarding what laws and procedures apply to mineral deposits deemed "deposits of strategic importance."
Financial Benefit Optimization	MEDIUM	 There is a high level of open and transparent data on tax and royalty flows. Mongolia has established a Stabilization Fund to manage mineral price volatility. Since 2007, the government has established various forms of sovereign wealth funds to accumulate revenue from the mining sector and support national development. 	 Government capacity to audit complex returns and to deal with transfer pricing, beneficial ownership and related issues needs to be improved. There is a lack of clarity regarding funding budgets of mining aimags and soums. There is a lack of transparency in the state-owned mining sector. There is a lack of clear criteria regarding which deposits should be classified as mineral deposits of strategic importance.



MINING POLICY FRAMEWORK THEME	LEVEL OF	STRENGTHS	GAPS
Socioeconomic Benefit Optimization	MEDIUM	 Multistakeholder councils are increasingly common at the aimag and soum levels, and are viewed favourably by stakeholders as mechanisms to discuss and manage concerns related to the minerals sector. Recent approval of terms for a model agreement between mining companies and local administrative bodies promotes integration of benefits of mining into aimag and soum levels. The new law on Health Impact Assessment (Chapter 3 of the Law of Mongolia on Hygiene) requires a health impact assessment where activities possibly or already affect human health. There are relatively few major security concerns at mine sites. The Minerals Law requires mining companies to report annually on the environmental impacts of mining activities and propose amendments to their EIA and environmental management plan, providing opportunities to respond to changing conditions. The Minerals Law requires license holders to protect cultural heritage. 	 There is a low level of understanding regarding how to develop and manage agreements between mining companies and local governments to ensure benefits to mine-affected communities. There is a widespread concern among stakeholders about equal access to benefits from mining. Requirements for consulting with affected stakeholders at every stage of the mining cycle are lacking. There is no apparent system for regular documentation and reporting on social and economic impacts of mineral development. The level of government planning for eventual transition to postmining/post-closure economies is low. Support for local business development opportunities related to mines is low.
Environmental Management	LOW	There are uniform requirements that all major projects conduct EIAs and have environmental management plans in place. Stakeholders have access to environmental information on MEGDT's website. Companies must submit annual reports on environmental management plans and proposals for how they should be improved. Company stakeholders consistently reported that they have emergency response plans in place.	 Monitoring of impacts on water quantity and quality is limited. Requirements for assessing and monitoring biodiversity impacts, particularly on fauna, are limited. There is a low level of government capacity to oversee and monitor design, construction, stability and water quality impacts of major facilities such as waste rock repositories, tailings impoundments and leach pads.



MINING POLICY FRAMEWORK THEME	LEVEL OF IMPLEMENTATION	STRENGTHS	GAPS
Post-mining Transition	LOW	 Article 45 of the Minerals Law requires mine operators to inform authorities a year in advance of pending closure and to take "all necessary measures to ensure the safe use of the mine area for public purposes and environmental reclamation." Article 14.1.3 of the EIA law requires such a plan "at least three years prior to the project or activity closure." The EIA law of Mongolia requires in Section 8.4.6 that there be an assessment of the closure phase of the proposed mining project and in 9.7 that the mining license holder pay 50 per cent of the amount required by the annual environment management plan as a guarantee. In the case of deposits of strategic importance there is the possibility that government can negotiate additional closure requirements. There is an incentive for concurrent or progressive reclamation. 	 There is no clear requirement that a comprehensive closure plan be in effect and approved by competent authorities before permits are issued. The legal framework does not provide a clear opportunity for public consultation on mine closure plans. Stakeholders reported significant ambiguities in the regulatory provisions related to mine closure. The financial surety provisions are unclear and the amount of the surety does not appear to be adequate. Mongolia lacks a census of abandoned mines and those mines known to exist have often not been assessed for the level and nature of environmental or safety hazards. Stakeholders reported the presence of abandoned, non-revegetated mined areas with opaque ownership and unclear legal successors.
Artisanal and Small- Scale Mining	MEDIUM	 The Minerals Law includes a legal framework for ASM. Ministries of Mining, Environment, and Health are collaborating to prevent and address health and safety concerns of artisanal and small-scale miners and their families. State government officials have engaged in Swiss Agency for Development and Cooperation (SDC) training and numerous capacity-building efforts to improve regulation and support the sector. Stakeholders widely reported a low level of child labour in the sector. 	 Many stakeholders indicated that there are legal and technical barriers to formalization. Rehabilitation of artisanal and small-scale mines appears to be extremely limited. The level of government commitment to diversify economic opportunities and alternative livelihoods is low in some aimags and soums. Efforts to formalize ASM do not sufficiently prevent or mitigate conflicts between small-scale and large-scale miners.



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ACRONYMS

APELL Awareness and Preparedness for Emergencies at Local Level

ASM Artisanal and small-scale mining

CIA Central Intelligence Agency

DSF Gobi Oyu Development Support Fund
EIA Environmental Impact Assessment

EITI Extractive Industries Transparency Initiative

ESEC Engaging Stakeholders in Environmental Conservation Project

GASI General Agency for Specialized Inspections

GDP Gross Domestic Product
GNI Gross National Income
HDF Human Development Fund
HDI Human Development Index

IDRC International Development Research Centre

IGF Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development

IISD International Institute for Sustainable Development

ILO International Labour Organization
IMRI Integrated Mineral Resources Initiative

INDC Intended Nationally Determined Contribution

MDF Mongolian Development Fund

MEGDT Ministry of Environment, Green Development and Tourism

MNT Mongolian Tugrik

MOMHI Ministry of Mining and Heavy Industry

MPF Mining Policy Framework
MPP Mongolian People's Party

MRPAM Mineral Resources and Petroleum Authority of Mongolia

NGO Non-governmental organization

OECD Organisation for Economic Co-operation and Development

PPP Purchasing Power Parity

SAM Sustainable Artisanal Mining (A Project of SDC)
SDC Swiss Agency for Development and Cooperation

SDGs Sustainable Development Goals

SDRC Sustainable Development Research Centre SDSG Sustainable Development Strategies Group

UNCRC United Nations Convention on the Rights of the Child

UNDP United Nations Development Programme

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples
UNFCCC United Nations Framework Convention on Climate Change

USDL United States Department of Labor

UNICEF United Nations International Children's Emergency Fund

VAT Value-Added Tax

WHO World Health Organization



1.0 INTRODUCTION

1.1 MINING AND SUSTAINABLE DEVELOPMENT

The growing demand for non-renewable mineral resources is among the world's greatest sustainability challenges, but for many countries it can also present a significant opportunity for growth and development. While grappling with the important question of how to meet the resource needs of a growing population in a way that takes into consideration the needs of future generations, it is easy to overlook the role that mining and its benefits can play in a nation's long-term social and economic development. Mining can bring employment and skill development, investments in education, the construction of infrastructure and the generation of much-needed revenue. The presence of a strong legal and policy framework is needed to maximize these benefits, promoting the development benefits of mining while upholding strong environmental and social standards. The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) Mining Policy Framework (MPF) aims to advance such policies and good governance practices.

1.2 THE INTERGOVERNMENTAL FORUM ON MINING, MINERALS, METALS AND SUSTAINABLE DEVELOPMENT

At the 2002 World Summit on Sustainable Development, held in Johannesburg, South Africa, delegates recognized the challenges and opportunities related to mining and sustainable development, and highlighted these concepts in Section 46 of the Johannesburg Plan of Implementation. Out of this process a number of member states came together to establish the IGF. The IGF is a voluntary initiative that provides opportunities for national governments with an interest in mining to work collectively to advance the priorities identified in the Johannesburg Plan of Implementation. The forum is the only global policy forum for the mining and metals sector with the overarching objective of enhancing government capacities for good governance in the sector. The major goals of the IGF are to enhance and promote the contribution of the mining, minerals, and metals sector to sustainable development, and to provide governments with a forum in which to discuss the opportunities and challenges of the sector. At present, there are 56 IGF country members. The IGF Secretariat is hosted by the International Institute for Sustainable Development (IISD).

1.3 ASSESSING THE IMPLEMENTATION READINESS OF IGF MEMBER STATES

The IGF is working with a voluntary selection of its member states to help them operationalize practices consistent with the IGF MPF, a "compendium of activities [the IGF member countries] have identified as best practice for exercising good governance of the mining sector and promoting the generation and equitable sharing of benefits in a manner that will contribute to sustainable



development" (IGF, 2013). These best practices are divided into six key themes: the Legal and Policy Framework; Financial Benefit Optimization; Socioeconomic Benefit Optimization; Environmental Management; Post-Mining Transition; and Artisanal and Small-Scale Mining.

Helping to operationalize the MPF in the selected IGF member states is a two-part process, beginning with an assessment of each country's national laws, policies and overall level of implementation of the MPF, followed by targeted capacity building to address key gaps. For the first part of the process, the assessments measure the readiness of the member state to implement the six themes of the MPF through existing government laws, policies and measures. The assessment is then used to help governments target their efforts in implementing the MPF, to inform capacity-building efforts and to allow for monitoring of progress over time.

This report presents the findings of the assessment process conducted between August 2016 to January 2017. It is structured as follows: Section 2 briefly describes the methodology used to conduct the assessment; Section 3 gives an overview of the mining sector in Mongolia and the policy context; Section 4 presents the main results of the assessment along the six dimensions of the MPF; Section 5 discusses these results and identifies key strengths and gaps; and Section 6 presents some initial recommendations regarding implementation gaps that require particular attention from the host country government.

It is important to note that the MPF is a general document with very broad coverage. Specific elements of the MPF may not be applicable in every context. The Assessment Team did not review any specific elements of the MPF to determine whether they should or should not apply in the specific context of Mongolia, only to determine if they were being applied. Accordingly, this review does not imply any independent review, or approval or disapproval of any part of the MPF by the IGF, IISD, SDSG, SDRC or their consultants, nor does it constitute legal advice.



2.0 METHODOLOGY

This assessment was completed in the following timeframe and using the methodology below:

- Desk-based research, including an extensive review of relevant Mongolian mining laws, policies, and literature, as well as information gathering from Mongolia's Ministry of Mining and Heavy Industry (MOMHI): August 2016–January 2017.
- Field visit to Mongolia for stakeholder consultation, including site visits to Dalanzadgad to meet with Ömnögovi Aimag government leaders and the Gobi Oyu Development Support Fund; to Khanbogd Soum to meet with government leaders, herders and Gobi Soil—a local non-governmental organization (NGO); to Tsogttsetsii to meet with Erdenes Tavan Tolgoi and energy resources mining companies; and to Selenge Aimag to visit Centerra Gold/Boroo Mine, and to visit artisanal miners and an artisanal gold processing facility: August 15–26, 2016.
- Validation meetings with government representatives: August 2016-February 2017.
- Incorporation of additional stakeholder feedback and drafting of the assessment report: September 2016–February 2017.
- · Completion of final assessment report: June 2017.

The Assessment Team notes that the field visit began about seven weeks after elections in Mongolia led to significant changes in government, with a major shift in power from the Democratic Party to the Mongolian People's Party (MPP); the MPP won 65 seats in a 76-member parliament. Many changes in leadership within government ministries and departments followed the elections. Although the timing of the overall assessment provides an opportunity to engage with a new administration early in their term, it also presented challenges in the team's ability to meet with all necessary government officials during the field visit. The period of assessment data gathering was extended to allow team members to meet with leaders as they were appointed.



3.0 MONGOLIA: NATIONAL CONTEXT

Mongolia began large-scale exploitation of its abundant mineral resources in the 1990s, leading to a mining boom and enabling one of the highest economic growth rates in the world (Sustainability East Asia, 2014). The country is particularly rich in copper and coal reserves, the exploitation of which are primarily responsible for tripling Mongolia's economic growth since 2009 (Otgochuluu, 2016). Mongolia has approximately 6,000 known mineral deposits, of which 600 have been explored and 200 are being exploited (Sustainability East Asia, 2014). The country is now heavily reliant on its minerals sector, which represents approximately 30 per cent of government revenues, 18.6 per cent of gross domestic product (GDP), 80 per cent of export earnings, and 70 per cent of new foreign direct investment into Mongolia (Otgochuluu, 2016).

The Oyu Tolgoi copper-gold mine is the country's largest mining project: EITI estimates that Oyu Tolgoi will account for one third of Mongolia's GDP by 2020 (EITI, 2016). Erdenet copper mine is another large operation currently in production (Otgochuluu, 2016). Mongolia has significant coal reserves; Energy Resources and Erdenes Tavan Tolgoi are two major coal mines in the country. The government currently seeks to expand coal production and related revenues, which is resulting in significant environmental concerns that need to be properly addressed. Mineral deposits exist throughout the country, including near the capital (EITI, 2015). Near Ulaanbaatar there are gold deposits in Gatsuurt and Boroo, brown coal to the southeast in Baganuur and Shivee Ovoo, and other minerals to the north, including copper and iron (EITI, 2015). The northeast of the country contains a cluster of large uranium deposits, the south has a range of copper and fossil coal deposits, and there is a large silver deposit in the far northwest (EITI, 2015).

Mongolia's heavy reliance on mineral revenue has created some challenges for the country in the current period of lower commodity prices. Mongolia has experienced an economic slowdown since its mining boom around 2010. However, the government is currently working to increase mineral production by negotiating investment and deposit development agreements on "mineral deposits of strategic importance" such as the Tavan Tolgoi coking coal deposit and the Gatsuurt gold deposit. The government also adopted a resolution to implement the national "Gold II" program, (following its Gold I Program from 1992–2000), which aims to increase gold extraction to 25 tonnes by 2020 and contribute substantially to economic growth (Aminaa, 2017).

The downturn in the economy, coupled with civil society complaints regarding mining's negative impacts on levels of dust, quantity and quality of water, and availability of land and pasture for nomadic herders, have made mining a topic of much public discourse in Mongolia. Stakeholders from all sectors also raise concerns regarding lack of clarity on the government's designation of "strategic" deposits, which are not subject to the same law and policy requirements as other deposits. Although many stakeholder complaints are valid and urgently need to be addressed, stakeholders



in all sectors also reported that mining companies have become a scapegoat for many economic, political, social and environmental ills that are beyond industry's control. However, stakeholders openly share their opinions about the sector in multistakeholder settings without fear of reprisal. This culture of openness has fostered a healthy debate, encouraged by the ongoing work of EITI and other efforts, that promotes incremental positive change in the sector and advances its contributions to sustainable development.

Regulation of the mining sector is predominantly managed by the MOMHI, the Mineral Resources and Petroleum Authority of Mongolia (MRPAM), the Ministry of Environment, Green Development and Tourism (MEGDT), and the General Agency for Specialized Inspections (GASI). The governing law and policy frameworks are explained under each MPF theme below.

3.2 KEY STAKEHOLDERS

The Assessment Team met with the following stakeholders in Mongolia's mining sector:

GOVERNMENT MINISTRIES, DEPARTMENTS AND AGENCIES

- Khanbogd Soum Government, Ömnögovi Aimag: Deputy Governor, Environmental Protector
- Mineral Resources and Petroleum Authority
- Ministry of Environment, Green Development and Tourism
- · Ministry of Finance
- · Ministry of Health
- Ministry of Mining and Heavy Industry
- · National Human Rights Commission of Mongolia
- · Regulatory Agency of the Government of Mongolia, General Agency for Specialized Inspection
- Ömnögovi Aimag Government: Citizens' Representatives Khural; Deputy Governor; Policy Development Department; Environmental Inspection

PRIVATE SECTOR

- · Centerra Gold Mongolia/Boroo Gold
- · Energy Resources
- Erdenes Tavan Tolgoi
- Mongolyn Alt Corporation (MAK)
- Mongolian National Mining Association

CIVIL SOCIETY

- ASM Federation of Mongolia
- The Asia Foundation
- Environmental Assessment Association
- · Globe International Center
- · Gobi Soils NGO
- · Gobi Oyu Development Support Fund
- Khan-Khentii Onon River Protection Organization
- · Let's Protect Our Rights NGO
- · Mongolia Extractive Industries Transparency Initiative Secretariat
- Natural Resources Governance Institute

- · OT Watch
- Open Society Forum
- Protecting Mongolian Environment Foundation
- Publish What You Pay
- · Responsible Mining Initiative
- · Source International
- · Southwest Research and Information Center
- Springs and Rivers Protection Foundation
- · Stakeholders Engagement for Sustainable Development
- Steps Without Borders NGO
- Transparency Foundation
- United Movement of Mongolian Rivers and Lakes

OTHER

- Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Agency, GIZ)
- · Hogan Lovells
- International Finance Corporation
- Mining Journal
- Swiss Agency for Development and Cooperation
- · United Nations Development Programme
- United Nations International Children's Emergency Fund (UNICEF)
- World Bank

3.3 LEGAL AND POLICY FRAMEWORK

The Mongolian legal framework for this assessment consists of the following key laws, policies and regulations—numerous other laws and policies are discussed in this report where relevant:

DOMESTIC LAW & POLICY

- The Constitution of Mongolia (1992, amended 2001) upholds "human rights and freedom, justice, and unity" of Mongolia and aspires to build and develop a "humane, civic and democratic society." At Article 38, the Constitution requires the Government to develop "the guidelines for national economic and social development"; develop and implement measures on sectoral, inter-sectoral, as well as regional development issues"; and "undertake measures for protection of the environment, the sustainable use and restoration of natural resources."
- The Environmental Protection Law of Mongolia (1995) regulates "the relations between the State, citizens, business entities, and organizations in order to guarantee the human right to live in a healthy and safe environment, an ecologically balanced social and economic development, the protection of the environment for present and future generations, the proper use of natural resources and the restoration of available resources."
- The Law on Information Transparency and Right to Information (2011) regulates "relations pertaining to ensuring transparency of the state, and rights of citizens and legal entities to seek and receive information."
- The Law of Mongolia on Environmental Impact Assessment (2012) aims to protect the environment, "prevent ecological imbalance, ensure minimal adverse impacts on the environment from the use of natural resources, and regulate relations that may arise in



- connection with the assessment of environmental impacts of and approval decisions on regional and sectoral policies, development programs and plans and projects."
- The **Law of Mongolia on Land (2002)** regulates "possession and use of state-owned land and other related issues."
- The Law of Mongolia on State Supervision and Inspection (2003) regulates "matters relating
 to state supervision and inspection structure, definition of legal basis for state administrative
 supervision and inspection activities, and implementation of state supervision and inspection."
- The **Law of Mongolia on Subsoil (1989)** regulates "issues related to use and protection of subsoil in the interests of the present and future generations."
- Law on Prohibition of Mineral Exploration and Mining Activities in areas in the Headwaters
 of Rivers, Protected Water Reservoir Zones and Forested Areas ("Long Named Law" 2009)
 prohibits "mineral exploitation and mining operations at headwaters of rivers, protected zones
 of water reservoirs and forested areas" and regulates rehabilitation activities carried out in
 these areas.
- The Minerals Law of Mongolia (2006, Amended 2014) regulates "the prospecting, exploration and mining of minerals within the territory of Mongolia" and establishes environmental protection and regulations in exploration areas and areas surrounding mines and mining operations.
- The Model Agreement on Issues of Environmental Protection, Mine Exploitation, and
 Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016)
 outlines the basis for an agreement to regulate the relationship between a mining license
 holder and local government, through the aimag and soum Governor, and issues regarding
 environmental protection, mineral exploitation, infrastructure development and jobs creation.
- The State Minerals Policy 2014–2025 (2014) focuses on "providing national primary interests
 by developing conspicuous and responsible mining relied upon by the private sector." It aims
 "to develop a multisectored and balanced economic structure in the short and mid-term."
 The main principles of the policy are "to provide sufficient social and economic benefits
 from mining industry to the public while considering development of the mineral sector and
 Mongolian National Development Policy based on the Millennium Development Goals" (MDGs,
 now the SDGs).

INTERNATIONAL COMMITMENTS

Mongolia's international commitments include, but are not limited to, the following international laws, protocols, and conventions:

INTERNATIONAL COMMITMENTS RELATING TO EXTRACTIVES

 Mongolia committed to implement the EITI in December 2005 and was admitted as a candidate in September 27, 2007. Mongolia is currently an EITI-compliant country making Meaningful Progress in EITI implementation. Mongolia's EITI Reports are among the most comprehensive in the world, with roughly 1,000 companies reporting (EITI, 2015).

INTERNATIONAL COMMITMENTS RELATING TO THE ENVIRONMENT

• Mongolia signed the United Nations Framework Convention on Climate Change (UNFCCC) on June 12, 1992. The UNFCCC was ratified on September 20, 1993 and entered into force in 1994. Mongolia ratified the Kyoto Protocol on December 15, 1999. Mongolia also signed the Paris Agreement on April 22, 2016. Mongolia endorsed a National Action Programme on Climate Change in 2011, which includes concrete measures in response to climate change covering all principal sectors of the economy. The country also developed the Green Development Policy of Mongolia in 2014, which includes key indicators for measuring progress in the implementation of sector-specific action plans (UNFCC Intended Nationally Determined Contribution [INDC],

2014). In its INDC submission, Mongolia outlined the expected mitigation impact of its policies and plans to achieve a 14 per cent reduction in total national greenhouse gas emissions excluding land use, land-use change and forestry by 2030 (UNFCC INDC, 2014). Mongolia also intends to contribute to global efforts to mitigate GHG emissions through policies that increase renewable electricity capacity from 7.62 per cent in 2014 to 30 per cent by 2030, and to implement advanced technology in energy production, such as supercritical pressure coal combustion technology by 2030. Mongolia adopted the 2030 Agenda for Sustainable Development, along with the United Nations Sustainable Development Goals (SDGs), on September 25, 2015. Mongolia subsequently adopted the Action Program of the Government of Mongolia 2016–2020, which reflects and aims to implement the SDGs.

- Mongolia signed the **Convention on Biological Diversity** on June 12, 1992, which was ratified on September 30, 1993. Mongolia acceded to the Cartagena Protocol on Biosafety on July 22, 2003. The country signed the Nagoya Protocol on Access and Benefit-sharing on January 26, 2012, which was ratified on May 21, 2013.
- Mongolia acceded to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** on January 5, 1996.
- Mongolia acceded to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal on April 15, 1997.
- Mongolia ratified the United Nations Convention to Combat Desertification on September 3, 1996.
- The country ratified the **Convention on the Conservation of Migratory Species** on January 11, 1999.
- Mongolia signed the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade on September 11, 1998, ratified on March 8, 2001.
- The **Ramsar Convention on Wetlands** entered into force in Mongolia on April 8, 1998. Mongolia currently has 11 sites designated as Ramsar Wetlands of International Importance.
- Mongolia signed the Stockholm Convention on Protecting Human Health and the Environment from Persistent Organic Pollutants on May 17, 2002, ratified on April 30, 2004.
- Mongolia signed the **Minamata Convention on Mercury** on October 10, 2013, ratified on September 28, 2015.

INTERNATIONAL COMMITMENTS RELATING TO LABOUR

- Mongolia ratified 20 International Labour Organization (ILO) Conventions, 17 of which are in force, including: The Forced Labour Convention, ILO Number (No.) 29 on March 15, 2005; the Freedom of Association and Protection of the Right to Organize Convention, ILO No. 87, the Right to Organize and Collective Bargaining Convention, ILO No. 98, and the Equal Remuneration Convention, ILO No. 100 on June 3, 1969; the Abolition of Forced Labour Convention, ILO No. 105 on March 15, 2005; the Discrimination Convention, ILO No. 111 on June 3, 1969; the Minimum Age Convention, ILO No. 138 on December 16, 2002; the Worst Forms of Child Labour Convention, ILO No. 182 on February 26, 2001; the Minimum Age (Underground Work) Convention, ILO No. 123 on December 2, 1981; and the Occupational Safety and Health Convention, ILO No. 155 on February 3, 1998.
- Mongolia signed the Safety and Health in Mines Convention, ILO No. 176 on November 26, 2015;
 it has yet to come into effect.

INTERNATIONAL COMMITMENTS RELATING TO HUMAN RIGHTS

 Mongolia signed the International Convention on the Elimination of All Forms of Racial Discrimination on May 3, 1966, ratified on Aug 6, 1969.



- Mongolia signed the **International Covenant on Civil and Political Rights** on June 5, 1969, ratified on November 18, 1974.
- Mongolia signed the **International Covenant on Economic, Social and Cultural Rights** on June 5, 1969, ratified on November 18, 1974.
- Mongolia signed the Convention on the Elimination of All Forms of Discrimination against Women on July 17, 1980, ratified on July 20, 1981.
- Mongolia acceded to The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment on January 24, 2002.
- Mongolia signed the United Nations Convention on the Rights of the Child (UNCRC) on January 26, 1990, ratified on July 5, 1990. Mongolia also signed the UNCRC Optional Protocol on Armed Conflict on November 12, 2001, ratified on October 6, 2004, and signed the UNCRC Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography on November 12, 2001, ratified on June 27, 2003.
- Mongolia voted in favour of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) at the UN General Assembly Meeting on September 13, 2007.

OTHER INTERNATIONAL COMMITMENTS

 Mongolia acceded to the United Nations Convention against Transnational Organized Crime, and its supplemental protocols, the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children and the Protocol against the Smuggling of Migrants by Land, Sea and Air, on June 27, 2008.

3.4 DEVELOPMENT CONTEXT

The United Nations Development Programme (UNDP) categorizes Mongolia as a country of High Human Development. The UNDP Human Development Index (HDI) measures long-term progress in three dimensions of human development: (1) "a long and healthy life" (measured by life expectancy), (2) "access to knowledge" (mean and expected years of education), and (3) "a decent standard of living" (Gross National Income [GNI] per capita). Mongolia's HDI for 2015 was 0.727, ranking 90 out of 188 countries (UNDP, 2015). That rank is shared with China and Fiji, and below that of Russia and Kazakhstan (UNDP, 2015). Currently, 11.1 per cent of the population lives in poverty, double the rate in China and 10 times that of Kazakhstan (UNDP, 2015). 2.3 per cent of the population lives in severe poverty, and 19.3 per cent of the population is vulnerable to poverty (UNDP 2015). Life expectancy at birth is 69.4 years, children can expect to attend 14.6 years of schooling, and GNI per capita (2011 Purchasing Power Parity [PPP]) was \$10,729.4 in 2014 (UNDP, 2015).



TABLE 2. HUMAN DEVELOPMENT INDEX TRENDS IN MONGOLIA, 1980-2014

	LIFE EXPECTANCY AT BIRTH	EXPECTED YEARS OF SCHOOLING	MEAN YEARS OF SCHOOLING	GNI PER CAPITA (2011 PPP\$)	HDI value
1980	56.9	10.3	5.8	3,265.1	0.524
1985	58.4	10.3	6.7	4,047.3	0.552
1990	60.3	10.2	7.7	4,582.6	0.578
1995	61.2	7.7	7.8	4,191.1	0.553
2000	62.9	9.4	8.2	4,607.7	0.589
2005	65.1	12.7	8.6	5,944.1	0.649
2010	67.5	14.6	9.3	7,083.7	0.695
2011	68.1	14.6	9.3	8,183.6	0.706
2012	68.6	14.6	9.3	9,071.9	0.714
2013	69.0	14.6	9.3	10,223.0	0.722
2014	69.4	14.6	9.3	10,729.4	0.727

Source: UNDP, 2015.

Mongolia's population, around 2.9 million people, grew quickly between 1980 and 2010, and has a current annual growth rate of 1.5 per cent, which is considered moderate (UNDP, 2015). The majority of the population, 71.2 per cent, is located in urban areas; 45 per cent of the total population lives in Ulaanbaatar (UNDP, 2015). Since 1980, population growth in cities has outpaced growth in rural areas by more than 1.5 per cent annually, indicating an increasing trend in rural-urban migration (UNDP, 2015). As the birth rate has fallen over the past two decades, the median age of the population in Mongolia has risen from 17.8 years in 1980, to 20.3 years in 1995, and to 27.5 years in 2014 (UNDP, 2015). Mongolia has made great strides in reducing infant mortality rates from 77 (per 1,000 live births) in 1980, to 26.4 in 2013; the rate now compares favourably to the global average of 32, however it is more than double China, Russia, and Kazakhstan, and is on par with Morocco and Rwanda (UNDP 2015; World Health Organization (WHO) 2015).

Mongolia's Law on Labour Articles 108–109 sets the minimum age for work at 16 years. Article 109 permits children ages 14 and older to perform light work "for the purpose of imparting vocational guidance and work experience, but only with the consent of parents and the "state administrative organization in charge of labour issues," assuming that the job does not "negatively affect intellectual development and health" (Law on Labour, 1999). Article 6 of the Law on the Protection of the Rights of the Child of Mongolia amended in 2003 sets the minimum age for hazardous work at 18 years. Hazardous work is defined by the ILO as work which "by its nature or the circumstances in which it is carried out is likely to jeopardize the health, safety or morals of young persons," and includes work with "dangerous substances, agents or processes, the lifting of heavy weights and underground work" (ILO, No. 138). This category includes, at minimum, work in the extractives sector and in ASM.

Section 110 of the Law on Labour of Mongolia requires medical examinations of children in the labour force, prohibits children from performing overtime work or work on weekends, prohibits children from carrying heavy loads and prohibits children from working "under abnormal or special conditions." Despite these prohibitions, 10.4 per cent of children in Mongolia ages five—14 are child labourers (United States Department of Labor [USDL], 2014). The ILO has noted that the minimum age for employment in Mongolia is below the minimum age for completing compulsory education, and called for the government to align the two limits (United States State Department, 2015). Additionally, evidence cited by the US Department of Labor reports that children work in ASM in Mongolia (USDL, 2014). In general, child labourers working in ASM are more likely to be boys; however, in some soums, girls are more prevalent in the ASM sector (Asia Foundation, 2013).



Public health expenditures in Mongolia in 2013 were 6 per cent of GDP, on par with Russia and China (UNDP, 2015). As measured from 2008–2013, moderate or severe child malnutrition affects 15.9 per cent of children under the age of five; high compared to China at 9.4 per cent and on par with Kazakhstan (UNDP, 2015).

Public expenditures on education in Mongolia in 2011 totalled 5.5 per cent of GDP, at the global average and more than Russia's 4.1 per cent (UNDP 2015). Mongolia has an adult literacy rate of 98.3 per cent. During the era of socialism in Mongolia, education was subsidized, with schools built in each soum centre; however, after shifting to a market economy, the educational system faltered (Asian Development Bank [ADB] 2016). The Net Enrolment Ratio in primary education varies by aimag; Mongolia has an average of 97 per cent national enrolment rate; however, Bulgan, Tuv, and Dundgovi aimags have enrolment rates below 90 per cent (UNDP, 2013). Literacy rates also differ across aimags; Sukhbaatar, for instance, has a rate of literacy for 15–24 year olds that is 5 per cent lower than in Ulaanbaatar (UNDP, 2013).

In Mongolia, 64 per cent of the population has access to an improved water source, and 60 per cent of the population has access to improved sanitation facilities, both significantly lower than in Russia and China (World Bank Open Data, 2015). Urban and rural populations have nearly equal access to improved water sources; however, only 43 per cent of rural populations have access to improved sanitation facilities compared to 66 per cent of their urban counterparts (World Bank Open Data, 2015).

Economic inequality in Mongolia also presents an issue; Mongolia has a Gini coefficient (a statistical measure intended to represent the equality of a nation's income distribution) of 36.5 (UNDP, 2015). A Gini coefficient of zero represents "perfect" equality. Russia has a Gini coefficient of 41.6 and China of 29.1 (World Bank Open Data, 2015).

Mongolia ranked 63 globally on the UNDP gender inequality index, behind China, which is ranked at 40 and Russia, ranked at 54 (UNDP, 2015). Women can expect to receive 1.4 years of additional schooling compared to their male counterparts, have a higher HDI mark (.737) than males (.716), have a life expectancy 8 years greater than males, and have a 1.2 per cent greater chance of gaining some secondary education than males (UNDP, 2015). However, women can expect to earn USD 3,000 less than their male counterparts annually (UNDP, 2015). Women hold 14.9 per cent of seats in parliament compared to 19.4 per cent in the United States, 14.5 per cent in Russia, and 23.6 per cent in China (UNDP, 2014). This results in a Gender Development Index of 1.028 (UNDP, 2015).

The successes seen in reducing gender inequality in Mongolia are a result of gender equality laws, including the Mongolian Constitution, Civil Code, Family Law, and the Criminal Code (Asia Foundation 2013). In relation to labour issues, Section 100.1 of the Mongolia Law on Labour prohibits an employer from dismissing from employment a pregnant woman or mother who has a child under three years of age. Section 102.1 of the Law on Labour prohibits employers from requiring a mother of a child under 8 years, or a single mother of a child under 16 years, to work without her consent at night. Section 104.1 guarantees mothers 120 days of mixed paid and unpaid maternity leave. In relation to mining, Temporary Government Resolution No. 72 included a prohibition on pregnant women and women with young children from working in ASM; however, the present regulations include no specifications regarding women working in ASM (Asia Foundation 2013).

Corruption is a concern in Mongolia; the country ranks 87th out of 176 countries in Transparency International's Corruption Perceptions Index 2016. The Index rankings span from Denmark's ranking of 1, perceived as "very clean," to Somalia's ranking of 176, perceived as "highly corrupt." Mongolia's rank is shared with Panama and Zambia. Mongolia is perceived as slightly more corrupt than China, which has a ranking of 79, but less corrupt than Russia, which is ranked 131 (Transparency International 2017).

Corruption risk is prevalent in the mining sector. Medium to high corruption risk exists in the exploration, pre-operation, extraction, and post-extraction phases of mining operations (UNDP, 2016a). There is a particularly high likelihood of corruption in Mongolia in the granting of exploration licenses, in relationships between local CSOs and mining companies, and in situations exacerbated by the lack of clarity of Mongolia's legal framework for mine closure (UNDP, 2016a). There is also a high level of risk of negative impact on resources, the environment, public access to services, and human rights in Mongolia as a result of corruption during the extraction phase, resulting from the approval of environmental management plans, and from corruption related to the sale of minerals (UNDP, 2016a). The greatest risk for corruption in the Mongolian mining sector—both in its likelihood to occur and in its potential negative impact—results from the collateral that mining companies are required to provide to state authorities for mine reclamation work (UNDP, 2016a). When a mining operation fails to comply with state environmental reclamation requirements, government authorities use the deposited collateral funds to implement the reclamation, however, the size of the collateral is unlikely to be enough to cover the required work, providing companies a way to avoid the real costs of reclamation (UNDP, 2016a).

ECONOMY

Over the past quarter-century Mongolia has experienced increased foreign direct investment in the extractives industries (EITI, 2014). Mongolia's economy is centred on its vast agricultural and mineral resources; as noted above, the economy is heavily reliant on the mining sector, which contributes 20 per cent of total GDP (EITI, 2014). Agricultural operations account for 16.6 per cent of total GDP, and the services sector accounts for 50.3 per cent (EITI, 2014). Commodity export totals in 2015 were USD 4.7 billion (United Nations Comtrade, 2015). Mongolia's primary agricultural products include wheat, barley, vegetables, sheep, goats, cattle and horses; the country's primary industries, other than mining, include construction, oil, food and beverage, processing of animal products and natural fibre manufacturing (United States Central Intelligence Agency [CIA], 2015).

Economic growth in Mongolia has slowed significantly in recent years, from 17.5 per cent annual GDP growth in 2011 to 2.4 per cent in 2015, as a result of declining exports from a weakening of the commodities markets—specifically in the minerals sector—and slower growth in China (CIA, 2015). In Mongolia, exports account for more than half of total GDP, and more than 60 per cent of external trade is with China (CIA, 2015). Mongolia also relies on Russia for 90 per cent of its energy supplies and other key imports, including machinery, fuel, cars, chemicals, building materials, appliances and cleaning supplies (CIA, 2015).

The lack of diversification in the economy, with heavy reliance on extractive industries, amplifies the impact of changes in commodity prices on Mongolia's economic growth (CIA, 2015). Prior to the recent cycle, in 2009, when commodity prices were low, the Mongolian economy shrank to 1.3 per cent growth (CIA, 2015). Economic reliance on the mining sector increased 13 per cent relative to other sectors in 2015 (CIA, 2015). This was primarily the result of an increase in mining production catalyzed by significant foreign investment by Rio Tinto at the Oyu Tolgoi copper and gold mine in Ömnögovi Aimag, considered to be the world's largest reserve of copper (CIA, 2015; Cui & Wernau, 2016).

Copper ore is Mongolia's largest export of any kind, worth almost USD 2.3 billion in 2015 (United Nations Comtrade, 2015), and in 2014 made up 62 per cent of all mineral sales nationally (EITI, 2014). Declines in the apparel, construction and manufacturing sectors were offset by 10.7 per cent growth in the agriculture sector in 2015 (ADB, 2016). Agriculture is seen as the main growth driver moving into 2017 (ADB, 2016).



ENVIRONMENT

Mongolia has formally protected 17.2 per cent of the country's land area (World Bank, 2015a), of which 72.9 per cent is agricultural and 6.9 per cent is forest (UNDP, 2015); however, 70 per cent of pastoral land is considered degraded (UNFCCC, 2017). Only 0.4 per cent of land is arable, and over 40 per cent is desert or desert steppe (World Bank, 2015a). Over 80 per cent of Mongolia is above 1,000 metres, increasing the effects of environmental degradation, contamination and climate change. Air quality in cities, particularly in Ulaanbaatar, is rapidly deteriorating, as nearly 85 per cent of residents rely on highly polluting wood or coal-burning stoves (World Bank, 2009). Use of wood for fuel and housing has resulted in dramatic levels of deforestation: losses of 0.7 per cent of forest area annually, much faster than the global rate of 0.1 per cent per year (UNEP, 2014). "The country is affected by serious ecosystem degradation, including that of pasture land, forest and water and loss of biodiversity and air pollution in urban areas" (UNDP, n.d.). The growing mining sector and the impacts of climate change pose new challenges for Mongolia's environment (UNDP, n.d.).



4.0 STATUS OF IMPLEMENTATION OF THE MINING POLICY FRAMEWORK

As noted above, the MPF presents the best practices required for good environmental, social, and economic governance of the mining sector, and for generation and equitable sharing of benefits in a manner that will contribute to sustainable development. Developed by the member states of the IGF, the MPF has universal application and represents a commitment from IGF members to ensuring that mining activities within their jurisdictions are compatible with the objectives of sustainable development and poverty reduction.

This assessment aims to measure the Mongolian government's level of implementation of the MPF through existing national laws and policies. Identifying the strengths and gaps in existing mining laws and policies provides information to aid the Mongolian government in targeting efforts to implement the MPF, informs capacity-building efforts and allows for monitoring of progress over time.

The assessment is organized according to the six themes of the MPF: the Legal and Policy Framework, Financial Benefit Optimization, Socioeconomic Optimization, Environmental Management, Post-Mining Transition and ASM. Each of the following subsections provides a short summary of the theme, the key legislation and policies applicable to the theme, and the strengths (where implementation is advanced) and gaps (where implementation needs more progress) within each theme. The assessment concludes with some general recommendations.

4.1 LEGAL AND POLICY ENVIRONMENT

The first theme of the MPF focuses on the general mining law and policy framework regulating the permitting process, and encourages a mature modern legislative system with clear lines of responsibility and accountability. This combination of regulations serves as a basis for good governance and sustainable development. The MPF recommendations under this theme fall into the following categories:

- The ongoing generation of and equal access to geological information.
- The periodic revision and updating of mining legislation and policies.
- · A permitting process that requires:
 - Consultation with communities in the planning and development stages
 - Submission of integrated assessments (social, economic and environmental)
 - Identification of sustainable development opportunities
 - A plan and financial assurance for mine closure



- Addressing indigenous people, cultural heritage, resettlement, and community safety and security issues
- A timely, transparent, unambiguous and consistent process.

KEY LAWS AND POLICIES

Key laws on this topic include:

- Constitution of Mongolia (1992, amended 2001)
- Environmental Protection Law of Mongolia (1995)
- General Administrative Law (2016)
- Government Action Plan 2016-2020 (2016)
- Investment Law (2013)
- Law of Mongolia on Land (2002)
- Law on Information Transparency and Right to Information (2011)
- Law of Mongolia on Environmental Impact Assessment (2012)
- Law of Mongolia on Hygiene (2016)
- Law of Mongolia on State Supervision and Inspection (2003)
- Law of Mongolia on Subsoil (1989)
- Law on Prohibition of Mineral Exploration and Mining Activities in areas in the Headwaters of Rivers, Protected Water Reservoir Zones and Forested Areas (2009)
- Minerals Law of Mongolia (2006, amended 2014)
- Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016)
- State Minerals Policy 2014–2025 (2014)

THE PERMITTING SYSTEM

The Minerals Law of Mongolia classifies mineral deposits into three categories: (1) deposits of strategic importance, (2) deposits of common minerals, and (3) deposits of conventional minerals. Article 4.1.12 of the Minerals Law defines a mineral deposit of strategic importance as "a deposit that may have an impact on the national security or the economic and social development of the country, or that is producing or has the potential of producing more than five per cent (5%) of the total gross domestic product of Mongolia in any given year." Common minerals are defined at Article 6.3 as "abundant sediments and rocky concentrations that can be used as construction materials." Conventional minerals are all other mineral deposits.

Only a "legal person" (individual, company, or entity) formed and operating under the laws of Mongolia and paying taxes in Mongolia, may be granted a mineral exploration or mining license. Article 17 of the Minerals Law explains requirements for obtaining an exploration license. Applicants for exploration licenses are required to provide detailed coordinates of the requested exploration area. No part of the requested area may overlap with any "special purpose territory"—a reserve or area where mineral exploration or mining is restricted or prohibited, and no area may overlap with any existing license area or license area covered by a pending application. The size of an exploration area must not be less than 25 hectares or more than 150,000 hectares. There is no limit to the number of exploration licenses one legal person may hold. Under Article 18, an exploration license must be granted to the first applicant who registers and files an application that meets these requirements.

The state administrative agency gives written notice to the Governor of the aimag if it contemplates granting a license. Article 19.4 of the Minerals Law requires the Governor of the aimag to respond



within 30 days to the agency following consultation with the Citizens' Representatives Khural (a municipal representative body) of the soum where the exploration would take place. If the Governor fails to respond within 30 days, the notice is deemed to be approved. The Governor may only refuse to grant the license for reasons provided in the laws of Mongolia. If the Governor supports the decision, the administrative agency must grant the exploration license. Exploration licenses are granted for a three-year period. The state administrative agency then notifies the Environmental Ministry and the Governors of the aimag and soum where the license area is located, as well as the state inspection agency, and must publish an official notice in a daily newspaper. The license holder may obtain three extensions of the term of the exploration license for three years each.

Only the exploration license holder is eligible to apply for a mining license in the exploration license area. If the exploration license expires and the exploration license holder fails to submit an application for a mining license, the mining license must be granted through a tender process. The mining license process proceeds in a similar manner as the exploration license process; however, no opportunity for the Governor or consultation with the Citizens Representatives Khural is required. Within seven days following the issuance of a mining license, the state administrative agency must notify the Environmental Ministry and the Governors of the aimag and soum where the license area is located, as well as the state inspection agency, and must publish an official notice in a daily newspaper. The term of the mining license is 30 years, and the license may be renewed two times for a period of 20 years each.

Exploration license holders must maintain a copy of the exploration license, an environmental management plan and report, and exploration work plan reviewed by the state administrative agency and professional inspection agency. Mining license holders must maintain a copy of the mining license, feasibility study, EIA, environmental management plan, property leases and product sales agreements, records establishing the boundaries of the mining area, and agreements on land and water use.

Importantly, a license holder must comply with environmental laws and regulations. An exploration license holder may not commence exploration operations without first obtaining approval of its environmental management plan from the Governor of the soum where the exploration area is located and written approval from MEGDT. Exploration license holders must submit annual environmental management plans to the Governor of the relevant aimag or soum and to the environmental inspection agency. Exploration license holders must deposit funds equal to 50 per cent of its environmental protection budget for a given year in a special bank account established by the Governor of the aimag or soum.

A mining license holder must prepare an EIA and environmental management plan prior to obtaining a mining license. The assessment and plan must be submitted and approved by MEGDT and then delivered to the Governor of the aimag or soum and to the environmental inspection agency. Pursuant to the Minerals Law and the Law of Mongolia on EIA, prior to the start of annual project implementation, mining license holders must deposit funds into an account opened by the state administrative agency. The amount of the deposited funds should equal the total annual budget required for implementation of environmental protection measures. If the license holder fails to fully implement environmental reclamation measures, MEGDT is required under the Minerals Law Article 39.3 to use the deposited funds to implement reclamation work. The license holder must, "without dispute, provide any required additional funds."



Stakeholders reported improvements in—but also discontent with—the permitting process. Government and company stakeholders primarily expressed dissatisfaction with two factors: (1) the race to electronically submit permit applications under the "first-come-first-served" process and (2) the high level of aimag government disapproval of licenses.

Regarding the first point, stakeholders reported that entities with the fastest Internet speed may be first to apply for a permit, and in some cases applicants will create new entities and apply under the names of multiple entities to increase the likelihood of submitting a permit application first. Some stakeholders argued that there should be more substantive reasons for selecting a permit holder than being first to apply. However, other stakeholders find this system to be the most fair, as it decreases opportunities for favouritism. Mongolia also issues permits through a tendering process, and recently defined new areas for exploration using a tendering process. The government is currently aware of the issues in the application process and is working to clarify related regulations. Government Action Plan 2016–2020, ratified on September 9, 2016, states that the process of granting mining licenses will be simplified.

Regarding the second factor, company and some government stakeholders reported that aimag and soum governors, through the Citizens' Representatives Khurals, could pass a decree to define certain areas as "locally protected areas" and "areas for special local use" that would make mining in an area impossible if they needed a law-based "excuse" to deny a permit; yet they could withdraw the decree and approve a subsequent application for the same area. These stakeholders expressed concern about the level of power and influence at the aimag and soum level, even after the state administrative agency found that the license applicant met all other criteria. However, aimag and soum government stakeholders and civil society stakeholders reported concerns that they do not have enough information or ability to influence the permitting process. In particular, civil society stakeholders reported that they often did not learn about the permit until it had already been granted, and were not adequately—if at all—consulted during the permitting process.

The Government of Mongolia is currently working on revisions to its mining law and policy framework, with improvements in the permitting process and mine closure requirements among its top priorities. Importantly, for all stakeholders who wish to engage in this process, Mongolia's new General Administrative Law (2016) requires government agents and agencies to conduct a hearing to introduce the concept and purpose of a new decision they intend to adopt. The purpose of this hearing is to hear the opinions of affected populations. This new law should improve opportunities for public input on the mining law and policy framework as changes are made to attract investment in Mongolia, meet objectives of Mongolia's 2016–2020 Action Plan and accomplish the country's vision under the United Nations 2030 Sustainable Development Goals (see UNDP Sustainable Development Vision 2016).

STRENGTHS

Key strengths in Mongolia's legal and policy environment related to mining are:

• Geological information is made available to the public for a reasonable fee. Anyone may access geological information in hard copy in Ulaanbaatar for a small administrative fee to cover the cost of the copies. While access remains difficult for stakeholders in remote areas outside of Ulaanbaatar, access is otherwise available to the public. There is much interest among stakeholders in making this information available electronically. The recently approved Government Action Plan 2016–2020 includes plans to create a National Geology Department and a National Geo-Information Database. MRPAM plans to launch a web-based Geographic Information System (GIS) in February 2016.



- Mining codes and standards are revised and updated to reflect changing knowledge and best practice. The Minerals Law of Mongolia was adopted in 2009 and amended in 2014. Related laws and policies are also quite current and are updated frequently. However, as noted below, the laws may be revised so frequently that this lowers investor confidence and leads to a lack of stakeholder clarity regarding current rule of law.
- The Law of Mongolia on Hygiene (2016) Chapter Three requires a health impact assessment
 to be made in accordance with the Law on EIA. The assessment must be made if an activity
 possibly or already affects human health, including mining activity.

GAPS

- Mining codes and standards are revised and amended frequently; while occasional improvements to the legal framework may be necessary to address gaps and make improvements based on lessons learned, frequent changes may negatively impact perceptions of a stable law and policy environment for foreign investment. While it is positive that the mining codes and standards are up to date, changes to the Minerals Law of Mongolia have been frequent. The Minerals Law was first adopted in 1994, revised extensively in 1997, revised again in 2006, and has been amended on an almost annual basis since that time (Hogan Lovells, 2015). A number of stakeholders contacted by the Assessment Team indicated that the frequency of these changes might be creating concern among potential mining investors. The Government of Mongolia, through its Government Action Plan 2016–2020 and Legislative Reform Plan 2017–2020, is now considering additional revisions to Mongolia's legal framework for mining. These revisions aim to address gaps in critical areas such as mine closure policy, as the Government seeks to develop a modern and sustainable framework that will attract increased investment in the sector.
- The proliferation of laws and policies results in confusion and lack of clarity among stakeholders. The overall abundance of new laws, policies, and requirements relevant to the minerals sector frustrate all stakeholders in their efforts to access, understand and follow the laws. However, environmental laws and policies have been streamlined in recent years; while the environmental framework remains complex, stakeholders have commented that it is now easier to comprehend. Nonetheless, stakeholders in all sectors frequently commented on confusion regarding the multitude of current laws, the frequency with which they are amended and whether they fit together into a cohesive framework.
- Mine closure requirements, financial assurance requirements and related monitoring are insufficient. As further discussed in the Post-Mining Transition section below, only the most general requirements for mine closure are provided in the Minerals Law of Mongolia (see Article 45). No detailed requirements or guidance are provided.
- The level of consultation with communities and other stakeholders during the assessment and planning process is limited. While the Law on EIA does require documentation of consultation with communities likely to be affected by the project (see Articles 8.4.8 and 17.4), stakeholders reported that such "consultations" are limited at best. Stakeholders noted that consultation may be very limited—targeting one or two government leaders, but not a broad representation of government, civil society and other interested stakeholders. Many civil society stakeholders reported that they do not hear about a permit until it has already been issued. Stakeholders noted that while a ministerial decree on the procedure of consultation was issued in 2014, it was not accompanied with any guidance, and no information has been made available regarding how consultations should be or have been implemented in practice.
- Elements of the electronic permit application process are frustrating to applicants. As noted above, company stakeholders in particular complained that the race to submit permit applications "first" in the "first-come-first-served" electronic application process is at times frustrating. Some company stakeholders noted that the process led to permit approvals



based on who had the fastest Internet speed or created the most new entities to increase the likelihood of submitting an application first. All stakeholders consulted on the permitting process noted that the electronic system is an improvement over the prior system when applications were hand delivered. Many stakeholders noted that the first-come-first-served strategy is the most fair, as it decreases opportunities for favouritism. The government is currently aware of the issues in the application process and is working to address them. Government Action Plan 2016–2020, ratified on September 9, 2016, states that the process of granting mining licenses will be simplified.

Lack of clarity and transparency regarding what laws and procedures apply to mineral
deposits deemed deposits of strategic importance. Although the Minerals Law provides
a general definition of deposits of strategic importance, stakeholders—particularly from
government and civil society—frequently expressed concern regarding what procedures apply
to such deposits and the perceived or actual law and policy exceptions allowed for such
deposits.

4.2 FINANCIAL BENEFIT OPTIMIZATION

The second theme of the MPF covers the optimization of financial benefits of mining activities through taxes and royalties, and reflects the value of mineral resources to society. The other major subtopic of this section is revenue transparency, on both the municipal and national levels. The policy recommendations under this section fall into the following categories:

- The implementation of a revenue generation framework that optimizes returns from mining activities and allows some minimum level of financial return during periods of low prices.
- The integration of planning for the mining sector with that of other economic sectors.
- Providing a policy that optimizes revenues while offering an adequate rate of return to investors, that uses income tax based on net profits, and that applies such taxes in a similar manner as to non-mining activities.
- The need for a high level of human and intellectual resources, particularly to administer and audit the country's tax system and obtain maximum benefit from its tax regime.
- The integration of fiscal instruments and policy objectives.
- Increasing revenue transparency and knowledge regarding the distribution of benefits from mining.

KEY LAWS AND POLICIES

Key laws and regulations relating to this section of the MPF are:

- Minerals Law of Mongolia (2006, amended 2014)
- Fiscal Stability Law (2010)
- Integrated Budget Law (2011)
- General Law of Taxation (2008)
- Government Resolution 52 (2014)
- State Minerals Policy 2014-2025 (2014)
- Investment Law (2013)
- Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016)
- Resolution on Coal Classification (2014)



ROYALTIES, TAXATION AND MANAGEMENT OF MINERAL REVENUES

General provisions related to taxation, and related definitions, are included in the General Law of Taxation, though this law does not itself impose any mining related taxes. Mining is subject to a general corporate income tax on the same basis as other industries. It is also subject to the same Value-Added Tax (VAT) as other industries. The chief tax specific to minerals industries is the royalty, which for non-coal minerals is fixed at five per cent (Minerals Law Article 47.3.2 2014). The coal royalty is 2.5 per cent (Minerals Law Article 47.3.1 2014). However, for deposits of strategic importance, which include the majority of foreign-owned mine sites, there is the opportunity to negotiate additional royalty above the standard amount, on a basis which varies depending on the extent to which the state has invested in finding or developing the mineral deposit.

According to the Minerals Law, 30 per cent of royalty payments and 50 per cent of special license fees go to local governments. However, stakeholders report that the per cent of royalty payment to local government was reduced to 5 per cent on November 20, 2016, due to government efforts to respond to the economic downturn. The amounts of these transfers are published by the central government. Local governments do not report their receipts.

Royalties from mining projects go in part into several special funds. If the royalty revenue exceeds the amount planned in the national budget for royalty revenue, the excess is deposited in the Fiscal Stability Fund. The Fund now is reported to have some 0.3 billion (USD Equivalent) in assets (Sovereign Wealth Fund Institute, 2017). It cannot be spent until it reaches the required level of 5 per cent of GDP. Government stakeholders report that 65 per cent of the remaining revenue from royalties is deposited in the "Future Heritage Fund," and the final 35 per cent goes into the national budget.

As noted above, Article 4.1.12 of the Minerals Law of Mongolia defines a "mineral deposit of strategic importance" as "a deposit that may have an impact on the national security or the economic and social development of the country, or that is producing or has the potential of producing more than five per cent (5%) of the total gross domestic product of Mongolia in any given year." Articles 5.3, 5.4, 5.5, 5.6, and 47 of the Minerals Law set out the special provisions on royalty and ownership provisions that can apply to such deposits.

Under the Minerals Law, the government could elect to own up to 50 per cent of a mineral project deemed to be of strategic importance; if the private company finances the prospecting and exploration, that is limited to 34 per cent. The law envisions that the government can establish a special royalty on top of the standard royalty, as an alternative to taking these ownership shares.

Mineral projects deemed deposits of strategic importance are subject to negotiated contracts. The negotiated provisions in such contracts include environmental protection, infrastructure, social responsibility, tax stabilization, workforce training and other subjects. Other provisions, established in law, are not supposed to be negotiable. Government Resolution 52 discusses this subject.

Deposits of strategic importance as of 2011 were reported as including most if not all of Mongolia's major mineral projects. Below is a table listing the 15 current deposits of strategic importance. The government is currently negotiating investment and deposit development agreements for Tavan Tolgoi and Gatsuurt.



TABLE 3. LIST OF STRATEGIC DEPOSITS

DEPOSIT NAME	TYPE OF MINERAL	LOCATION	RESERVES
Tavan Tolgoi	Fossil Coal	Ömnögovi, Tsogttsetsii	6,420 million tonnes coal
Narlin Sukhait	Fossil Coal	Ömnögovi, Gurvantes	125.5 million tonnes coal
Baganuur	Brown Coal	Ulaanbaatar, Baganuur	600 million tonnes coal
Shivee Ovoo	Brown Coal	Gobisumber, ShiveeGobi	646.2 million tonnes coal
Mardai	Uranium	Dornod, Dashbalbar	1,104 tonnes at 0.119 per cent U308
Dornod	Uranium	Dornod, Dashbalbar	28,868 tonnes at 0.175 per cent U3O8
Gurvan Bulag	Uranium	Dornod, Dashbalbar	16,073 tonnes at 0.152 per cent U3O8
Tomortei	Iron	Selenge, Khuder	229.3 million tonnes at 51.15 per cent Fe
Oyu Tolgoi	Copper, Gold	Ömnögovi, Khanbogd	2.7 billion tonnes ore, 25.4 million tonnes copper, 1,028 tonnes gold
Tsagaan Suvarga	Copper, Molybdenum	Dornogobi, Mandah	10.64 million tonnes oxides at 0.42 per cent Cu and 0.011 per cent Mo, 240.1 million tonnes sulphides at 0.53 per cent Cu and 0.018 per cent Mo
Erdenet	Copper, Molybdenum	Orkhon, Bayan-Ondor	1.2 billion tonnes at 0.51 per cent Cu and 0.012 per cent Mo
Burenkhaan	Phosphor	Khubsugul, Alag-Erdene	192.24 million tonnes at 21.1 per cent P2O5
Boroo	Gold	Selenge, Bayangol	24.5 thousand tonnes at 1.6g/tonn Au
Gatsuurt	Gold	Selenge, Mandal	17.1 million tonnes at average grade of 2.9 grams per tonne gold, 1.6 million ounces of yellow metal
Tomortein Ovoo	Zinc	Sukhbaatar, Sukhbaatar	7.7 million tonnes at 11.5 per cent Zn
Asgat	Silver	Bayan-Ulgii, Nogoonnuur	6.4 million tonnes at 351.08g/tonne Ag

Sources: Verein der Mongolischen Akademiker, 2015; Mineral Resources and Petroleum Authority of Mongolia, 2016.

STRENGTHS

The most important strengths in the theme of financial benefit optimization are:

- There is a high level of open and transparent data on tax and royalty flows. Mongolia has over 10 years of experience implementing the EITI. Stakeholders remarked positively on the level of financial data available regarding funds paid to and revenue received by the state related to the minerals sector. However, stakeholders expressed concerns about lack of transparency in the state-owned mining sector, and a lack of transparency in the management of local funds.
- Mongolia has established a Stabilization Fund to manage mineral price volatility. Although the Fund seems to be based upon a sound concept, it is not fully operational until its assets equal 5 per cent of GDP.
- Since 2007, the government has established various forms of sovereign wealth funds to accumulate revenue from the mining sector and support national development. The Mongolian Development Fund (MDF) was established by law in 2007. The Human Development Fund (HDF) was established by law in 2009 and replaced the MDF.

GAPS

- Government capacity to audit complex returns and to deal with transfer pricing, beneficial
 ownership and related issues needs to be improved. These are issues of deep concern in
 many countries, and Mongolia is not alone in seeing a need to build capacity in these areas.
 Stakeholders were unaware of the efforts of the Organisation for Economic Co-operation and
 Development (OECD) at better management of transfer pricing issues (See OECD, 2016).
- There is a lack of clarity regarding funding budgets of mining aimags and soums. Stakeholders expressed great concern, particularly government and civil society stakeholders at the aimag and soum levels, regarding the extent to which planned and budgeted transfers of mineral



revenues from national to local government entities are actually realized. Stakeholders expressed a general belief that in the current conditions of budget stress these transfers would be reduced, by unpredictable amounts, with significant negative effects on local development plans.

- There is a lack of transparency in the state-owned mining sector. Many stakeholders shared concerns regarding lack of transparency in this sector.
- There is a lack of clear criteria regarding which deposits should be classified as mineral deposits of strategic importance. There is active debate in the Mongolian government and among interested stakeholders regarding whether Mongolia would benefit from a more standardized system for mineral deposits of strategic importance with requirements set out in generally applicable laws, or whether terms for such deposits should be established in negotiated agreements. At this point it appears that almost all significant foreign investments are deemed to be deposits of strategic importance.

4.3 SOCIOECONOMIC BENEFIT OPTIMIZATION

The third theme of the MPF aims to promote the conversion of extracted natural capital into human capital by encouraging policies that optimize the socioeconomic benefits of mining to local, regional and national stakeholders. The policy recommendations under this theme fall into the following categories:

- The integration of mining into community, regional, and national fabrics and strategies, for example, by making socioeconomic planning a part of the permitting process and by ensuring that consultations with affected stakeholders take place at various stages of the mining cycle.
- Ensuring that mining activities consider and support education and community health services, working collaboratively with governments.
- Ensuring high standards of occupational health and safety through appropriate standards.
- Optimizing employment and business opportunities at and near the mine with an objective of ensuring economic growth that extends beyond the life of the mine.
- Addressing potential security issues.
- Considering the respect of human rights, indigenous people and cultural heritage through norms aligned with international laws and standards.

KEY LAWS AND POLICIES

Key laws on this topic include:

- Action Program of the Government of Mongolia 2016–2020 (2016)
- Integrated Budget Law (2011)
- Constitution of Mongolia (1992, amended 2001)
- Environmental Protection Law of Mongolia (1995)
- Green Development Policy of Mongolia (2014)
- · Law on Information Transparency and Right to Information (2011)
- Law on Regulating Public and Private Interests in Public Service and Preventing Conflicts of Interest (2012)
- Law on the Protection of Cultural Heritage (2014)
- Law of Mongolia on Environmental Impact Assessment (2012)
- Law of Mongolia on Land (2002)
- Law of Mongolia on Hygiene (2016)
- Minerals Law of Mongolia (2006, Amended 2014)



- Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016)
- State Minerals Policy 2014-2025 (2014)

SOCIOECONOMIC PROMISE IN MONGOLIA

Stakeholders in Mongolia are generally well-educated and eager to engage in discussions regarding the impacts and benefits of mining in Mongolia. They are open about their opinions and expect to be consulted. As multistakeholder councils and other mechanisms emerge on regional and local levels, stakeholders have demonstrated willingness to collaborate across sectors. Civil society's ability to speak a common language across diverse urban and rural cultures makes the country a ripe environment for socioeconomic benefit optimization. Such characteristics are likely to lead to success in implementation of agreements under the recently adopted Model Agreement framework. However, stakeholders are uncertain how to implement the Model Agreement, and how to ensure that it aligns with existing agreements and legal frameworks. One existing agreement is the Oyu Tolgoi Cooperation Agreement, which established the Gobi Oyu Development Support Fund. This fund is described in the box below.

The Green Development Policy of Mongolia (2014), State Minerals Policy 2014–2025 (2014), and Action Program of the Government of Mongolia 2016–2020 (2016) lay out medium- and long-term strategies for socioeconomic development. In particular, the Green Development Policy details Mongolia's vision for sustainable socioeconomic development including:

- Section 1.3: "Supporting the global commitment to transition to a socially inclusive, low carbon
 and wasteless development model by changing current development trends and conserving
 natural resources and ecosystem value along with increased human well-being and reduced
 poverty" and
- Section 1.3: "[T]ransition to a development model that results in human well-being by safeguarding environmentally friendly, inclusive economic growth, enhancing natural resources utilization and maintaining the ecosystem service sustainability."

The plan includes guiding principles such as (1.3.1) "ensure citizen's participation in green economic growth" and transparency and accountability. Challenges and opportunities related to implementing these objectives and those of the MPF are further elaborated below.



BOX: SOCIOECONOMIC DEVELOPMENT STRATEGIES: THE GOBI OYU DEVELOPMENT SUPPORT FUND

While in Ömnögovi Province, the Assessment Team met with the Gobi Oyu Development Support Fund (DSF) to discuss how the DSF is governed and how it works to meet sustainable development objectives in Mongolia. The DSF was established in 2015 through a Cooperation Agreement agreed the Oyu Tolgoi copper-gold mine in Ömnögovi Province; the Government of Ömnögovi Province; and the communities of Khanbogd, Manlai, Bayan-Ovoo and Dalanzadgad. The primary objectives of the Cooperation Agreement are to agree on a basis for a transparent and respectful relationship among the parties, and to promote sustainable socioeconomic development of Ömnögovi Province.

The DSF is established as an Independent Legal Entity under the Law of Mongolia on Non-Governmental Organisations. Oyu Tolgoi contributes USD 5 million to the fund each year under the Cooperation Agreement.

DSF accepts proposals for projects that target health, education, training, employment, support for local business expansion, environment and preservation of cultural heritage. Applicants must provide a clear governance structure, budget and timeline for a project within these thematic areas that will be implemented within the Ömnögovi Province.

The proposal review process includes three tiers. First, the **Executive Director conducts** an initial review of proposals to ensure that they are complete and meet the Fund's primary criteria. Second, the proposals go to a Relationship Committee. The Relationship Committee conducts further research on the proposals, such as consulting with experts when necessary to determine project viability, and then prioritizes the proposals based on type, timing, potential impacts, community needs and other appropriate factors. The Relationship Committee seeks to make decisions unanimously. Finally, the prioritized proposals go to the DSF Board, which considers the Relationship Committee's recommendations and



DSF-Funded Kindergarten in Dalanzadgad, Mongolia

makes final decisions to approve or reject proposals.

In 2015, Gobi Oyu DSF funded a construction project of two kindergartens in Dalanzadgad, one of which is pictured above. The kindergartens opened on April 20, 2016, the first anniversary of signing the Cooperation Agreement.

DSG received 47 proposals in 2016 and has agreed to finance four social infrastructure projects and nine sustainable development programs. These include, among others, a health care centre, an animal health service centre, a greenhouse/nursery, a forestry program, a cave protection program and a museum.

The success of the Fund relies in part on ongoing outreach to communities in the Ömnögovi Province throughout the year to publicize the availability of funds and explain the application process. The Fund also monitors management of awarded grants, to ensure that the funds are well managed and used to achieve tangible and sustainable results.

Under the Cooperation Agreement, Oyu Tolgoi has agreed to fund the DSF for 30 years. Stakeholders in all sectors were enthusiastic about the Fund and its sustainable benefits in the Ömnögovi Province. The DSF is an excellent example of a practical mechanism for maximizing the socioeconomic benefits of mining.



STRENGTHS

- Use of multistakeholder councils including soum, community and company leadership are increasingly common. Use of multistakeholder councils at the aimag and soum level is common in Mongolia. Such councils are born of a number of initiatives, such as the EITI or negotiations between mining companies like Oyu Tolgoi and local communities. Stakeholders in Mongolia's mining intensive South Gobi region in particular reported on the effectiveness of such councils toward building and improving relationships, understanding the perspectives of representatives of other sectors, problem solving and overall management of the impacts and benefits of mining.
- Recent approval of terms for a model agreement between mining companies and local administrative bodies promotes integration of benefits of mining into aimag and soum levels. Article 42.1 of the Minerals Law requires a mining licence holder to "work in cooperation with the local administrative bodies and conclude agreements on issues of environmental protection, mine exploitation, infrastructure development in relation to the mine-site development, and job creation." While this requirement is nothing new, the government only recently (on March 28, 2016) through Resolution 179, approved the terms for the "Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation." Stakeholders anticipate that this Model Agreement will result in many new agreements that will stimulate greater benefits to mine-affected communities. However, government stakeholders at the national and local levels have expressed concerns regarding inclusion of financial benefits and funds in such agreements, due to the Law on Regulating Public and Private Interests in Public Service and Preventing Conflicts of Interest (2012). Article 17 of this law states that "a public official, or a state or local institution, is prohibited from requesting or accepting any form of donation or financial aid for public use from a natural or legal person." Local government officials are cautious not to breach this prohibition, which could lead to possible investigations by Mongolia's Anti-Corruption Agency.
- The new law on Health Impact Assessment (Chapter 3 of the Law of Mongolia on Hygiene) requires a health impact assessment where activities possibly or already affect human health. The Law of Mongolia on Hygiene was approved on April 2, 2016. Its requirement for health impact assessment applies to mining activities that affect human health. It is unclear, however, whether adequate human resources or budget have been dedicated to conducting such assessments on more than a modest and ad hoc scale.
- There are relatively few major security concerns at mine sites. Stakeholders in all sectors reported relatively few concerns related to security issues or violence around mine sites. However, some concerns were raised. One civil society stakeholder reported that she heard of a woman shooting a gun in the air in Khanbogd soum to call attention to issues caused by mining trucks driving through the soum. Other stakeholders reported that shots were fired at a Gatsuurt fuel tank in recent years. We heard of at least one stakeholder complaint of mine security detaining local people without adequate cause. A company stakeholder reported that some herders had damaged fencing at the mine and allowed a herd to enter and graze in the mining area. Stakeholders also reported conflicts between small-scale and large-scale miners. However, major security issues appear to be quite uncommon.
- The Minerals Law requires mining companies to annually report on the environmental impacts
 of mining activities and propose amendments to their EIA and environmental management
 plan, providing opportunities to respond to changing conditions. The Minerals Law Article 39.1.7
 et seq. require mining companies to submit to the MEGDT, local government and inspection
 agency an annual report detailing adverse impacts and proposed responses. This includes
 detailing any adverse environmental impacts due to expansion of mining operations or other
 changing conditions.



• The Minerals Law requires license holders to protect cultural heritage. Articles 40–41 of the Minerals Law require license holders to comply with the requirements of the Law on Protection of Cultural Heritage. The Green Development Policy of Mongolia (2014) also includes an objective to "[p]romote transformation of natural and cultural heritage sites into exemplar[s] of green development areas by limiting mining and industrial activities and developing ecotourism and traditional livestock husbandry."

GAPS

- There is a low level of understanding regarding how to develop and manage agreements between mining governments and local governments to ensure benefits to mine-affected communities. Stakeholders have a range of concerns regarding how the new Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development will impact existing agreements, how new agreements will be negotiated and implemented, and whether agreements under the new model will have a positive or negative impact on existing benefit-sharing arrangements. Stakeholders in all sectors expressed a need for more detailed guidance regarding how to develop and manage these agreements.
- There is widespread concern among stakeholders about equal access to benefits from mining. Stakeholders, particularly government and civil society stakeholders at the soum level, expressed concerns regarding unfair distribution of the benefits of mining, which they report primarily reach the aimag level instead of focusing benefits on mine-affected soums. The Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development may respond to this concern. Innovative initiatives, such as Oyu Tolgoi's DSF, also respond to this concern by focusing grants on programs that benefit mine-affected areas.
- Requirements for consulting with affected stakeholders at every stage of the mining cycle are lacking. While the Law of Mongolia on EIA requires the legal entity performing the EIA to "organize, at the report preparation stage, consultations with and formally seek comments from the local authority, the community that is likely to be affected by the project and local residents living in the area where the proposed project is going to be implemented" (Article 17.4), and the EIA report must include notes of these consultations, Mongolia's legal framework does not require ongoing consultations throughout the life of the mine. Notably, the words "stakeholder," "community," and "consultation" do not appear even once in the Minerals Law of Mongolia, but the Minerals Law does allow a license holder, in cooperation with the local administrative body, to organize a public forum related to the issues of environmental protection, infrastructure development, and employment, and related agreements between the company and local government (Articles 42.1–42.2).
- There is no apparent system for regular documentation and reporting on social and economic impacts of mineral development. Although the Minerals Law of Mongolia requires the "State administrative body in charge of geology and mining issues" to provide "recommendations with respect to natural and human factors that may have an impact on the social and economic development of Mongolia" (Article 11.1.3) and "to do research, evaluation, and recommendations with respect to the impact the mining industry has on the social and economic development of Mongolia" (Article 11.1.10), there is no apparent information gathering or reporting system focused on social and economic impacts of mining. Likewise, although the Environmental Protection Law of Mongolia states the purpose of guaranteeing, among other aims, "an ecologically balanced social and economic development," it contains no requirements for reporting on these factors. The Law of Mongolia on EIA, as noted above, does contain a requirement for consultation with communities likely to be affected by the project; this is likely to result in documentation of social and economic impacts, but documentation of such impacts is not specifically required by the law. However, social and economic impacts are significant. Local government stakeholders in particular documented the social and economic impacts of sometimes extraordinary mine-related in-migration (and in some cases out-migration), lamenting the inability of their education and community health services to respond to the demands of a fluctuating population.



- The level of concrete government planning for eventual transition to post-mining/post-closure economies is low. Although a soum-level government official shared some detailed strategies for economic diversification and long-term planning beyond the life of a mine, such concrete strategies were lacking overall at both the state and aimag level. The Green Development Policy of Mongolia includes objectives to increase processing of agricultural products through promotion of sustainable agriculture development, development of green-tech, export-oriented manufacturing and promotion of ecotourism products and services. The MPF envisions incorporating such strategies, as well as others based on local realities, early in the life of a mine and as part of a comprehensive mine closure plan, to ease the social and economic burdens of post-mining transition. Such strategies are also cornerstones in promoting long-term sustainable development.
- Support for local business development opportunities related to mines is low. Although company stakeholders shared some recent ad hoc initiatives to support, build capacity and source from local businesses, government-led initiatives for local business development related to mines has been relatively low. However, the Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016), does contain some provisions on local procurement and employment. New agreements under the model should lead to improvements in this area.

4.4 ENVIRONMENTAL MANAGEMENT

This section of the MPF recognizes the importance of ecosystem management to any society seeking to achieve a more sustainable development path.

The themes of this section include:

- Water management, including:
 - Environmental management standards for use of surface and ground water, with strict monitoring and appropriate penalties where standards are compromised.
 - Requiring mining entities to ensure that mine effluent streams discharged into the environment are managed and treated to meet established effluent discharge guideline values.
 - Requiring mining entities to ensure that water-leaching or percolating waste dumps, tailings storage areas and leach pads have equivalent protection.
 - Requiring that mining entities have in place practices and plans that minimize the likelihood of impacts beyond the mining site.
- Avoiding and minimizing potential adverse effects to biodiversity throughout the mining cycle.
- Managing mine wastes by requiring that mining entities design, operate, and maintain waste structures according to internationally recognized standards; and requiring mining entities to commission independent expert reviews and report to government prior to development approval, when changes are proposed and at regular intervals during the operating phase.
- The development and implementation of emergency preparedness programs.

KEY LAWS AND POLICIES

Key laws on this topic include:

- Civil Code Art. 502 (2002)
- Constitution of Mongolia (1992, amended 2001)
- Law for Soil Protection and Prevention of Desertification (2012)
- Law of Mongolia on Environmental Impact Assessments (2012)



- Law of Mongolia on Natural Resources Use Fee (2012)
- Law of Mongolia on Water (2012)
- Law of Mongolia on Water Pollution Fees 2012
- Law on Air (2012)
- Law on Buffer Zones (1997)
- Law on Disaster Protection (2012)
- Law on Environmental Protection (2012)
- Law on Fauna (2012)
- Law on Forests (2012)
- · Law on Information Transparency and Right to Information (2011)
- Law on Land (2002)
- Law on Natural Plants (2012)
- Law on Plant Protection (2007)
- Law on Prohibition of Mineral Exploration and Mining Activities in areas in the Headwaters of Rivers, Protected Water Reservoir Zones and Forested Areas (2009)
- Law on Protection of Cultural Heritage (2014)
- Law on Sanitation (1998)
- Law on Special Protected Areas (2004)
- Law on Subsoil (1995)
- Minerals Law of Mongolia (2009, amended 2014)
- Order No. A-2, dated 4 January 2010, Procedural Guidance for Environmental Impact Assessment (2010)

ENVIRONMENTAL LAW AND POLICY IN MONGOLIA

Mongolia has been actively legislating in the environmental area for a number of years, notably the numerous environmental laws either passed or substantially revised in 2012. The fundamental basis of Mongolian environmental law is the 1992 Constitution of Mongolia. Article 6.1 of the Constitution states that "the land, its subsoil, forests, water, fauna and flora and other natural resources shall be subject to the people's power and state protection." Article 16.1.2 establishes that the citizens of Mongolia are guaranteed "the right to a healthy and safe environment, and to be protected against environmental pollution and ecological imbalance."

Mongolia relies heavily on EIA procedures. The Law on EIA requires all projects or project modifications to go through general EIA or environmental screening prior to implementation. That process can lead to one of four results:

- 1. *Project Implementation*: May be authorized for small projects without negative impact on human health and environment.
- 2. Project Implementation with Environmental Conditions: Projects with low negative impacts on human health and environment.
- 3. Detailed EIA Required: Projects whose negative impact on human health and environment cannot be determined during general EIA and a more detailed survey is needed.
- 4. *Impossible to Implement*: Projects that do not conform to relevant regulations, are inconsistent with land management plans, or are harmful to the environment and human health.



Out of a detailed EIA an environmental management plan and monitoring program are developed, designed to meet the recommendations and findings of the EIA. The entity that has performed a detailed EIA is to develop an environmental management plan designed to protect and ensure sustainable use and restoration of the natural environment in which the proposed project is to be implemented; ensure that recommendations outlined in the strategic assessment mitigate, eliminate, and prevent adverse impacts that are identified by the detailed EIA; and monitor and identify potential negative consequences that may arise in the proposed project environment (Law on EIA Art. 9.1 2012). Applications for a license for the use of natural resources, extraction of petroleum and minerals, and possession and use of land for business purposes, as well as an approval for any other projects, are subject to a prior general EIA (Law on EIA Art. 7.2 2012).

The state organization in charge of nature and environment is to make public via its website information regarding the development programs and plans that are subject to a strategic assessment and the projects that have undergone an EIA (Law on EIA 2012). An opportunity for public comment is required.

The preparers of EIAs and management plans are to be Mongolian entities licensed by government authorities; the level of capacity or required experience of those licensed to prepare EIAs is unclear. Also unclear is the capacity of government organs to review and approve them, a particular concern in light of the very tight deadlines given by the law for review. Company stakeholders expressed concerns regarding the level of competence of those who prepare EIAs; one stakeholder suspected that text was copied from the text of one EIA and duplicated in another.

The law does appear to allow developers of deposits of strategic importance to negotiate investment contracts that can extend to environmental matters (see Government Resolution 52 of 2014). The extent to which this leads to stronger (or to weaker) environmental standards could not be assessed, primarily due to lack of access to these contracts.

STRENGTHS

- There are uniform requirements that all major projects conduct EIAs and have environmental management plans in place. The Minerals Law of Mongolia together with the Law on EIA require mineral rights holders to conduct EIAs and environmental management plans, and to submit annual reports.
- Stakeholders have access to environmental information on MEGDT's website. Civil society stakeholders in particular commented that they could easily find EIAs and other environmental information on the Ministry's website.
- Companies must submit annual reports on environmental management plans and proposals for how they should be improved. Companies are required to submit annual environmental reports noting any negative environmental impacts and including proposals for how the environmental management plan should be improved to respond to any negative impacts.
- Company stakeholders consistently reported that they have emergency response plans in place. All company representatives interviewed confirmed that they have emergency response plans in place. However, some companies held regular drills to test their emergency response plans, but others were less certain about when they last held an emergency drill.

GAPS

Monitoring of impacts on water quantity and quality is limited. There does not appear to be
adequate monitoring of impacts on water quantity or water quality. While there are improved
monitoring requirements on paper, the extent to which this results in improved practice is
unclear. Concerns regarding the impacts of mining on water quality and quantity, and lack
of related monitoring, are broadly shared among stakeholders in Mongolia. Stakeholders in



all sectors also expressed concerns regarding the capacity of state institutions to oversee the monitoring process, take corrective action where problems appear, or impose effective sanctions when these are necessary to assure compliance.

- Requirements for assessing and monitoring of biodiversity impacts, particularly on fauna, are limited. Mongolia holds great biodiversity in its grasslands, rivers and lakes that is important for the state and region. Stakeholders highly value the environment, and biodiversity in particular, but this is not reflected in the Law on EIA, the Environmental Protection Law or the Minerals Law of Mongolia.
- There is a low level of government capacity to oversee and monitor design, construction, stability and water quality impacts of major facilities such as waste rock repositories, tailings impoundments and leach pads. The Assessment Team did not identify any uniform requirements or criteria governing these facilities, nor requirements that international best practice be followed in their design and construction. Company and government stakeholders expressed a low level of confidence in the ability of inspectors to adequately monitor these important and high-risk aspects of mining.

4.5 POST-MINING TRANSITION

This section of the MPF contemplates that, to support the goal of sustainable development, a mining operation must take closure planning into consideration from inception through the life of the mine.

The themes of this section of the MPF include:

- Ensuring that a comprehensive closure plan and adequate financial assurance are provided before the requisite development and mining permits for a new mine are approved.
- Ensuring that closure plans are of a high standard and are updated on a regular basis.
- Developing financial assurance mechanisms for mine closure.
- Taking a leading role in exploring options for orphaned and abandoned mines within the state's jurisdiction.

KEY LAWS AND POLICIES

Key laws and policies on this topic include:

- Government Action Plan 2016-2020 (2016)
- Law on Environmental Protection (2012)
- Law of Mongolia on Environmental Impact Assessments (2012)
- Minerals Law of Mongolia (2009, amended 2014)

MINE CLOSURE IN MONGOLIA

Mongolia has a significant and growing legacy of mine properties that have not been adequately rehabilitated. Some of these are artisanal mining sites. Some of them are larger operations where the ownership and legal responsibility for the site is now unclear. International experience is that once such a legacy of problem sites is allowed to accumulate, it is extremely difficult to generate the funds necessary for rehabilitation.

While dealing with abandoned or "orphan" sites is important, the highest priority is to prevent any more such sites from being added to the list. The MPF promotes a legal system in which mining cannot start until government has in hand both of the following:

- 1. An approved closure plan
- 2. A financial guarantee adequate to ensure that if the company fails to perform the rehabilitation, the state will have sufficient funds available to do so itself.



Mongolia does require the preparation of mine closure plans, but there is no requirement to submit them or have them approved by the state until the years just prior to mine closure. By this time, major impacts to the environment have often occurred; in the absence of a plan, impacts may be greater than if closure is planned for and taken into account from the earliest phase through the life of the mine. At such a point, it is very difficult for the state to enforce strong closure planning and implementation, and the mine operator has little at stake economically since additional mineral reserves are minimal.

Further, international experience is that closure very frequently occurs unexpectedly, for reasons such as sharp downturns in commodity markets or accidents at the mine site. It is sometimes very difficult to predict, a year (or three years) ahead that closure will occur. The best practice is therefore to be ready for closure at any time.

The Assessment Team met with some mining companies that were operating major mines with significant environmental impacts, but which did not have closure plans in place; our team also visited a mine site where, largely due to the company's own initiative and internal mandates, implementation of a comprehensive closure plan was already quite advanced.

As further detailed below, Mongolia's legal framework does require a financial deposit for environmental purposes. But many stakeholders in Mongolia are uncertain regarding how the amount of the deposit is determined and the circumstances under which it can be spent, and do not find that it is in most cases resulting in adequate closure. Stakeholders in all sectors expressed concern that the amount was not adequate to pay the full closure costs.

The Government of Mongolia is aware of these issues and is in the process of developing plans to address them. Mongolia's Government Action Plan 2016–2020, approved by Government Resolution 45 on September 9, 2016, states that "a legal environment will be developed to facilitate the use of secondary minerals, and mining reclamation and closure processes will be improved to meet international standards." Government stakeholders also noted that a Legislative Reform Plan 2017–2020, approved in January 2017, states that the Minerals Law will be revised to clarify conditions for mine closure and financial assurance.

STRENGTHS

- Article 45 of the Minerals Law requires mine operators to inform authorities a year in advance
 of pending closure and to take "all necessary measures to ensure the safe use of the mine
 area for public purposes and environmental reclamation." Article 14.1.3 of the EIA law requires
 such a plan "at least three years prior to the project or activity closure." However, neither law
 provides detailed requirements for a mine closure plan or specifics of the kind of reclamation
 that is necessary.
- The EIA law of Mongolia requires in Section 8.4.6 that there be an assessment of the closure
 phase of the proposed mining project and in Section 9.7 that the mining license holder pay 50
 per cent of the amount required by the annual environment management plan as a guarantee.
 The guarantee is to be refunded to the project implementer after mine closure if the project
 is deemed to have satisfactorily complied with the requirements of its EIA and implemented
 annual environmental management plans of the mine operation.
- In the case of mineral deposits of strategic importance there is the possibility that
 government can negotiate additional closure requirements. Because contracts govern
 mineral deposits of strategic importance, the government has an opportunity to include more
 developed mine closure requirements than are required in current law. We were not able to
 evaluate the extent to which this has been done in practice, largely due to lack of access to
 most of these negotiated agreements.
- There is an incentive for concurrent or progressive reclamation. Licensees who complete concurrent or progressive reclamation are eligible for an early refund of the guarantee amount.



GAPS

- There is no clear requirement that a comprehensive closure plan be in effect and approved by
 competent authorities before permits are issued. Mongolia's legal framework does not provide
 detailed requirements or guidance for mine closure. However, stakeholders in all sectors place
 a high priority on improvement in this area, including adoption of clear mine closure legislation;
 there are draft laws in circulation, and many stakeholders assert that progress will be limited
 until a law is adopted.
- The legal framework does not provide a clear opportunity for public consultation on mine closure plans. Although mine closure and the post-mining transition may have significant social, economic and environmental impacts, the law does not require public consultation on mine closure plans.
- Stakeholders reported significant ambiguities in the regulatory provisions related to mine closure. Such ambiguities serve as obstacles to clear regulatory oversight of closure plans and programs, and are barriers to decisive action by government.
- The financial surety provisions are unclear and the amount of the surety does not appear to be adequate. Stakeholders in all sectors expressed concern over the lack of clarity about the financial surety provisions. The amount of the surety does not appear to be adequate in most cases to provide for proper rehabilitation of mined areas where mine operators fail to do this.
- Mongolia lacks a census of abandoned mines, and those mines known to exist have often not been assessed for the level and nature of environmental or safety hazards. The Government of Mongolia is aware of this issue, but has to date failed to identify and resolve the legacy issues of abandoned mines.
- Stakeholders reported the presence of abandoned, non-vegetated mined areas with opaque ownership and unclear legal successors. Furthermore, there is no funding source to address reclamation of these sites.

4.6 ARTISANAL AND SMALL-SCALE MINING

Artisanal and Small-Scale Mining (ASM) is the final theme of the MPF. In addressing this theme, the framework aims to enhance the health, safety, and quality of life of artisanal and small-scale miners working informally outside the legal framework, and to enhance the contribution of this sector to sustainable development. Policy recommendations within the theme focus on the following:

- The integration of ASM into the legal system through appropriate legal frameworks, technical support and formalization strategies.
- The integration of ASM into the formal economic system through the promotion of savings and investment, appropriate and transparent revenue policies, certification programs and collaboration with larger mines.
- A reduction in the social and environmental impacts of ASM operations through the provision
 of technical training, the adherence to minimal health and safety standards, the elimination of
 child labour, the promotion of the role and security of women in ASM, and the implementation
 of rural development and job creation policies to promote alternative livelihoods.

ARTISANAL AND SMALL-SCALE MINING IN MONGOLIA

ASM activities in Mongolia primarily focus on the extraction of gold; over 78 per cent of artisanal and small-scale miners work at gold deposits (EITI, 2014). Other significant ASM activities are present near coal, fluorspar, tungsten, and jewel deposits (EITI, 2014). While exact numbers are unavailable, between 61,000 and 100,000 miners are involved in this sector (EITI, 2014). Statistics regarding workers in the sector are difficult to obtain because ASM covers a wide range of operations by companies and individuals; the work is often illegal, irregular, and seasonal (UNEP, 2012).



Mines exist at a minimum of 238 mine deposits in over 100 soums in more than 20 aimags (EITI, 2014; UNEP, 2012). Government royalties from ASM totalled USD 10.1 billion in 2015, double the previous year, and are expected to continue to climb (SDC Factsheet, 2015). ASM gold sales to Mongol Bank in 2015 weighed in at 5,950 kilograms, nearly equal to that of all other contributing sources of gold combined (SDC Factsheet, 2015).

Prior to 2008, Mongolia's approach to ASM or "ninja" regulation was to discourage it through banning the use of mercury and cyanide; however, this was not effective at curbing ASM activities that are harmful to human health and the environment (World Bank, 2008). During this time ASM activities in Mongolia were expanding, and artisanal and small-scale miners had generally low levels of understanding of mining risks, engaged in unsafe practices, and liberally used mercury and cyanide in gold extraction without understanding the adverse impacts on their own health and the environment (World Bank, 2008). In 2008 the World Bank determined that ASM is the largest generator of rural incomes, supporting an estimated 250,000 people, including the miners and their extended family members; close to 10 per cent of the population derive direct or indirect cash benefits from ASM (World Bank, 2008).

Mongolia's Law on Minerals Article 4.1.23 defines ASM: "Engaging in small-scale mining means operations of unregistered partnership as specified in Article 481.1 of the Civil Code or by partnerships specified in Article 35 or a cooperative specified in Article 36.4 of the Civil Code conducted for the purpose of extracting mineral resources in economically non-viable deposits or in derivative deposits arising from mining and technological waste" (Law on Minerals, 2014).

The average salary of an ASM miner in Mongolia in 2013, as reported by a limited survey by SDC, was Mongolian Tugrik (MNT) 352,045 (USD 140), compared to the national rural average of MNT 814,129 (USD 330) (EITI, 2014). More men than women are involved in ASM; women comprise an estimated 19.4 per cent to 45 per cent of total workers, depending on the aimag and soum (Asia Foundation, 2013). In a survey by the Asia Foundation, 30.7 per cent of miners at ASM sites surveyed were found to be women (Asia Foundation, 2013). The survey found that there were fewer women in hard rock gold mining sites, and that women were frequently introduced to this type of mining through their husbands or families, though some single women work in ASM (Asia Foundation, 2013). The survey also found that women primarily dominate the processing and provision of auxiliary services in the sector, such as preparing, planning, cooking, cleaning, and buying and selling, and do less of the actual mining activities, such as digging, hauling, and blasting ore (Asia Foundation, 2013). 24.6 per cent of men surveyed by the Asia Foundation work in an ASM partnership headed by a woman (Asia Foundation, 2013).

The Asia Foundation estimated in 2013 that 15 per cent to 18 per cent of Mongolia's informal artisanal and small-scale miners are children, mostly boys (Asia Foundation, 2013). Among children in ASM, boys often earn more than girls as a result of the fact that boys, on average, extract more minerals than girls (Asia Foundation, 2013).

Since 2012 the government has identified numerous additional areas suitable for ASM. Separate areas of over 100 hectares of fluorspar have been identified at Tuimert Tsagaan in Dundgovi Aimag and Ikh Khongoryn Nuruu in Dornogovi Aimag, south and southeast of Ulaanbaatar (EITI, 2014). Large areas of gold deposits have been identified throughout the aimags of Darkhan-uul, Uvur-khangai, Bulgan and Tuv, all in the central region near Ulaanbaatar (EITI 2014).

Illegal ASM operations have been recorded in 20 soums in 10 aimags, primarily mining gold (EITI, 2014). In Zaamar, Sergelen and Sumber in Tuv Aimag near Ulaanbaatar, illegal ASM operations are present near gold deposits (EITI, 2014). In Uvs, Khovd, and Govi-Altai, in the west of the country, illegal ASM operations are present on tungsten and gold deposits (EITI, 2014). Aimags Dorngovi, Sukhbaatar, Zavkhan, Selenge, and Umnugovi also have illegal ASM mines (EITI, 2014). Government, company and other stakeholders expressed concerns regarding the environmental, social and other negative impacts of ASM activity.



The Government of Mongolia passed Resolution 308, "Extraction Operations of Minerals from Small-Scale Mines," on December 1, 2010, providing a legal environment for the registration of ASM mines. Formalization guidelines were approved in 2011. This catalyzed a 28 per cent increase in the number of ASM partnerships registered with the government from 2013 to 2014 (EITI, 2014). Resolution 308 designated that a miner is required to be locally registered to legally engage in ASM activities (EITI, 2014). Currently more than 871 ASM partnerships have registered with the government and over 7,085 miners are independently registered. The ASM National Federation of Mongolia was founded by NGOs representing small-scale miners, and has registered over 5,800 artisanal and small-scale miners (EITI, 2014). The Federation is a strong and effective advocate for miners' rights and has received significant commitments from government ministries relating to ASM operations and establishment (Sustainable Artisanal Mining [SAM], 2016).

A number of projects have been established in an effort to improve the ASM sector. The SAM Project in Mongolia was established in 2005, in partnership with the SDC and MRAM (SDC, 2015). The project was founded to organize artisanal and small-scale miners "into formal entities and create a favourable legal environment to formalize and regulate sustainable operation" (SDC, 2015). SDC has published a number of manuals, guidelines, reports and studies on ASM in the region, and strives to assist in integration of ASM into the formal economy and increase its development contributions (SDC, 2016). Its goals are to increase the use of a human rights-based approach in all aspects of ASM; to strengthen formal supply chain stakeholders by enhancing and increasing the visibility of ASM mineral commodity contributions to economic development; and to catalyze the learning from, and application of, best practice regarding ASM in Mongolia (SDC, 2015). A number of successes have resulted from the SAM project, including: development of an ASM legal framework; improvement in ASM operational safety; an increase in enrolment in ASM health insurance schemes; increase to national treasury through sales and royalty payments; and the establishment of the ASM National Federation of Mongolia (SDC, 2015). In 2016, the Mongolian organization XAMODX was the first entity in Asia to have its gold certified as Fairmined Ecological Gold, produced following Fairmined standards for social, organizational and economic criteria, and also without use of any toxic chemicals in gold processing. This was accomplished through the support of SDC's SAM Project.

In 2008 the World Bank established the Mongolia Mining Sector Technical Assistance Project. The project closed on December 31, 2015 (World Bank, 2008). Its key goals in relation to ASM were to support formalization in the sector, perform outreach activities to increase capacity and knowledge within mining communities, and to support the SDC in its efforts (World Bank, 2008). The project was successful in meeting these goals: a high number of self-imposed indicators relating to ASM operations were fully achieved (World Bank, 2015b).

The Asia Foundation, with support from the SDC, has established the Engaging Stakeholders in Environmental Conservation (ESEC) Project, which aims to mitigate environmental impacts from historic and current ASM in Mongolia (Asia Foundation, 2014). The most recent phase of the project took place from July 2013 to December 2016, with a budget of USD 3.9 million, targeting artisanal and small-scale miners in 18 aimags. The Asia Foundation believes that ASM can contribute to sustainable local development in Mongolia, including the realization of the right to a healthy environment and the right to decent work (SDC, 2014a). The Purpose of ESEC is to reduce the environmental impact of ASM activities through capacity building within the sector and increase formalization of the sector through the development of cost-effective rehabilitation methodology, which can help to provide the sector with an accepted industry standard (Asia Foundation 2014). ESEC is focused on 230,000 rural citizens of ASM-intensive soums, while other beneficiaries of the project include: artisanal and small-scale miners, soum governments, large-scale mining companies, local entrepreneurs and the central government (SDC, 2014a). As of 2013, the project had facilitated the establishment of 31 local multistakeholder councils, consisting of local governments, mining representatives, civil society, and local communities and 17 soums approved environmental action plans (SDC, 2014b).



GIZ established the Integrated Mineral Resources Initiative (IMRI) in Mongolia in 2011 which is currently in its second phase, scheduled to run until 2017. The IMRI aims to increase the ability of national and local partner institutions to promote inclusive and sustainable growth based on mineral resource wealth (GIZ, 2016). In relation to ASM, the multistakeholder, multi-level initiative promotes an integrated approach to location development and is involved in disseminating up-to-date knowledge and coaching the staff of Mongolian partner institutions (GIZ, 2016). In cooperation with the SDC, the IMRI is setting up a local value chain for gold—especially gold jewellery—to create local employment and earning opportunities; creating an opportunity for significant integration between the value chain and ASM-mined gold (GIZ, 2016). From 2011 to 2014, during the first phase of the project, the IMRI provided substantial assistance and targeted advisory services to a number of partner organizations. It is also linked to government activities aimed at improving the institutional and economic policy environment in the mining sector in Mongolia (GIZ, 2016).

As of 2015, approximately 11 per cent of miners in the ASM sector had been formalized. But a long list of obstacles to formalization remains, including "limited mining land access, high income tax, political economic interests in local areas, weak implementation of [the] ASM legal framework, an upsurge of illegal mining, and weak ASM and government institutions" (SDC, 2016). Artisanal miners consulted in the course of the assessment echoed these difficulties in the formalization process.

KEY LAWS AND POLICIES

Key laws on this topic include:

- Environmental Protection Law of Mongolia (1995)
- Law of Mongolia of Labour (1999)
- Law of Mongolia on Land (2002)
- Minerals Law of Mongolia (2006, amended 2014)
- Resolution 308, Extraction Operations of Minerals from Small-Scale Mines (2010)

STRENGTHS

- The Minerals Law includes a legal framework for ASM. The Minerals Law defines ASM at Article 4.1.23.
- Ministries of Mining, Environment, and Health are collaborating to prevent and address health
 and safety concerns of artisanal and small-scale miners and their families. Government
 stakeholders reported a high level of collaboration regarding inter-agency management of
 ASM.
- State government officials have engaged in SDC training and numerous capacity-building
 efforts to improve regulation and support the sector. As noted above, the government has
 collaborated with SDC, the Asia Foundation, the World Bank, GIZ and others to advance the
 sector.
- Stakeholders widely reported a low level of child labour in the sector. However, the Asia Foundation estimated in 2013 that 15 per cent to 18 per cent of Mongolia's informal artisanal and small-scale miners are children.

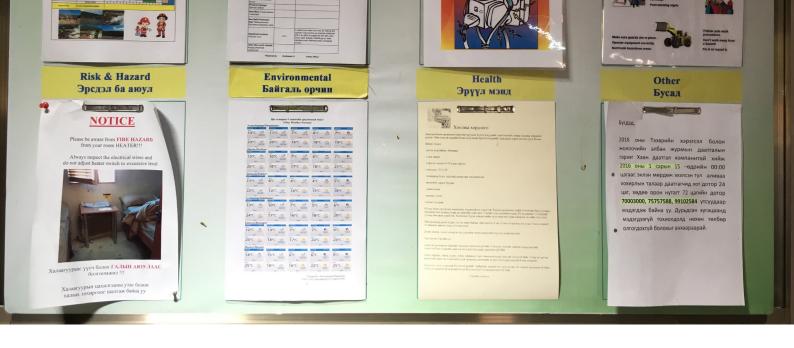
GAPS

- Many stakeholders indicated that there are legal and technical barriers to formalization. In
 particular, stakeholders lack clarity regarding how to form partnerships or cooperatives. Miners
 also complained that necessary approvals could only be obtained in Ulaanbaatar.
- Rehabilitation of artisanal and small-scale mines appears to be extremely limited.

 Stakeholders reported a very low level of rehabilitation of ASM sites. Large-scale miners also reported issues with artisanal and small-scale miners disturbing areas the large-scale miners had already rehabilitated.



- The level of government commitment to diversify economic opportunities and alternative livelihoods is low in some aimags and soums. Government officials share a wide range of perspectives on ASM activity, but most agree that miners have few other economic alternatives. Much of this activity is prevalent in very remote areas and during times when agricultural activity is low or other alternatives are lacking.
- Efforts to formalize ASM do not sufficiently prevent or mitigate conflicts between small-scale and large-scale miners. Company stakeholders commented that small-scale mining activity remained a property and security concern, and while local government expressed the will to address such concerns, their resources to do so are very limited. Stakeholders from both small-scale and large-scale mining sectors noted conflict between miners in these sectors.



5.0 ANALYSIS OF STRENGTHS AND GAPS

The Mining Policy Framework is a comprehensive and demanding framework, representing international best practices in the governance of the mining sector. Few, if any, governments would satisfy all criteria listed under the MPF's six themes. The government of Mongolia's agreement to participate in this assessment reflects the country's openness to better understanding and addressing the gaps in its mining policies and laws, and to identifying opportunities for building on its existing strengths. The government's willingness to share documents and speak candidly with the Assessment Team reflects its desire and commitment to improve the contribution of the mining sector to the achievement of the country's sustainable development objectives.

Overall, the Assessment Team found the Mongolian government's level of implementation of the MPF to be medium.

MAJOR STRENGTHS

- 1. There are many well-trained and highly competent professionals working in the mining sector in Mongolia, both in private and public entities.
- 2. Recently approved terms for a model agreement between mining companies and local administrative bodies promote integration of benefits of mining into aimag and soum levels.
- 3. Multistakeholder councils are increasingly common at the aimag and soum levels, and are viewed favourably by stakeholders as mechanisms to discuss and manage concerns related to the minerals sector.
- 4. High level of open and transparent data on tax and royalty flows; Mongolia has 10 years of experience implementing the EITI.
- 5. The Minerals Law includes a legal framework for ASM.

MAJOR GAPS

- 1. Overall lack of management of large-volume and high-risk mine wastes, including, but not limited to, their impact on water resources.
- 2. Lack of a clear system of planning and regulating mine closure and rehabilitation, including lack of financial assurance for mine closure.
- 3. Need to improve government capacity to audit complex tax returns, and to deal with transfer pricing, beneficial ownership and related issues.
- 4. Lack of clear criteria as to which deposits should be classified as mineral deposits of strategic importance.
- 5. Lack of clarity and transparency regarding funding budgets of mining aimags and soums, and distribution and use of revenues.



6.0 RECOMMENDATIONS

Mongolia's State Minerals Policy 2014–2025 and involvement in the IGF indicate the country's commitment to responsible mining and long-term sustainable development. Such responsible management is particularly needed during this challenging economic period, to protect Mongolia's valuable human capital and natural resources in the short term and to attract and maintain responsible investors in the long term. The recent elections in Mongolia resulted in many changes in government, and many new government leaders. This provides opportunities to renew commitments and improve strategies to manage the impacts and benefits of the mining sector.

Given the outcomes of this assessment, the Assessment Team has identified a few areas in particular where Mongolia could strengthen capacity to implement the MPF. These are outlined in the capacity-building themes identified below. These themes will be the focus of the capacity-building phase that follows completion of this assessment report.

PRIORITY AREA 1: MINE CLOSURE

A significant gap in Mongolia's implementation of the MPF is its lack of a clear system for planning and regulating mine closure and rehabilitation, including lack of financial assurance for mine closure.

Key topics to address in the capacity-building phase include:

- · Legal and regulatory frameworks for mine closure.
- · Integrating requirements for advance planning for closure into the permit process.
- Comprehensive closure planning, reporting, and monitoring, including planning for social and economic transitions with mining communities; integrating identification and management of social impacts into EIA and mine closure procedures.
- Establishing a system of financial guarantee adequate to provide for closure at any time in the mine life cycle.
- · Identifying a funding mechanism to rehabilitate inactive mine sites.
- Integrating existing mines into a mine closure system.
- Long-term management of large-volume and high-risk mine wastes, including, but not limited to, their impact on water resources and biodiversity.
- Examining capacity requirements the state will have to meet to administer a comprehensive mine closure system.
- Community engagement in mine closure planning and rehabilitation.



PRIORITY AREA 2: FINANCIAL BENEFIT OPTIMIZATION

Stakeholders in Mongolia, as in many other mining regions of the world, seek to better understand the complex and growing issues of transfer pricing and beneficial ownership, among other challenging fiscal and taxation issues.

Key topics to address in the capacity-building phase include:

- · Auditing complex tax returns.
- Addressing the issues of transfer pricing and beneficial ownership, including guidance from the OECD Transfer Pricing Guidelines.
- The integration of fiscal instruments and policy objectives.
- · The integration of planning for the mining sector with that of other economic sectors.

PRIORITY AREA 3: SOCIOECONOMIC BENEFIT OPTIMIZATION

As noted above, stakeholders in Mongolia are eager to engage and expect to be consulted. The level of openness among stakeholders in Mongolia's mining sector, their willingness to collaborate across sectors and ability to speak a common language across diverse urban and rural cultures make the country a ripe environment for socioeconomic benefit optimization. Such characteristics are likely to lead to success in implementation of agreements under the recently adopted Model Agreement framework. However, stakeholders who are already parties to an existing agreement fear what change may bring, and those who have not yet negotiated agreements are unsure how to proceed. Stakeholders also seek strategies for monitoring and implementing these agreements.

Key topics to address in the capacity-building phase include:

- Negotiation, management and implementation of agreements between companies and local government under the new Model Agreement framework.
- Ensuring adequate funding for management of local impacts and capturing local benefits of mining.
- · Subnational revenue sharing.
- Maximizing employment and business development opportunities, including diversification of livelihoods and assisting local businesses in improving their access to markets.
- Integrating social impact assessment in the permitting process of large-scale mining projects.
- Establishing and implementing practical procedures for stakeholder consultation in the permitting process and throughout the life of the mine.
- Aligning plans and actions with Mongolia's medium- and long-term strategies to implement the SDGs, including the Action Program of the Government of Mongolia 2016–2020, and other national sustainable development objectives and plans.



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ANNEX I: CONSULTED GOVERNMENT AGENCIES AND STAKEHOLDERS

Government Ministries, Departments and Agencies

- Khanbogd Soum Government, Ömnögovi Aimag: Deputy Governor, Environmental Protector
- Mineral Resources and Petroleum Authority
- · Ministry of Environment, Green Development, and Tourism
- · Ministry of Finance
- · Ministry of Health
- · Ministry of Mining and Heavy Industry
- · National Human Rights Commission of Mongolia
- Regulatory Agency of the Government of Mongolia, General Agency for Specialized Inspection
- Ömnögovi Aimag Government: Citizens' Representatives Khural; Deputy Governor; Policy Development Department; Environmental Inspection

Private Sector

- · Centerra Gold Mongolia/Boroo Gold
- Energy Resources
- Erdenes Tavan Tolgoi
- Mongolyn Alt Corporation
- Mongolian National Mining Association

Civil Society

- The Asia Foundation
- · ASM National Federation of Mongolia
- Environmental Assessment Association
- Globe International Center
- Gobi Soils NGO
- · Gobi Oyu Development Support Fund
- Khan-Khentii Onon River Protection Organization
- · Let's Protect Our Rights NGO
- · Mongolia Extractive Industries Transparency Initiative Secretariat
- Natural Resources Governance Institute
- · OT Watch
- · Open Society Forum
- Protecting Mongolian Environment Foundation
- Publish What You Pay
- · Responsible Mining Initiative
- · Source International
- · Southwest Research and Information Center
- · Springs and Rivers Protection Foundation
- Stakeholders Engagement for Sustainable Development



- Steps Without Borders NGO
- Transparency Foundation
- United Movement of Mongolian Rivers and Lakes

Other

- Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Agency, GIZ)
- Hogan Lovells
- International Finance Corporation
- · Mining Journal
- Swiss Agency for Development and Cooperation
- United Nations Development Programme
- United Nations International Children's Emergency Fund (UNICEF)
- World Bank



ANNEX II: LIST OF KEY LAWS AND POLICIES REVIEWED

- Action Program of the Government of Mongolia 2016–2020 (2016)
- Civil Code Art. 502 (2002)
- Constitution of Mongolia (1992, amended 2001)
- Environmental Protection Law of Mongolia (1995)
- Fiscal Stability Law (2010)
- General Administrative Law (2016)
- General Law of Taxation (2008)
- Government Action Plan 2016-2020 (2016)
- Government Resolution 52 (2014)
- Green Development Policy of Mongolia (2014)
- Integrated Budget Law (2011)
- Investment Law (2013)
- Law for Soil Protection and Prevention of Desertification (2012)
- Law on Regulating Public and Private Interests in Public Service and Preventing Conflicts of Interest (2012)
- Law of Mongolia on Labour (1999)
- Law of Mongolia on Environmental Impact Assessment (2012)
- Law of Mongolia on Hygiene (2016)
- · Law of Mongolia on Land (2002)
- Law of Mongolia on Natural Resources Use Fee (2012)
- · Law of Mongolia on the Protection of the Rights of the Child (1996, amended 2003).
- Law of Mongolia on State Supervision and Inspection (2003)
- · Law of Mongolia on Subsoil (1989)
- Law of Mongolia on Water (2012)
- Law of Mongolia on Water Pollution Fees 2012
- Law on Air (2012)
- Law on Buffer Zones (1997)
- · Law on Disaster Protection (2012)
- Law on Environmental Protection (2012)
- Law on Fauna (2012)
- Law on Forests (2012)
- · Law on Information Transparency and Right to Information (2011)
- Law on Land (2002)
- Law on Natural Plants (2012)
- · Law on Plant Protection (2007)
- Law on Prohibition of Mineral Exploration and Mining Activities in areas in the Headwaters of Rivers, Protected Water Reservoir Zones and Forested Areas (2009)
- Law on Protection of Cultural Heritage (2001/2014)
- Law on Sanitation (1998)
- Law on Special Protected Areas (2004)



- Law on Subsoil (1995)
- Minerals Law of Mongolia (2006, Amended 2014)
- Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016)
- Order No. A-2, dated 4 January 2010, Procedural Guidance for Environmental Impact Assessment (2010)
- Resolution 308, Extraction Operations of Minerals from Small-Scale Mines (2010)
- Resolution on Coal Classification (2014)
- State Minerals Policy 2014-2025 (2014)



ANNEX III: TABLE FROM COUNTRY ASSESSMENT

The following table shows the main assessment results for Mongolia in relation to each section of the MPF.

TABLE A1: MAIN ASSESSMENT RESULTS FOR MONGOLIA

MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
1. Legal and Policy Environment			
The ongoing generation of and ac	cess to geological infe	ormation.	
The generation of baseline geological, topographical and other information for national land-use planning, and making that information available with equal access to individuals, communities, and other civil society actors to ensure that consultations between different parties can take place on an equal footing.	MEDIUM	Baseline information is available and is accessible to the public for a reasonable administrative fee to cover the cost of copies. While the information is currently available only in hard copy, the government is discussing options to make the information available online. The recently approved Government Action Plan 2016–2020 includes plans to create a National Geology Department and a National Geolofromation Database. MRPAM plans to launch a webbased Geographic Information System (GIS) in 2017.	Stakeholders generally, and the government agencies in charge, indicate that Mongolia compiles a significant amount of geologic data. This information is available to any party requesting it, for a fee. Documents are only available in Ulaanbaatar and in hard copy, which may present obstacles to public access. Electronic access to this information would make it more accessible to a broader range of stakeholders.
The revision and periodic updating	g of mining codes and	standards	
Mining codes and standards are revised and updated to reflect changing knowledge and best practice. They should deal with all aspects of mining from exploration to closure and post-closure management. The data and reporting requirements by entities should be made explicit in exploration and operating licences so that authorities can make informed decisions.	MEDIUM	The mining law is revised and updated frequently. The most recent amendments to the mining law were in 2014. The mining law and related laws do not provide robust mine closure planning requirements.	The mining law is a source of much public discourse and debate. Mining codes and standards are updated and changed so often that this creates an atmosphere of policy instability and uncertainty that is of considerable concern to investors and other stakeholders. In the case of mineral deposits of strategic importance, government can negotiate agreements that vary from the general terms set out in legislation Stakeholders, including government officials, expressed the concern that this contract mechanism has become the norm rather than the exception and that the benefits of having standards of general application are thus being lost.
A permitting process that requires Mining entities, in preparing their applications for a mining permit, to consult with communities and other stakeholders at all stages of the assessment and planning process and to document the nature and results of their engagement program in the permit application.	s: MEDIUM	Consultation with communities and other stakeholders is required in the EIA process. Permit holders must complete and have an approved EIA prior to exploration and mining activity.	Ongoing consultative mechanisms to identify and address the concerns of communities and other stakeholders are lacking. The tripartite councils that exist in some aimags and soums may help fill this gap in some instances.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Mining entities are required to submit integrated social, economic, and environmental assessments, including a baseline description of current conditions, possible risks and impacts of the mining activities and proposed mitigation or management measures.	MEDIUM	The Minerals Law and EIA law require license holders to prepare EIAs, including baseline studies, possible risks and impacts of mining activities, and proposed mitigation or management measures.	Requirements to identify and mitigate social and economic concerns are lacking.
Permit submissions are required to identify and quantify opportunities and propose programs that lead to the creation of sustainable benefits over the life of the project.	LOW	The Minerals Law requires mining license holders to conclude agreements with local government regarding environmental concerns, infrastructure development and jobs creation. A Model Agreement was recently adopted to provide guidance regarding such agreements.	Stakeholders generally commented that the Model Agreement should lead to more sustainable benefits from mining. However, some stakeholders, particularly those who are parties to existing agreements, expressed concern that the Model Agreement may result in reducing their benefits from mining. There is widespread concern regarding how the agreements will be concluded, operationalized and managed.
The permit applications are considered complete only when they include acceptable plans for the eventual closure of mines and the provision of adequate financial assurance to cover the costs of closure and ongoing monitoring.	LOW	The Minerals Law, Environmental Protection Law, and EIA law do not provide robust mine closure planning requirements. Mine closure plans are required three years prior to closure under the EIA law and one year prior to closure under the Minerals Law. Financial assurance is required for environmental rehabilitation, but the amounts may be too low and the procedures are unclear.	Stakeholders in all sectors reported lack of any clear guidance in the mining law and policy framework regarding mine closure, and expressed lack of clarity regarding financial assurance requirements generally. The level of financial assurance for environmental rehabilitation appears to be far too low to cover comprehensive mine closure, and it is unclear when and how these funds can be used.
Permit applications are required, if applicable, to address indigenous peoples, cultural heritage, resettlement, and community safety and security issues.	MEDIUM	Articles 40–41 of the Minerals Law require license holders to comply with the requirements of the Law on Protection of Cultural Heritage. Mining license applicants must submit an approved EIA, which includes documentation of community concerns generally. Mongolia voted in favour of UNDRIP at the UN General Assembly Meeting on September 13, 2007. The Green Development Policy of Mongolia (2014) includes an objective to "[p]romote transformation of natural and cultural heritage sites into exemplar[s] of green development areas by limiting mining and industrial activities and developing ecotourism and traditional livestock husbandry." The Policy also includes an objective to: "[t]ake risk assessment and preservation measures for environment, historical and cultural heritage prior to implementation of large mining operations and development projects."	Regarding resettlement: direct displacement is not as frequent an issue as in other parts of the world given Mongolia's vast land area and relatively small population. However, numerous stakeholders commented on issues with apparent indirect displacement resulting from reduced access to water supplies, increased dust, and overuse and degradation of pastureland. Despite voting in favour of UNDRIP in 2007, Mongolia does not recognize "indigenous" peoples. Some groups are advocating for such a distinction, including the reindeer people and some groups of nomadic herders.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Mining entities are required to have a consultation process that provides affected communities with an opportunity to express their views on project risks and impacts, and be consulted on the development of mitigation measures.	LOW	The EIA law requires license holders to consult with potentially affected communities and other stakeholders in preparation of an EIA.	Stakeholders widely reported that consultation is lacking in practice, and that they regularly are not aware of a mining project until a permit has already been issued. The law does not require ongoing consultations throughout the life of the mine.
The permitting process requires completion of the process in a timely, transparent, unambiguous and consistent manner.	MEDIUM	The Minerals Law provides clear timelines for the permitting process, both for exploration and mining permits.	Stakeholders reported that the process is often protracted and ambiguous in practice, and access to public information about the process is low until the permit has been issued. The process for mineral deposits of strategic importance is concluded via contract and is less transparent than
2. Financial Benefits Optimization			the procedures under the Minerals Law.
The implementation of a revenue of		and royalties) scheme that:	
Optimizes the return from the mining activity and the taxation agreements achieved with foreign and domestic investors in a manner that reflects the different realities they face.	MEDIUM	Mongolia has a 5 per cent base royalty for non-coal minerals established in the Minerals Law, Article 47.3.2. Mining companies pay VAT and corporate income tax on the same basis as non-mining businesses.	There have been major disputes between the government and industry, many related to the base on which the royalty is charged.
Optimizes the resource levy revenues to society during high price periods, while minimizing the need for entities to reduce or end production during low price periods, supporting a variety of sustainable development objectives.	MEDIUM	Mongolia has a Fiscal Stability Fund. Assets in this Fund must reach the mandated level of 5 per cent of GDP before it can be spent, so it is not yet fully effective.	Mongolia has devoted considerable effort to studying these problems and attempting to devise appropriate policy solutions. The current period of low commodity prices is having severe impacts on Mongolia state revenues and growth of the economy; the Fund could be used to ease the effects of this volatility once it is in full operation.
Seeks to integrate the mineral sector with other sectors of the economy so as to optimize the contributions of the mineral sector.	LOW	Mongolia's State Minerals Policy 2014–2025 (2014) contemplates medium- and long-term development planning.	Economic integration has proven to be a challenge in Mongolia as so much of its mineral product has been destined for export with relatively little value added. Further, Mongolia has a modest manufacturing base, which has made it difficult to establish linkages.
A mining policy that:			
Maintains sufficient flexibility to ensure that a balance is achieved between optimizing revenue from mining activities while providing mine developers and operators with an adequate rate of return on their investment.	нідн	Mongolia has a 5 per cent base royalty for minerals established in the Minerals Law. Mining companies pay VAT and corporate income tax on the same basis as non-mining businesses.	There have been major disputes between the government and industry, many related to the base on which the royalty is charged. Mongolia has repealed its controversial windfall profits tax.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Uses national corporate income taxes based on net profits as the common element for large- and small-scale commercial mining.	нідн	The basic income tax regime for ASM and large-scale commercial mining are the same. The income tax of entities with income less than MNT 3 billion (USD 1.2 billion) is lower not just in the mining industry, but for all industry, than that for entities with income 3 billion MNT or more.	
Applies taxes in the same manner as to non-mining entities within a jurisdiction but with the potential for allowances specific to mining for defined expenditures and/or accelerated deductions to achieve specific public policy aims.	MEDIUM	The basic income tax regime is the same for mining and non-mining entities. Mining companies pay VAT and corporate income tax on the same basis as non-mining businesses. The principal mining-specific tax is the royalty	
The need for human and intellectu	al resources to manaç	ge the sector such that:	
There is adequate governmental capacity to negotiate the financial terms and conditions of mineral development agreements, to administer the tax system and agreements, to deal with transfer and other pricing issues, and to audit the results.	LOW	Mongolia's mineral tax system is complex and dealing with all the issues it entails strains government capacity. Government is quite concerned to build its capacity in the areas of transfer pricing and beneficial ownership, and ability to audit complex tax submissions by foreign multinationals.	Stakeholders reported that government negotiation teams are highly educated, multidisciplinary and competent. However, stakeholders also reported that there is a low level of capacity to administer the tax system and agreements, to deal with transfer pricing, beneficial ownership, and related issues, and to audit results.
		The government is currently negotiating investment and deposit development agreements for Tavan Tolgoi (coking coal deposit) and Gatsuurt (gold deposit).	
There is knowledge of how mineral development agreements are developed in other jurisdictions and the degree to which they are serving national objectives. Domestic competence in these matters should be considered a priority and, as necessary, be supplemented with independent third-party expertise.	MEDIUM	Mongolia has studied mineral development agreements in other jurisdictions. Mongolia has also undertaken specialized studies of foreign mine development agreements related to specific commodities of concern. The government is currently negotiating investment and deposit development agreements for Tavan Tolgoi (coking coal deposit) and Gatsuurt (gold deposit).	The scope of the necessary competence to negotiate these agreements depends on the scope of the issues that are open to negotiation. In Mongolia, the subjects which are negotiable are set out in Government Resolution 52, and include environmental protection, infrastructure, social responsibility, tax stabilization, workforce training and other subjects.
The integration of fiscal instrumer	ts and policy objectiv	es such that:	
All negotiations on mineral development agreements and licenses should take into consideration national policy objectives and how the agreements can support them.	MEDIUM	In 2014, the Parliament of Mongolia approved the State Minerals Policy 2014–2025 (2014). This policy clarified the country's objectives. The Green Development Policy of Mongolia (2014) includes an objective to "[r]eflect green development principles in international trade agreements and contracts and promote trading of low carbon and energy efficient technologies."	It is too early to know the impacts of this policy, particularly as the sector has been in a downward economic cycle in recent years.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Addressing the issue of the distrib	ution of benefits by:		
Providing open and transparent data on tax and royalty flows and how the benefits have been distributed at the local, regional and national levels. Governments may wish to consider how to benefit from initiatives such as the Extractive Industries Transparency Initiative (EITI).	HIGH	There is considerable transparency of the amounts collected and how they are allocated in the state budget. There is less transparency of how local governments spend funds in their control. The fiscal stability and human development funds are said to be relatively transparent because they are scrutinized through the annual budget process. Mongolia has participated in the EITI since 2010.	Stakeholders reported that, given the current economic distress the country is experiencing, the amounts of money actually transferred to subnational government fall short of the amounts budgeted. Stakeholders expressed considerable criticism regarding lack of transparency in the financial management in the state-owned mining sector.
Using different mechanisms to maximize the transparency, understanding and acceptance of how the direct financial flows from mining operations are apportioned in ways that are appropriate to their political and legal systems.	MEDIUM	In 2009, the government began to search for an optimal system for distributing mining revenue. It has since established several funds to better manage mine revenues. The MDF was established by law in 2007. The HDF was established by law, and replaced the MDF, in 2009. Mongolia has also established a Fiscal Stability Fund. Five per cent of the royalty revenue deposited into the national budget goes to a "Local Development Fund."	It is too early to know the impacts of these measures, particularly as the sector has been in a downward economic cycle in recent years.
3. Socioeconomic Benefit Optimize	ation		
The need to integrate community,	regional and national	issues by:	
Integrating mines and mining into the local, regional and national fabrics.	MEDIUM	Multistakeholder councils at the aimag and soum levels are increasingly common in Mongolia. Recent approval of terms for a model agreement between mining companies and local administrative bodies promote integration of benefits of mining into aimag and soum levels. Article 42.1 of the Minerals Law requires a mining licence holder to "work in cooperation with the local administrative bodies and conclude agreements on issues of environmental protection, mine exploitation, infrastructure development in relation to the mine-site development, and job creation." On March 28, 2016 through Resolution 179, Parliament approved the terms for the "Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation."	Multistakeholder councils are not uniformly required by law, but are born of a number of initiatives, such as the EITI or negotiations between mining companies like Oyu Tolgoi and local communities. Stakeholders in Mongolia's mining intensive South Gobi region in particular reported on the effectiveness of such councils. Stakeholders express concern regarding how to negotiate and implement agreements under the Model Agreement's limited guidance. Stakeholders are concerned about equal access to benefits from mining.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Making socioeconomic planning a formal part of the permitting process.	LOW	There are no apparent requirements for regular documentation and reporting on social and economic impacts of mineral development. The Minerals Law of Mongolia requires the "State administrative body in charge of geology and mining issues" to provide recommendations with respect to natural and human factors that may have an impact on the social and economic development of Mongolia" (Article 11.1.3) and "to do research, evaluation, and recommendations with respect to the impact the mining industry has on the social and economic development of Mongolia" (Article 11.1.10). The Environmental Protection Law of Mongolia states the purpose of guaranteeing, among other aims, "an ecologically balanced social and economic development," but it contains no requirements for reporting on these factors.	The Law of Mongolia on EIA, as noted above, does contain a requirement for consultation with communities likely to be affected by the project, which may result in documentation of social and economic impacts, but the law does not specifically require documentation of such impacts.
Addressing mining operation effects, interactions or local, regional and national dependencies, in initial documentation and in regular reporting.	LOW	EIAs must include documentation of environmental impacts and consultation with potentially affected communities. No documentation regarding interactions with regional and national dependencies is required.	Stakeholders confirmed that no documentation regarding regional and national dependencies is required.
Making consultation with affected stakeholders a requirement of the permitting process and at every stage of the mining cycle.	LOW	Lack of requirements for consulting with affected stakeholders at every stage of the mining cycle. The Law of Mongolia on EIA require the legal entity performing the EIA to "organize, at the report preparation stage, consultations with and formally seek comments from the local authority, the community that is likely to be affected by the project and local residents living in the area where the proposed project is going to be implemented" (Article 17.4), and the EIA report must include notes of these consultations. The Minerals Law allows a license holder, in cooperation with the local administrative body, to organize a public forum related to the issues of environmental protection, infrastructure development, and employment, and related agreements between the company and local government (Articles 42.1–42.2).	Mongolia's legal framework does not require ongoing consultations throughout the life of the mine. Notably, the words "stakeholder," "community," and "consultation" do not appear even once in the Minerals Law of Mongolia. Stakeholders noted that while a ministerial decree on the procedure of consultation was issued in 2014, it was not accompanied with any guidance, and no information has been made available regarding how consultations should be or have been implemented in practice.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Making planning subject to review and approval for the original permit.	LOW	There are no specific requirements for documentation and reporting on social and economic impacts of mineral development prior to approval of the original permit.	
Making the original permit subject to regular review and periodic revision to reflect goals and changing conditions.	MEDIUM	The Minerals Law requires mining companies to annually report on the environmental impacts of mining activities and propose amendment to their EIA and environmental management plan, providing opportunities to respond to changing conditions. The Minerals Law Article 39.1.7 et seq. requires mining companies to submit to the MEGDT, local government, and inspection agency an annual report detailing adverse impacts and proposed responses. This includes detailing any adverse environmental impacts due to expansion of mining operations or other changing conditions.	
Making education a national prior	l ity by:		
In a manner consistent with local and national needs, targeting every level of education from primary to post-graduate levels.	MEDIUM	Education is generally a high priority in Mongolia, evidenced by high levels of literacy throughout the country. While there are numerous mining companyled initiatives to build schools and fund scholarships in mine-impacted communities, soum-level government leaders have utilized funds from mining companies to develop new schools and balance the in-migration that has resulted from local mining activity.	Stakeholders in mining soums reported inability to respond to rapid in-migration into their soums. In Khanbogd soum, a government stakeholder reported that 330 students should be in schools, but the soum now has over 1,000. They have two kindergartens, but 400 children in the soum need to be in kindergarten—there just isn't space. Funds from the Oyu Tolgoi Gobi Oyu DSF will be used by the soum to build a school for 640 students and a kindergarten for 200 students.
Ensuring that both the physical infrastructure and the human resources to staff and service educational facilities are put in place and upgraded over time through the efforts of all stakeholders, including the permit holder.	MEDIUM	There are no requirements for permit holders to contribute to school infrastructure and human resources; however, many mining companies do so of their own initiative.	As detailed in the row above, stakeholders in mining soums reported inability to respond to rapid inmigration into their soums.
Ensuring that, with government leadership, stakeholders other than the permit holder assume greater responsibility over time so that post-closure transition can occur with a minimum of disruption.	MEDIUM	This is largely not applicable in Mongolia. While mining companies may contribute toward building educational institutions and providing educational scholarships, they are not otherwise assuming responsibility for education.	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Addressing community health by:			
Including health considerations in the baseline socioeconomic assessment required by mining entities during the permitting process.	MEDIUM	A new law on Health Impact Assessment (Chapter 3 of the Law of Mongolia on Hygiene) requires a health impact assessment where activities possibly or already affect human health. The Law of Mongolia on Hygiene was approved on April 2, 2016. Its requirement for health impact assessment applies to mining activities that affect human health.	It is unclear whether adequate human resources or budget have been dedicated to conducting such assessments on more than a modest and ad hoc scale.
Working with mining entities as well as with communities in the planning and priority setting for health services that mining entities may have undertaken to provide.	LOW	While there are no requirements for permit holders to contribute to health services, some mining companies do so of their own initiative.	
Leading with other stakeholders to gradually assume responsibility for community health from mining entities so that post-closure transition can occur with minimum disruption.	LOW	The Assessment Team did not read or hear about any mining entities being responsible for community health services. However, the state- and aimag-level governments in particular do not appear to have overall long-term plans for post-mining transition.	
Ensuring high standards for occup	ational health and sa	fety by:	
Ensuring that companies accept corporate responsibility for occupational health and safety through appropriate legal requirements, as well as through governmental monitoring, inspection and enforcement.	MEDIUM	The Minerals Law Article 44 ensures health and safety standards, and requires the license holder to "carry out activities to ensure the safety of the citizens of the relevant soum, as well as labour safety and hygiene for employees." The Law of Mongolia on Labour Safety and Hygiene provides requirements on occupational health and safety.	While there are regular inspections of mining companies, stakeholders did not comment on the quality or frequency of inspection of occupational health and safety.
Ensuring that failures in occupational safety and health performance are effectively dealt with to prevent reoccurrence and are supported by a system of penalties up to and including the revocation of operating permits.	MEDIUM	The Law of Mongolia on Labour Safety and Hygiene (2008) provides requirements on occupational health and safety. Article 36 of the Law outlines liabilities and penalties for violations.	
Requiring entities to provide education, training, equipment and adequate systems to reduce hazards; minimize the risk of accidents, injury and disease; and create a safety-conscious environment.	MEDIUM	The Minerals Law Article 44 ensures health and safety standards, and requires the license holder to "carry out activities to ensure the safety of the citizens of the relevant soum, as well as labour safety and hygiene for employees." The Law of Mongolia on Labour Safety and Hygiene (2008) provides requirements on occupational health and safety.	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Optimizing employment opportuni	ties at the mine by:		
Requiring that socioeconomic plans be part of the permitting process and seeking to optimize the employment of host nationals, particularly those from the vicinity of the mine. Increasing the national presence in mine operations (including increasing managerial responsibility) should be an objective, depending on national circumstances, education and other elements.	LOW	There are no specific requirements for socioeconomic plans prior to approval of the original permit. The State Minerals Policy 2014 – 2025 (2014) contemplates training and employment of national human resources for mineral and infrastructure sector, but does not provide any specific strategies.	
Creating business development op	pportunities by:		
Putting in place a supportive legal and fiscal environment so that the socioeconomic plan developed by the permit holder and approved by the government includes the promotion of opportunities for local, regional and national supply of goods and services to the mine, community and region.	LOW	There are no specific requirements for socioeconomic plans prior to approval of the original permit or for local, regional and national supply of goods and services to the mine, community and region. The State Minerals Policy 2014 – 2025 (2014) contemplates training and employment of national human resources for mineral and infrastructure sector, but does not provide any specific strategies. The Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016), does contain some provisions on local procurement and employment. New agreements under the model should lead to improvements in this area.	
Promoting new non-mine-related industrial and service business opportunities made possible by infrastructure put in place for the mine.	LOW	There are no specific requirements for socioeconomic plans prior to approval of the original permit or for local, regional and national supply of goods and services to the mine, community and region. The State Minerals Policy 2014–2025 (2014) contemplates training and employment of national human resources for mineral and infrastructure sector, but does not provide any specific strategies. The Model Agreement on Issues of Environmental Protection, Mine Exploitation, and Infrastructure Development in Relation to Mine Site Development and Jobs Creation (2016), does contain some provisions on local procurement and employment. New agreements under the model should lead to improvements in this area.	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Addressing potential security issue	es by:		
Working with entities to address issues that may give rise to security concerns before issuing permits or commencing operations. Governments should consider using the tools and programs of the socioeconomic plan to resolve or reduce the potential for disputes and to guide actions by international norms such as those represented by the International Finance Corporation Performance Standards on Social and Environmental Sustainability and the Voluntary Principles on Security and Human Rights.	MEDIUM	There is limited government action in this regard; however, there is a very low level of concern related to security at mine sites. On the whole, security issues appear to be quite low. The Green Development Policy of Mongolia (2014) includes the objective: "[i]ntroducing environmental standards and norms consistent with international standards and increase results/ quality of environmental assessment while promoting competitiveness and increased productivity."	Stakeholders reported relatively few security issues or episodes of violence around mine sites. One civil society stakeholder reported that she heard of a woman shooting a gun in the air in Khanbogd soum to call attention to issues caused by mining trucks driving through the soum. Other stakeholders reported that shots were fired at a Gatsuurt fuel tank in recent years. There is at least one report of mine security forces improperly detaining local people. A company stakeholder reported that some herders had damaged fencing at the mine and allowed a herd to enter and graze in the mining area. Stakeholders reported conflicts between small-scale and large-scale miners.
Not issuing permits when a deposit to be mined is in an area of active armed conflict. When there is already active development or an operating mine when conflict breaks out, governments and operating entities should act to protect human rights and ensure the safety of miners, their families, and communities in accordance with the OECD guidelines. If this is not possible, governments may consider removing the mine operation from the dynamics of the conflict by any means possible, including by revoking the mine permit and shutting down the mine.	MEDIUM	The Assessment Team found no evidence of any areas of active armed conflict in Mongolia. There are no specific provisions in the Minerals Law or EIA law related to mining in areas of active armed conflict. While this conceivably would be documented in the EIA, there is no clear guidance for how to respond to a conflict should it arise.	One company stakeholder noted that the company follows OECD guidelines should any conflict arise, due to the company's own internal mandates.
The importance of respecting hum	ıan rights, indigenous	peoples, and cultural heritage by:	
Ensuring that domestic policies and laws are (at a minimum) consistent with international law and norms on human rights, indigenous people and cultural heritage; governments and mining entities should respect the spirit and intent of current and future international normative language on Indigenous People such as is found in the International Finance Corporation Performance Standards on Social and Environmental Sustainability.	MEDIUM	The Minerals Law requires license holders to protect cultural heritage. Articles 40–41 of the Minerals Law require license holders to comply with the requirements of the Law on Protection of Cultural Heritage. The Green Development Policy of Mongolia (2014) includes an objective to "[p]romote transformation of natural and cultural heritage sites into exemplar[s] of green development areas by limiting mining and industrial activities and developing ecotourism and traditional livestock husbandry." The Policy also includes an objective to: "[t]ake risk assessment and preservation measures for environment, historical and cultural heritage prior to implementation of large mining operations and development projects."	The question of whether some groups in Mongolia should be recognized as having indigenous characteristics or status is an open and robust debate in Mongolia.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Ensuring that mining operators observe high standards of conduct within the country and requiring that mining entities, in their permit applications and day-to-day operations, are knowledgeable of and act in ways consistent with national laws and international laws and norms.	MEDIUM	While license holders are required to follow national laws, there are no specific state requirements for license holders to act in ways consistent with international laws and norms. The Green Development Policy of Mongolia (2014) includes the objective: "[i]ntroducing environmental standards and norms consistent with international standards and increase results/ quality of environmental assessment while promoting competitiveness and increased productivity."	
4. Environmental Management			
Management of water by:	I	T	
Having appropriate environmental management standards in place for the use of surface and ground water that are strictly monitored and enforced through appropriate penalties.	LOW	The relatively new 2012 legislation requires that water users have equipment installed to measure water use. Where usage exceeds 50 cubic metres per day, users monitor all use and appoint a "water use manager." It is not clear to what extent these requirements have been implemented in practice, or the capacity of government institutions to oversee and evaluate company monitoring efforts, or the extent to which this monitoring serves environmental protection functions beyond assuring that companies are paying the appropriate water use fees.	This is a very serious concern for many stakeholders, who believe that mining is having significant impact on water resources in many parts of Mongolia. There are ambiguities in the standards, but the bigger concerns are the very limited amount of monitoring and the lack of effective penalties for violation of requirements. Stakeholders expressed considerable concern that some companies were not paying the full water use charges established by the 2012 legislation.
Requiring mining entities to ensure that quality and quantity of mine effluent streams discharged to the environment, including storm water, leach pad drainage, process effluents, and mine works drainage, are managed and treated to meet established effluent discharge guideline values.	LOW	The Assessment Team did not find any effluent discharge guideline values, despite numerous attempts to do so.	A considerable number of stakeholder reported that there is a significant lack of monitoring, lack of government capacity to implement monitoring programs and review the results of monitoring, and no effective system of sanctions.
Requiring mining entities to ensure that water leaching or percolating waste dumps, tailings storage areas and leach pads have equivalent protection.	LOW	The Assessment Team was not able to identify any general requirements that address these issues; it is possible that some requirements are addressed in specific agreements regarding mineral deposits of strategic importance, or in site-specific environmental management plans.	Mongolia appears to place heavy reliance in this regard on the EIA process; how effective this process is in ensuring performance in this area is unclear. Stakeholders provided considerable anecdotal evidence that this is a significant issue in Mongolia.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Requiring that mining entities have in place practices and plans that minimize the likelihood of impacts beyond the mining site, particularly potential transboundary impacts.	LOW	The Assessment Team was not able to identify any general requirements that address these issues; it is possible that some requirements are addressed in specific agreements regarding mineral deposits of strategic importance, or in site-specific environmental management plans.	Stakeholders expressed concerns about potential transboundary impacts on water resources in the north of the country. Mongolia appears to place heavy reliance in this regard on the EIA process and environmental management plans; how effective this process is in ensuring performance in this area is unclear.
Avoiding and minimizing potential	adverse effects to bid	odiversity by:	
Requiring that mining entities submit environmental management programs and updates for approval, during the permitting process and whenever there are significant process or operational changes during the operating life of the mine.	MEDIUM	The legislation does require periodic reassessment of environmental impact and adjustment of environmental management plans. Expanded operations trigger a requirement for reassessment.	
Identifying, monitoring, and addressing potential and actual risks and impacts to biodiversity throughout the mining cycle as part of environmental impact assessment.	LOW	Stakeholders, including government officials, stated that current practice in this area needs to be strengthened.	This appears to be a priority concern.
Require that mining entities conduct monitoring on a continuous basis based on national standards and the conditions of the operating permit, compile and submit performance assessments to government and publish regular reports that are readily accessible to the public.	LOW	Stakeholders reported that lack of effective monitoring is a key problem. Stakeholders expressed concern that standards may be negotiated in individual agreements or vary from one environmental management plan to another, rather than being uniform and consistent for all operators. The level of reporting and availability of data to the public appear to be low.	
Managing mining wastes by:			
Ensuring that structures such as waste dumps and tailing storage facilities are planned, designed and operated so as to appropriately assess geotechnical risks and environmental impacts through the entire mine cycle and after mine closure.	LOW	The Assessment Team was not able to identify any general requirements that address these issues; it is possible that some requirements are addressed in specific agreements regarding mineral deposits of strategic importance, or in individual environmental management plans.	This appears to be a priority concern. To the extent that specific agreements are negotiated, stakeholders are concerned about the level of capacity of government to assess the difficult geotechnical issues, and the lack of uniformity of requirements.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Requiring that mining entities design, operate and maintain mine waste structures according to internationally recognized standards.	LOW	The Assessment Team was unable to identify any requirements of this nature. The Green Development Policy of Mongolia (2014) includes the objective: "[i]ntroducing environmental standards and norms consistent with international standards and increase results/ quality of environmental assessment while promoting competitiveness and increased productivity." The Policy also includes the objective: "[p] reventing pollution through use of international standards for conventional and unconventional oil deposit and exploration and mining and frequent monitoring and evaluation."	
Requiring that mining entities commission independent expert reviews and report to governments prior to development approval, when changes in design are proposed, and at regular intervals during operating phase.	MEDIUM	Expansion and modification of projects requires reassessment through the EIA process.	
The development and implementa	tion of an emergency	preparedness program by:	
Requiring all mining operations have an emergency preparedness and response program prior to commencement of operations and ensuring that the program be reviewed, tested and updated regularly.	MEDIUM	Stakeholders reported that periodic emergency exercises are conducted at most large mining operations. However, the Assessment Team did not locate any specific requirements in the mining law and policy framework.	
Basing all elements of the emergency preparedness program on ongoing consultation and cooperation with local and other stakeholders and government.	MEDIUM	Stakeholders reported that companies have emergency response plans and that government does oversee them with attention. The Assessment Team was unable to find evidence that these plans are subject to consultation with stakeholders.	
Ensuring that monitoring of the effectiveness and responsiveness of the emergency preparedness program is conducted by companies in cooperation with communities and all levels of government.	MEDIUM	Stakeholders reported that companies have emergency response plans and that government does oversee them with attention. However, the Assessment Team was unable to find evidence that these plans are subject to consultation with stakeholders.	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Ensuring that mine emergency plans are comprehensive and meet current best practice standards, specifically by: i) requiring the development of emergency preparedness programs as part of an environmental impact assessment for any new operation; ii) requiring regular review and updating of such programs; iii) requiring consultation and cooperation with local, regional, national and, as appropriate, transboundary stakeholders in the development and maintenance of emergency preparedness programs; iv) endorsing and promoting best international practices, such as the Awareness and Preparedness for Emergencies at Local Level (APELL) process, at national and regional levels to better coordinate emergency preparedness between mining entities, local authorities and local populations; and v) ensuring that appropriate government departments and agencies at the national, regional and local levels are aware of and prepared to cooperate with mining company response actions.	MEDIUM	The Assessment Team was unable to find evidence that these plans are effectively developed in the EIA process or that they are subject to consultation with stakeholders. The Assessment Team did not find any requirement for use of the APELL process. The Green Development Policy of Mongolia (2014) includes the objective: "[i]ntroducing environmental standards and norms consistent with international standards and increase results/ quality of environmental assessment while promoting competitiveness and increased productivity." The Policy also includes the objective: "[p] reventing pollution through use of international standards for conventional and unconventional oil deposit and exploration and mining and frequent monitoring and evaluation."	Stakeholders reported that companies have emergency response plans and that government does oversee them with attention. Several stakeholders noted that these plans are updated.
5. Post-mining Transition			
Ensuring that closure plans prepar	red by mining entities	are of a high standard and updated or	n a regular basis by:
Providing legal and regulatory frameworks for closure.	LOW	There are provisions related to closure in the Minerals Law and EIA law.	Most stakeholders, including government stakeholders, noted that progress is hampered by a number of unclear and ambiguous areas in the law, and identified this as an area that should be prioritized for improvement. The Government Action Plan 2016–2020 and Legislative Reform Plan 2017–2020 indicate the intent and need for the government to clarify the legal framework for mine closure and financial assurance.
Having the institutional capacity to monitor and enforce legal and regulatory frameworks.	LOW	Stakeholders reported significant ambiguities in the regulatory provisions related to closure, which serve as obstacles to clear regulatory oversight of closure plans and programs. Stakeholders also reported a lack of capacity in monitoring and enforcement and lack of adequate mechanisms to sanction noncompliance.	
Requiring that stakeholders be consulted in the development of closure objectives and plans.	LOW	There is no specific requirement for stakeholder consultation on the contents of closure plans.	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Requiring that a comprehensive closure report and adequate financial assurance be provided before the requisite development and mining permits for a new mine are approved.	LOW	There is no clear requirement that an adequate and comprehensive closure plan be in effect and approved by the competent authorities before the permits are issued. The EIA law provides that a plan be submitted three years prior to closure and the Minerals Law requires a plan to be submitted one year prior to closure.	Stakeholders widely identified this as a top priority area. The Government Action Plan 2016–2020 and Legislative Reform Plan 2017–2020 indicate the intent and need for the Government to clarify the legal framework for mine closure and financial assurance.
Requiring the use of external experts by entities to contribute to the development of closure plans and to validate the risk assessments, studies and activities associated with highrisk elements such as tailings dams, waste dumps and acid rock drainage.	LOW	There are no requirements to use external experts. The EIA Law requires that EIA be prepared by licensed entities.	
Requiring that internationally accepted guidelines and best practices (such as International Finance Corporation Performance Standards on Social & Environmental Sustainability) be followed.	LOW	While there is currently a low level of requirements on this topic, the Government of Mongolia has expressed its intentions to adopt best practices. The Green Development Policy of Mongolia (2014) includes the objective: "[i]ntroducing environmental standards and norms consistent with international standards and increase results/ quality of environmental assessment while promoting competitiveness and increased productivity." The Policy also includes the objective: "[p] reventing pollution through use of international standards for conventional and unconventional oil deposit and exploration and mining and frequent monitoring and evaluation." MEGDT, the Central Bank of Mongolia, the Mongolian Banking Association, and the Financial Regulatory Commission established a working group to implement a Mongolian Sustainable Finance Initiative. In partnership with FMO (the Dutch Development Bank) and the International Finance Corporation, the working group established the Sustainable Finance Principles and Sector Guidelines for mining, agriculture, construction and manufacturing that went into effect in January of 2015. The principles are based on international benchmarks, particularly the IFC Performance Standards, the World Bank Group Environmental, Health, and Safety Guidelines, and the Equator Principles (FMO 2014).	



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Requiring the periodic reassessment and independent auditing of closure plans: more frequently for mines with an expected short operating life, less frequently for large operations with economic life expectancies measured in decades.	LOW	There are no requirements for periodic reassessment and independent auditing of closure plans.	
Putting in place a framework to encourage progressive rehabilitation in mining areas as soon as the disturbed area is no longer needed for mining, to reduce future closure liabilities and reverse or minimize future environmental, economic and social impacts.	MEDIUM	The Minerals Law provides incentives for concurrent or progressive reclamation.	It is not clear how effective this is in encouraging companies to implement progressive rehabilitation. The Government Action Plan 2016–2020 and Legislative Reform Plan 2017–2020 indicate the intent and need for the Government to clarify the legal framework for mine closure and financial assurance.
The development of financial assu	rance mechanism for	mine closure by:	
Ensuring that financial assurance for closure and post-closure expenses is present and adequate to the task by adopting legislation, regulations and guidelines for financial assurance. These would: i) require an adequate level of financial assurance based on realistic estimates to cover the cost of all outstanding work programs at any time, including premature closure and the conduct of closure programs by third-party contractors in the event that the mine operator is unable or unavailable to complete the work; ii) require that each closure plan and its cost estimates be validated or approved by the responsible authorities; iii) establish appropriate forms of financial security (bonds, insurance, etc.), including their specific details and conditions; iv) require that the financial securities be issued or held only by qualified and approved financial institutions; v) give governments, based on their sole discretion, the right to gain immediate and unencumbered access to the full amount of the financial assurance securities; and vi) allow the draw-down or release of security instruments only as each work program or other requirement is satisfied.	LOW	The financial surety provisions in the Minerals Law and EIA law are unclear and are misunderstood by most stakeholders. The current financial guarantee system is based on annual rehabilitation budgets rather than on the total cost of an adequate restoration program.	The level of surety does not appear adequate in most cases to provide for proper rehabilitation of mined areas where mine operators fail to do this. The Government Action Plan 2016–2020 and Legislative Reform Plan 2017–2020 indicate the intent and need for the government to clarify the legal framework for mine closure and financial assurance.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Accept a leadership role for orpha	ned and abandoned r	nines in their jurisdiction by:	
Working with entities that collectively constitute the mining industry to explore options for developing technological solutions (including the reprocessing of mining wastes) or contributing expertise or other resources to help resolve the legacy issue of orphaned or abandoned mines.	LOW	Companies are allowed to discharge their reclamation obligations by reclaiming other sites. The Green Development Policy of Mongolia (2014) includes an objective to "[p]romote efforts aimed to reclaiming at least 70 per cent of degraded, polluted, and abandoned land due to production activities."	There appear to be abandoned, non-revegetated mined areas with opaque ownership and unclear legal successors; there is no funding source to address reclamation of these sites.
Working with countries whose economies benefitted from the flow of low-cost industrial inputs that came at least in part from mines that are now orphaned or abandoned that contribute to the resolution or management of abandoned mines.	LOW	Stakeholders did not provide any evidence of Mongolia pursuing this avenue of dealing with legacy sites. Mongolia does not have a census of abandoned mines, and those mines known to exist have often not been assessed as to their level of environmental hazard.	
Using targeted fiscal arrangements to encourage the reactivation of those mines to create economic activity, fund remediation and provide for post-closure management in cases where such a mine or its wastes has economic potential.	LOW	Stakeholders did not provide any evidence of Mongolia pursuing this strategy in attempting to deal with abandoned sites with remaining potential.	
Seeking recognition by multilateral agencies and organizations that the historical and legal situation of such mines, particularly in developing countries, requires their leadership in managerial, advisory, hortatory and financial forms.	MEDIUM	Mongolia has worked with a number of external actors in addressing mine closure issues, such as the Government of Canada, which is currently funding capacity-building efforts through the Strengthening Extractive Sector Management in Mongolia program, and the Government of Germany, which is also supporting capacity-building programs. The non-profit organization Mine Reclamation Technology Corporation of Korea carried out a study of abandoned mines with incomplete rehabilitation. The Asia Foundation's ESEC Program helped rehabilitate some abandoned mines.	Mongolia has received considerable external advice, but progress requires that the competent Mongolian authorities make clear policy choices appropriate to their circumstances and implement them.
6. Artisanal and small-scale minin		al a stanck	
Ways of integrating informal ASM Creating plage legal frameworks	activities into the leg	, , , 	The legal framework requires miner to
Creating clear legal frameworks and regulatory mechanisms to facilitate the organization of ASM, access to property rights and ensuing obligations for ASM.	MEDIUM	The Minerals Law includes a legal framework for ASM. The Minerals Law defines ASM at Article 4.1.23.	The legal framework requires miners to form associations, which is an obstacle for some miners. Miners reported numerous obstacles to formalization.
Providing technical support to build the capacity of government or other bodies tasked with regulating and supporting the sector.	MEDIUM	MRAM reported conducting trainings in collaboration with SDC. MRAM, MOMHI, and the Ministry of Health and Sports have collaborated with SDC, the Asia Foundation, GIZ, WHO, the World Bank, and others to increase capacity to manage the sector.	Government ministries do not have a substantial budget or system in place that would deliver such trainings independent of support from SDC and others.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Developing and replicating formalization strategies on the basis of lessons learned.	HIGH	The Government of Mongolia has collaborated with SDC, the Asia Foundation, GIZ, WHO, the World Bank and others to develop and replicate formalization strategies.	
Ways of integrating ASM activitie	s into the formal econ	nomic system by:	
Improving savings in the artisanal mining community, establishing more acceptable forms of financing and encouraging responsible investment.	MEDIUM	The Government of Mongolia is working with SDC, which has programs to improve savings in the ASM community.	Government ministries do not have a substantial budget or system in place that would deliver such programs independent of support from SDC and others.
Strengthening the appropriateness, viability and transparency of policies and systems for collection, management and reinvestment of ASM revenue.	MEDIUM	The Government of Mongolia is working with SDC, which has programs on systems for collection, management and reinvestment of ASM revenue.	Government ministries do not have a substantial budget or system in place that would deliver such programs independent of support from SDC and others.
Encouraging initiatives for standards and certification of ASM "fair trade" conflict-free minerals to harmonize and grow in scale.	MEDIUM	The Government of Mongolia is working with SDC and its SAM project, as well as the Alliance for Responsible Mining, which encourages initiatives for standards and certification of ASM "fair trade" conflict-free minerals to harmonize and grow in scale. In Mongolia, ASM organization XAMODX was the first organization in Asia to obtain Fairmined Ecological Certification, a process that meets not only Fairmined social, organizational and economic criteria, but also is produced without use of any toxic chemicals (Belgian Development Agency 2016).	Government ministries do not have a substantial budget or system in place that would promote such initiatives independent of support from SDC and others.
Encouraging, through the permitting process or at other times, entities to explore ways to collaborate with ASM when ASM is present or can reasonably be anticipated to follow the development of a mine.	LOW	Stakeholders reported some progress in ASM and large-scale mining collaboration. However, significant tension between these parties remains.	Company stakeholders reported that unpermitted ASM activity is frequent at times and particularly difficult to control at night, when there are few, if any, local security agents available to monitor large-scale mines.
Reducing the social and environment	ental impacts of ASM	by:	
Providing technical training to improve productivity and to safeguard the environment, and developing, disseminating and enforcing regulations with a particular emphasis on safeguarding water sources, reducing deforestation, ending or reducing the use of mercury, and improving the management of mercury and other toxic substances when it is not possible to eliminate them, including safe working conditions, access to health care, etc.	MEDIUM	Mongolia signed the Minamata Convention on Mercury on October 10, 2013, ratified on September 28, 2015. The Minamata Convention is a global treaty to protect human health and the environment from the adverse effects of mercury. The Government of Mongolia is working with SDC, which has programs on technical training to improve productivity and safe working conditions, and to safeguard the environment.	Although small-scale miners are largely well informed regarding health and safety, thanks in large part to the SDC's efforts, the miners do not always follow procedures or use SDC-provided health and safety equipment. Stakeholders reported a low level of regulation and enforcement of health and safety and environmental measures in ASM.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF IMPLEMENTATION	IMPLEMENTATION	MAJOR OBSERVATIONS
Having national programs that provide minimal standards of health and education to ASM workers and their families.	MEDIUM	The Government of Mongolia is working with SDC, which has programs on health and education for ASM workers and their families.	Government ministries do not have a substantial budget or system in place that would deliver such programs independent of support from SDC and others.
Making a significant and verifiable reduction in the number of children employed in artisanal mining and improvements in the nature and scheduling of their work so as to accommodate educational needs.	MEDIUM	Section 110 of the Law on Labour of Mongolia (1999) requires medical examinations of children in the labour force, prohibits children from performing overtime work or work on weekends, prohibits children from carrying heavy loads and prohibits children from working "under abnormal or special conditions." The Asia Foundation reported in 2013 that 10.4 per cent of children in Mongolia ages 5–14 are child labourers. The ILO has noted that the minimum age for employment in Mongolia is below the minimum age for completing compulsory education, and called for the government to align the two limits (United States State Department, 2015). Evidence cited by the USDL reports that children work in ASM in Mongolia (USDL, 2014).	The Assessment Team did not see any children working at or present around ASM sites during our limited field visits, where our arrival at the site was sometimes unannounced. Most stakeholders reported that there were no children working in ASM. The Asia Foundation reported in 2013 that, in general, child labourers working in ASM are more likely to be boys; however in some soums, girls are more prevalent (Asia Foundation, 2013).
Strengthening, monitoring and enforcing laws on child labour in artisanal and small-scale mining areas.	MEDIUM	The Government of Mongolia is working with SDC, which has programs to educate small-scale miners, including on the topic of child labour.	Government ministries to not have a substantial budget or system in place that would deliver such programs independent of support from SDC and others.



MINING POLICY FRAMEWORK RECOMMENDATION	LEVEL OF	IMPLEMENTATION	MAJOR OBSERVATIONS
Strengthening the role and security of women in ASM.		The Government of Mongolia is working with SDC, which has programs on the role and security of women in ASM.	Government ministries do not have a substantial budget or system in place that would deliver such programs independent of support from SDC and
		The Asia Foundation Reported that more men than women are involved in ASM; women comprise an estimated 19.4 per cent to 45 per cent of total ASM workers, depending on the aimag and soum (Asia Foundation, 2013).	others.
	MEDIUM	In a survey by the Asia Foundation, 30.7 per cent of miners at ASM sites surveyed were found to be women (Asia Foundation, 2013). The survey found that there were fewer women in hard rock gold mining sites, and that women were frequently introduced to ASM mining through their husband or family, though some single women work in ASM (Asia Foundation, 2013). The survey also found that women primarily dominate processing and the provision of auxiliary services in the sector, such as preparing, planning, cooking, cleaning, and buying and selling, and do less of the actual mining activities, such as digging, hauling and blasting ore (Asia Foundation, 2013). 24.6 per cent of men surveyed by the Asia Foundation work in an ASM partnership headed by a woman (Asia Foundation, 2013).	
Promoting the inclusion of ASM in rural development and job creation policies such that, where desired and realistic, alternative livelihoods are promoted.	MEDIUM	The State Minerals Policy 2014 – 2025 (2014) Article 3.1.2. promotes support of "cooperation and legal organization of artisanal miners by the state policy and by improving related legislative regulation." The Government of Mongolia is working with SDC to improve policies.	Stakeholders reported a low level of alternatives to ASM activity, particularly in rural areas and outside of the agricultural production seasons. There is little work generally to diversify the economy in rural areas to provide alternative sources of livelihood. Many small-scale miners reported that this is why they work in ASM.

