



## **Pioneering New Approaches in Support of Sustainable Development in the Extractive Sector:**

### **BACKGROUND PAPER ON GOVERNMENT TOOLS FOR SECTOR SUSTAINABILITY**

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## **INTRODUCTION**

In developing new approaches and tools to ensure more sustainable mineral development – there is a need to consider the roles and responsibilities of stakeholders. This includes not just those present where the development takes place, but those having an interest or influence over the project’s outcome. Clearly the government is a key stakeholder, affecting nearly all aspects of mineral development and thus impacting many other key stakeholders. With this role comes the need for good governance, building strong institutions and employing laws and policies that honor the broader interests of society. At the broadest level, these are tools that any government may use in addressing and ensuring the sustainability of the mining sector.

This chapter examines overarching mineral policies and mining laws to identify current trends in mineral development that contribute towards sustainable development. From those trends key components are defined that, if embedded in overarching policy and legal instruments, becomes tools of sustainability.

The analysis was carried out for five countries: Botswana, Namibia, South Africa, Tanzania and Zimbabwe (the “case study countries”). Mineral policies and mining laws for these nations were compared to international good practice, looking at the global experience to identify instruments that have led to meaningful, sustainable outcomes. To this end, emphasis has been given to the use of consultative frameworks, improved environmental and social planning, improved transparency, and measuring outcomes in more meaningful ways.

## I.1. MINERAL DEVELOPMENT

Mineral development is a unique industrial activity. A State retains ownership of its mineral resources and assigns rights for temporary exploitation, underscoring the need for strong institutions and regulatory oversight. Overarching sector instruments originate within national constitutions and transcend into mineral policy where the intent of the government is defined using development principles. Mining laws and regulations are the implementation of these principles, guiding development on a day-to-day basis. This relationship between constitution, policies, and laws guarantees that overarching administration of the mining sector remains a fundamental, core responsibility of any government. To achieve sustainability within the sector, requires that overarching instruments contain key components.

## I.2. OVERARCHING INSTRUMENTS

Mineral resource development relies upon an interrelated system of policies, laws, regulations, contracts, and agreements. This system can be described using five principal components divided into two groups: (i) overarching instruments of mineral policy, mining law, and mining regulations; and (ii) project specific mining contracts and community mining plans and agreements. This chapter focuses on mineral policy and mining law, the two overarching instruments that impact project-specific development.

- **Mineral Policy** uses guiding principles to optimize society's benefits from resource development by both current and future generations. Good mineral policies define the roles and responsibilities of government, community, and company and reflect a consultative process that empowers impacted communities to be an active participant in the planning process.

Mineral policy objectives can include contributions by the sector towards regional economic development, improved infrastructure, societal objectives, and social protection safeguards. The principles of sustainable development – the economic, environmental, and social measures by which performance of the sector will be measured, and reported – increasingly guide good mineral policy development.

It is not uncommon for policy work to distinguish between artisanal mining, small-to-medium producers, and major mineral industries. Each sub-sector has unique considerations with respect to environmental and social protection, and contributions to the overall economy.

Key themes within mineral policy include:

- (i) elements of good governance;
- (ii) mechanisms to create a competitive business environment and attract private sector participation;
- (iii) environmental stewardship through the assessment and management of risks and responsible reclamation / rehabilitation of lands;

- (iv) mining & community issues that include effective consultation frameworks, resettlement and compensation, family and gender issues, and affirmative actions for disadvantaged or vulnerable groups; and
  - (v) sustainable development, the implementation of effective mine closure plans that from the beginning consider broader sustainable development plans for the local community, company / community partnerships, long-range land-use planning beyond mine closure, and capacity building, training and education of the community.
- **Mining Law** generally begins with a clear statement as to the role of the state as owner of mineral resources, and the regulation of mineral development activities through a transparent, non-discriminatory licensing framework. Mining laws define the rights, privileges, and obligations of mineral rights holders.

Good mining laws address economic concerns by providing security of tenure against arbitrary actions. They foster competitive economic environments that enable investors through the provision of flexible mineral rights that allow for varied timing of investment, alternative sizes and types of holdings, and allowances for extensions or voluntary withdrawals. Economic concerns also extend to sound fiscal and regulatory obligations shared with other pieces of legislation and clear definition of violations and penalties. More recently, special provisions relating to mine closure obligations, revenue sharing with communities, and dispute resolution have dominated economic considerations.

Environmental stewardship is widely recognized to encompass environmental risk assessment & management during the life-cycle of a mine including closure. To this end, an environmental impact assessment and environmental management plan are often mandated, as are health and safety standards and emergency preparedness.

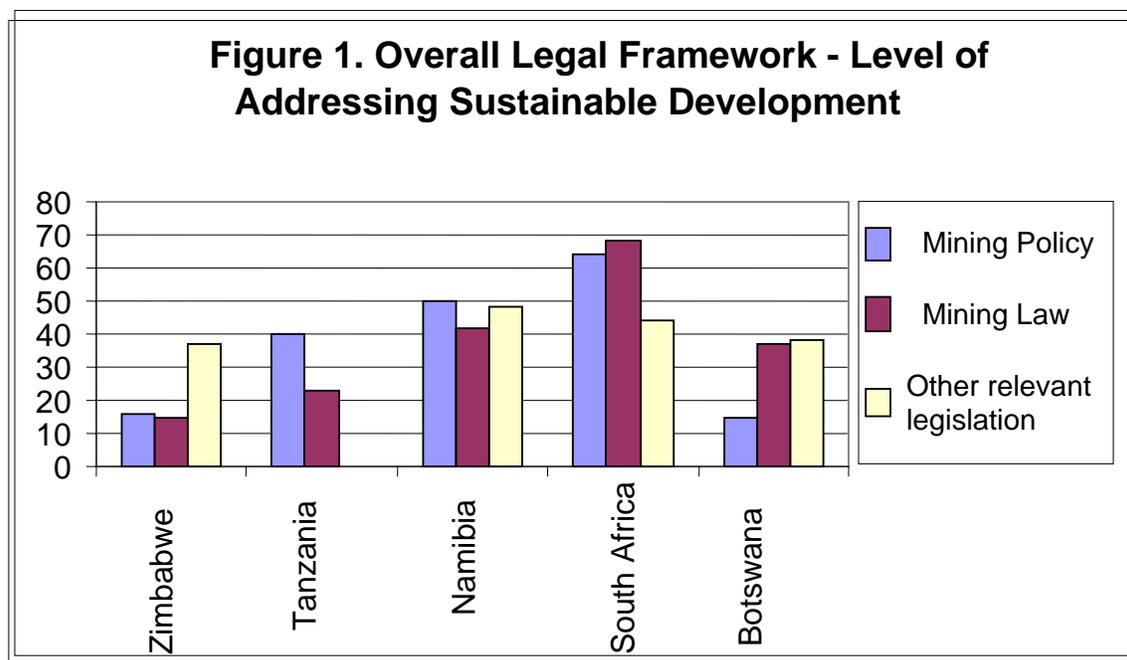
Social components relating to “mining & community” are relatively new and encompass the creation of effective consultative frameworks across all stages of development, social impact assessment and mitigation, voluntary resettlement and fair compensation, and gender / family issues. For a successful mining operation, community well-being is essential. Successful businesses operate in thriving communities.

Mining laws also provide for the resolution of disputes through consistent, non-discriminatory, and transparent processes. Regulatory elements that are project-specific, such as community issues and the negotiation of community mining agreements, and environmental and social impact assessment are housed within mining regulations (taking input from mineral policy).

## II. ASSESSING SECTOR TRENDS TOWARD SUSTAINABILITY

In developing this chapter there is a need to define the building blocks of overarching policies and laws – the “key components” used to administer and regulate the sector. Each key component has a unique definition and can be assigned membership into thematic groups, such as environmental stewardship. The strength of a policy or law can be estimated by assessing these key components and looking for gaps that might make roles and responsibilities of government, company, and community less well defined.

Figure 1 is showing the level of addressing sustainable development by the case study countries in the overall legal framework (the y-axis showing the level of addressing key themes, expressed as a percentage using the methodology explained in Annex A).



From Figure 1, some key observations are made. South Africa appears to be advanced in addressing sustainable development of its mining sector in the overall legal framework, followed by Namibia. The other three countries are assessed to be less than 40 percent of addressing sustainability. In both South Africa and Namibia, both the policy and law contain key components, to a certain extent, that address the key themes discussed below.

To assist in the analysis, an evaluation tableau has been created using key components grouped according to the following main themes:

- The cornerstone of mineral development is good governance – guiding mining activities using principles that define roles and responsibilities, social objectives, and the rights and obligations of mineral-right holders.

- Mining is an economic activity that requires a competitive business climate – to encourage exploration and development governments must ensure equal treatment of investors in a transparent and stable environment, and provide stability through clearly defined rules and regulations.
- The right to develop a nation’s mineral resource comes with an obligation for environmental stewardship – taking the long-term view, future generations must not be encumbered by lax standards and disregard for the land today. Good mineral development begins with good environmental assessment and environmental management planning.
- Mining is an activity administered at a national level but having impacts at the local level – communities are key players in mineral development, necessitating that they be empowered to participate in all stages of the project to ensure that their well being is enhanced and not be adversely impacted by poor development. Good mineral development begins with good social impact assessment and social management planning.
- Mineral development today will impact a nation for generations to come – good development is guided by the principles of sustainability. Overarching policies and laws “begin with the end in mind”, from the outset of project development developing plans that extend beyond the life of the operation, beyond mine closure, and into a future where mineral activities contribute toward the greater social good.

### III. CASE STUDY RESULTS

This section describes the results of the analysis and to what extent the case study countries have the necessary instruments for developing a sustainable mining sector. Consideration is given to mineral policy overall and mining law and regulations.

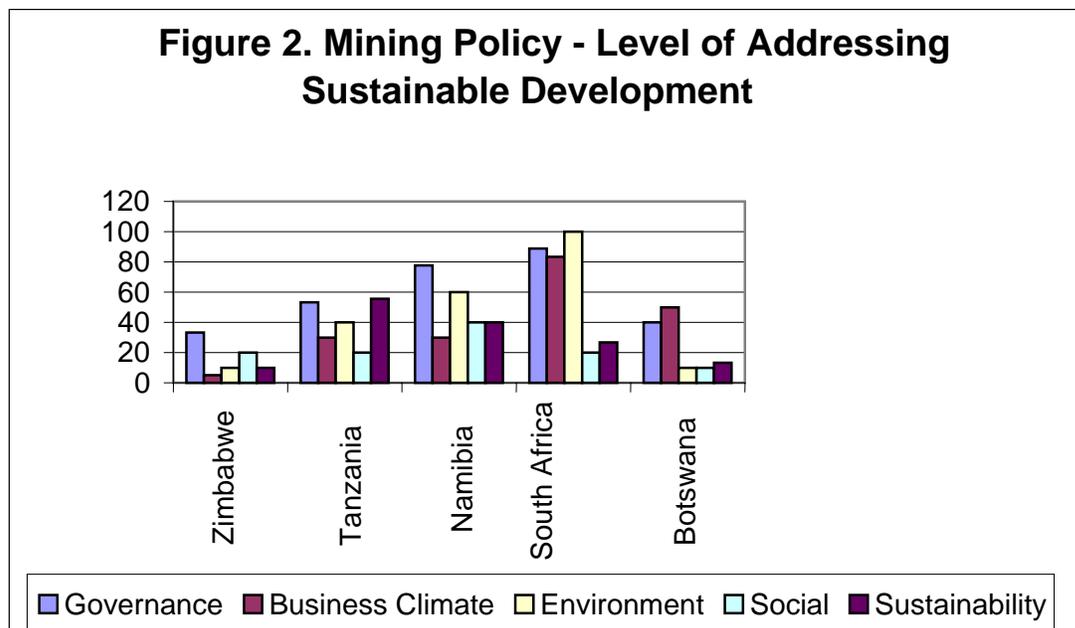
A matrix was used to standardize the country data from the case study countries analyzed under the project. The full evaluation tableau is comprehensive, having more than thirty key components for mineral policy and forty key components for mining law. Added to that are more than fifteen key components for general administration of the law, including reference other pieces of essential legislation and regulations. Recognizing that each component is itself a compound measure, more than one hundred elements in total have been used to evaluate the overarching instruments of the five nations within this study. The full evaluation tableau with detailed descriptions for each component is included in Annex A.

The full evaluation tableau in Annex A can be used by various stakeholders as a tool to evaluate the strengths and weaknesses of overarching instruments. A government may wish to improve the framework in order to address the need to ensure that mining has benefit at the local level. A mining company may use the tableau to make investment decisions *vis a vis* different countries it can invest in, and to ensure that key components leading to sustainability are taken into consideration. The community may use the tableau as a checklist to ensure that its concerns are satisfactorily addressed by either the

overarching instruments and/or the mining company. As the tableau is a toolkit for sustainability in the mining areas.

The governments of the case study countries appear to ensure that their mining policy and legal frameworks provide for an enabling environment in which the state, mining businesses and the community can prosper. However, only three of the countries have articulated official mineral policy documents, the other two (respectively Zimbabwe and Botswana) rely on periodic policy pronouncements. In this regard, policies are preferred to pronouncements, in that they more clearly articulate the intention of a government proactively.

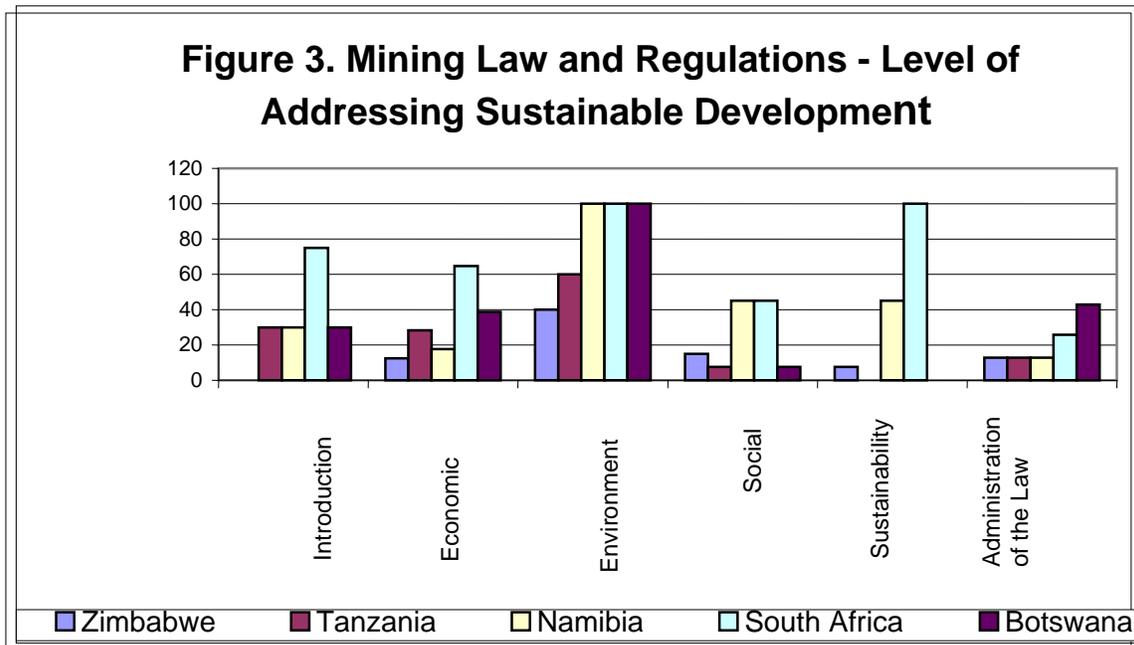
Figure 2 presents an assessment of the overall attention given to sustainable development components within mineral policies for the case study countries



In general, all governments of the case study countries address these major themes to some degree. For all governments, some noted strengths include:

- The role of the state as regulator and the role of the private sector in assuming risk in the development of mineral resources.
- The need for stable competitive business environments to attract investment capital by offering an efficient, non-discriminatory, transparent legal and fiscal regimes.
- The need for environmental stewardship through the use of environmental impact assessment and environmental management plans.
- The need for community consultation/empowerment on resource planning and development, including land-use planning and post-mining activities.
- The need for clear established, independent competent authorities for the administration and enforcement of the legal requirements.

Figure 3 presents an assessment of the overall attention given to sustainable development components within mining laws and regulations for the case study countries.



In looking at Figures 2 and 3, there are some strong disparities between the case study countries. In general all of the countries do not perform well in implementing the overarching instruments. Furthermore, those themes that address impacts at the local level are not clearly defined. With emphasis now shifting onto mandates for sustainability and good governance, there are new trends that largely post-date development of the current policies / laws. To this end, four key themes have emerged from this analysis, that merit additional attention by all of the governments surveyed (policy and law). Governments may: a) wish to take these into consideration in the mineral policy and mining law, in order to ensure sustainability at the local level; or b) leave these themes for companies / communities to address on a project-specific basis:

- A. Predevelopment social planning – better assess the social impacts of mine development at the community level, and develop frameworks for effective community consultation, empowerment to participate in planning, dispute resolution, and community planning.
- B. Mine closure planning – pre-development planning extends beyond reclamation and rehabilitation, into issues of local economic development to lessen the impact of mine closure, retraining and redeployment of labor into other industries, reallocation of lands to post-mining activities, and overall community well-being.
- C. Transparent revenues management – ensuring that the nation adheres to international initiatives to increase transparency of payments by companies to governments and government-like entities.

- D. Assuring sustainability by measuring outcomes – implementing programs using clearly defined time-lines for impacts to be achieved, measuring project performance against baseline data, public reporting and verification on programs, and mechanisms for periodic program adjustment are needed.

This report also recognizes the essential role of good governance through institutional strengthening and capacity building. Governance has not been included for formal discussion here as it is a process rather than a series of discrete components that would be embedded in either mineral policy or mining law. The four key themes above (A through D), are explored in greater detail as follows.

#### A. PREDEVELOPMENT SOCIAL PLANNING

<i>Code in Annex A</i>	<i>Component</i>
<b>P4a.</b> <b>L4a.</b>	consultation processes
<b>P4b.</b> <b>L4b.</b>	resettlement & compensation
<b>P4c.</b> <b>L4c.</b>	community well-being

**Table 1:** Mineral policy and mining law components used to target pre-development social planning. The left column refers to the codes in the evaluation tableau in Annex A and the right column the corresponding component (i.e. P4a. refers to Mineral Policy, Social Mining and Communities, component – consultation processes).

There is widespread recognition of the need to ensure that mining benefits reach impacted communities and that these benefits are as broad as possible<sup>1</sup>. These include:

- measuring the economic, social, and cultural impacts of projects
- maximizing mining’s benefits to communities through revenue distribution and use, addressing gender disparities, use of funds and foundations, developing small businesses, skills development
- introducing community health and welfare initiatives
- providing avenues for conflict and dispute resolution

Although objectives are clear, the instruments to (i) assess and integrate social dimensions into mining development, and (ii) integrate community participation into decision-making, are yet to be defined.

Sustainable communities are the product of good policies and laws that have been planned and implemented at the local level with the active participation of community

<sup>1</sup> a) Striking a Better Balance – The World Bank Group and Extractive Industries: The Final Report of the Extractive Industries Review, World Bank Group Management Response, September 17, 2004. p. v.

b) Breaking New Ground: Mining, Minerals, and Sustainable Development, International Institute for Environment and Development / World Business Council for Sustainable Development.

members. Two instruments are proposed to ensure that local communities benefit from the extractive industries:

- Instrument 1: development of a community consultation framework by the sector ministry, to assess and assign the roles and responsibilities of government(s), the company(s), NGO's and donors, and local affected communities on measures to address social impacts;
- Instrument 2: development of a community development plan facilitated and coordinated by the sector ministry in consultation with stakeholders, including the active participation of communities, in defining holistic regional development.

These instruments allow governments to contribute towards sustainability by integrating existing licensing requirements (i.e. a company's initial closure plan, environmental and social impact assessment) with broader planning objectives within the community and region. To this end there is a third key instrument already in use, stakeholder analysis. As stakeholder analysis is applied within World Bank social analysis and as an accepted tool it is discussed below without further elaboration. Likewise, social and environmental management plans are also in wide application and are broadly accepted. They are also referenced below without further elaboration.

Key interactions between different players highlight the need for effective consultation and holistic planning:

- the government (sector ministry) as part of sector governance, needs to facilitate dialogue relating to collecting community information needs on sector development issues, defining rational expectations, and creating institutional arrangements if appropriate ones do not exist.
- to support this effort the government will undertake a stakeholder analysis to identify organizations, groups, and individuals having interests in a project and a stake in the outcome. Stakeholders include those who are affected, or can affect, the project. Stakeholder analysis defines the nature and magnitude of social actor's interests and influences on a project.
- consultation by the company from early exploration through development of the social management plan, and across the life of the operation and the end of mine closure. Impacts associated with the project may be avoided, and if not avoided – mitigated, and if not mitigated – compensated. Where compensation is necessary, it is directed towards broader community development goals.

If one views the company's environmental/social management plans as avoiding, mitigating, or compensating on project-specific impacts; the broader community development plan is the instrument that elevates activities towards sustainability objectives. Current industry practice highlights a possible expansion within the approach to an additional instrument – development of a community benefits agreement. Such an agreement would be a formal understanding between the company and community of roles and responsibilities defined within the community development plan. As such, the community benefits agreement is a social contract built upon principles rather than a list of items or actions. These principles will remain through the life of the operation, recognizing that the associated community development plan is likely to evolve as

conditions change. To ensure maximum flexibility available to the community benefits agreement; a non-prescriptive approach is recommended for the community development plan.

Whether a formal agreement between company and community evolves from that process will be a policy decision of each government. Presently, many such agreements are voluntary. Certainly the community management plan can and should be part of the mine permitting process.

Some general points are provided here that will assist in exploring dimensions of community social conditions until such time as widely applied frameworks for mine permitting are available:

*Social diversity and gender* - consideration of how communities are organized into different groups, according to clan, gender, locality, language, class or other identity. Issues that are likely to result from mine impacts might be attributed to these groups.

*Institutions, rules, and behaviors* – a consideration of intra-group and inter-group relationships, and the relationships of those groups with government and the mining company. Past mining development in the region is likely to have developed norms, values, and behaviors that will influence the current project. Community expectations for the new mine are likely to be a product of these behaviors.

*Stakeholders* – including those who will be affected by the project and those who have an influence over the project. What are the interests of the various stakeholders in mine development and will they be positively or negatively impacted? What special characteristics relate to vulnerable groups within the community?

*Participation* – what opportunities exist for the community or select sub-groups to participate in mine planning? How can they be empowered to have influence in project design, public choices, and accountability? What capabilities or capacity deficiencies are likely to impede their participation during the permitting process?

#### **Community Consultation / Conflict Resolution**

An example of third-party advocacy on mining & community issues is provided by the Oxfam Community Aid Abroad Mining Ombudsman. Established in 2000, the Mining Ombudsman is authorized to assist (indigenous) communities on mining related human rights, social protection, and dispute resolution where Australian mining companies are involved.

Summarized from Mining Ombudsman Annual Report 2004

Oxfam Community Aid Abroad

*Social Risk* – what could go wrong with the mine design in terms of community impacts, including social tensions or conflict that might undercut the mine? How can the company and government provide dispute / conflict resolution to address these risks so that its development objectives are realized?

## B. MINE CLOSURE PLANNING

Code in Annex A	Component		Associated Components
<b>P5b.</b>	mine closure planning	<b>L2c.</b>	Promotion of the private sector, economic growth, & job creation
<b>L2n.</b>	Closure plan: initial plant at time of license application, updated periodically	<b>L2m.</b>	Fiscal requirements: closure funds, environmental guaranty
<b>L5a.</b>	economic <ul style="list-style-type: none"> <li>Local economic development and diversification</li> </ul>	<b>L2q.</b>	Revenues sharing with communities
<b>L5b.</b>	environmental <ul style="list-style-type: none"> <li>Reclamation plan</li> <li>Environ. / habitat enhancement</li> </ul>	<b>L3c.</b>	Mine reclamation
<b>L5c.</b>	Social <ul style="list-style-type: none"> <li>Retraining</li> <li>Re-conversion</li> </ul>	<b>G3a.</b>	Environmental impact assessment and environmental management plan
		<b>G3h.</b>	Urban / rural land-use planning

**Table 2:** Mineral policy and mining law components used to target mine closure planning. The left column refers to the code in the evaluation tableau in Annex A and the right column the corresponding component name.

Mine closures are having and will continue to have a major impact across the broad spectrum of concerns of all of the groups that are directly and indirectly impacted. Mine closure represents a continuous series of activities that begins with pre-planning prior to the project's design and construction and ends with the achievement of long-term site stability and the establishment of a self-sustaining ecosystem.

From the perspective of governments, mine closure presents a complex mixture of environmental, social, economic and development issues that the government must have ensured that (a) industry has adequately recognized and prepared for over the life of the mining enterprise and (b) that the closure plan is carried out to the satisfaction of the communities involved, other major stakeholders and government at all levels.

Mine closure should be now considered in a broader context of the issues of "social/economic equality" and "sustainable development". This will result in greatly expanding the scope of government responsibilities and needed actions.

Mining industry accepts the concept and responsibility of mine site rehabilitation and decommissioning. At issue is the development of an effective and efficient approach to the funding of closure that enables mine rehabilitation and other environmental objectives to be achieved and also facilitates and encourages industry to comply with the requirements of Government and the community.

Broad mineral policy and mining law components included in this study on Mine Closure relate to:

- *land-use planning* – integrating mine planning with the community lands-use plan, perhaps best accomplished during development of the community management plan. This plan should consider complementary and competing land-uses (i) during operation of the mine; and (ii) post-closure after reclamation and rehabilitation of mining lands.
- *mine closure planning* – as part of the permitting process, development of a mine closure plan that includes:
  - considerations for retraining and redeployment of workers after mine closure, using a progressive phase-out of jobs leading up to closure
  - re-conversion of plant site to a secondary industrial use
  - community sustainability through the stimulation of improved infrastructure networks that will support secondary industry, increased technical capacity and business acumen as a result of local training, business mentoring programs supported with specialists from the mine staff, capacity-building and education provided by the mine and/or government.
- *local/regional economic development strategies* – that provide economic incentives for (i) the mine to stimulate local businesses through the procurement of goods and services, (ii) government-sponsored programs to stimulate development of small-to-medium enterprises through the provision of loans and grants, and small-business extension services
- *partnership strategies* – to achieve sustainable development goals by integrating community requirements imparted by mining with those of complementary industries.

Mine closure planning has strong connectivity to environmental permitting and the development of community management plans. Related key components also found in the evaluation matrix relate to:

- economic incentive programs for companies to make investments in local small businesses or shared infrastructure. Historically, such contributions have been constrained by a lack of tax relief or other fiscal provisions that would offset cost to the project.
- the use of revenue sharing between government and communities to provide funds for community-based programs (defined in the community management plan). This leads to issues of shared company / community structures for trusts, foundations, and other community-based financial institutions.
- Government commitment to education to provide local skill sets appropriate for other industrial activities.
- HIV/AIDS education and prevention programs to reduce staffing loss problems.

A good practice example is the Strategic Framework for Mine Closure developed by Australia through an effort of both government and mining industry. (see Australia case below).

### Strategic Framework for Mine Closure

The objective of the *Strategic Framework for Mine Closure* is to encourage the development of comprehensive Closure Plans that return all mine sites to viable, and wherever practicable, self-sustaining ecosystems, and that these plans are adequately financed, implemented and monitored within all jurisdictions. The Strategic Framework is designed to cover a broad range of mining and mining related activities. Exploration (which entails lower levels of impact and is often transitory in nature) and mineral processing are considered part of the broader mining function.

Appropriate planning and adequate provision for mine closure are issues to be addressed by both the regulators and the minerals industry across Australia. Australian State and Territory Governments (and in some cases local government) are responsible for the regulation and management of mine closure and rehabilitation requirements on industry. All States and Territories have mine closure policies requiring site-specific post-mining rehabilitation plans developed by companies for approval by the respective mining agencies in each jurisdiction. State and Territory Governments also require some form of security bond, usually in the form of a bank guarantee or a cash payment for smaller operations, but the calculation process for bonds varies between jurisdictions.

For its part, the mining industry has responded directly to changing community environmental standards through the development of mechanisms such as the Australian Mining Industry (2000) *Code for Environmental Management* and through the adoption of international environmental performance standards such as ISO 14001. The Code encourages self regulation by the industry, with mine closure as a key component, to:

- ensure resources are adequate to implement environmental plans during operations and closure; and
- plan for closure in the feasibility and design phases of a project and regularly reviewing plans to consider changes in site conditions, technology and community expectations.

Source: ANZMEC Strategic Framework for Mine Closure, Australia

### C. TRANSPARENCY

Code in Annex A	Component
P2f. L2q.	revenues management and EITI

**Table 3:** Mineral policy and mining law components used to target Transparency. The left column refers to the code in the evaluation tableau in Annex A and the right column the corresponding component name.

The Extractive Industry Transparency Initiative (EITI) was launched by British Prime Minister Tony Blair at the World Summit on Sustainable Development in Johannesburg, September 2002. The initiative is an out-growth of others aimed at increased government transparency for disclosure of revenues streams such as the Publish What You Pay. Revenues from mining companies, principally in the form of taxes, royalties, and bonuses, should contribute towards economic growth and social development in developing countries. A lack of accountability and transparency in these revenues is currently exacerbating poor governance and contributing towards corruption, conflict and poverty.

EITI is a process by which countries and companies voluntarily engage in putting in place procedures to record and disclose the revenues paid by extractive industry companies and received by government institutions. So far, several oil producing states have signed up for EITI including Azerbaijan and Nigeria. On the minerals side, Ghana and now Kyrgyz Republic are implementing EITI. In October 2004 Kyrgyz Republic became the first country to publish an EITI report. Other countries are at varying degrees of implementation. By adopting EITI countries are able to show to their citizens and outside donors and investors their commitment to revenue transparency, and increase their accountability for the use of these revenues. Stakeholders are also able to see and evaluate the benefits to extractive industries to their nation.

Some of the lessons learnt from the experience of implementing the EITI in Kyrgyz Republic include:

- Coalitions work – in this case the combined efforts of the Bank, IFC, EBRD, and IMF - all of which have been unwavering in their commitments to ensuring transparency in the Kumtor restructuring transaction. Cameco and Standard Bank (financial advisors to the government) were also supportive in looking for an expeditious and sensible way to move the IPO forward.
- Senior level government support was also instrumental. The Prime Minister saw and used the endorsement of the EITI to blunt significant criticism from members of Parliament over the government's handling of the restructuring.
- Good working relationships at the staff level, Bank/IFC/EBRD/IMF and also, importantly, the in-country resident missions of the Bank and IMF and senior officials at the Ministry of Finance and Prime Minister's office.
- Understanding and communicating the benefits of EITI to the key participants (government and mining sector) is essential for good cooperation and success.
- Moving from concepts to practice by working closely with all the reporting parties to define the format of the reports and provide guidance on the content to be reported was a major factor in producing the first report.
- Significant knowledge of the mining sector in Kyrgyz Republic by virtue of previous Bank sector reports and on-going IFC involvement with the Kumtor project.

Creativity helps increase the value of the natural resource for governments: the Kyrgyz government realized US\$80 million in immediate cash and a remaining shareholdings in Centerra worth about US\$160 million as part of the restructuring of the Kumtor mine. The Kyrgyz Republic publicly report the revenue which is now available for poverty reduction activities.

## D. MEASURING OUTCOMES

<i>Code in Annex A</i>	<i>Component</i>
P5h.	Measuring outcomes (policy implementation)
P4c. L4e.	Community welfare
P4b. L4d.	Resettlement and compensation
P5i.	HIV / AIDS education

**Table 4:** Mineral policy and mining law components used to target Measuring Outcomes. The left column refers to the code in the evaluation tableau in Annex A and the right column the corresponding component name.

In general sustainable development elements are found in various legislative components of the five country region, but there remain implementation weaknesses as reported by consultants. In addition, capacity constrains at both local district and government departments are clear obstacles to sustainable mine development.

To achieve sustainability requires having a set of metrics that track net contributions to those most impacted by the operation – the government, the community, and the company. Governments can influence the process the process through policy and regulatory actions:

- Define within mineral policy benchmarks or targets against which the sector will be measured. These benchmarks may be industry wide (in terms of sector sustainability) or project specific (in terms of contribution of a single operation towards sector sustainability). Some general themes used to create sustainability indicators may include:
  - Economic measures that consider (i) net contributions to national and regional accounts in the form of royalties, taxes, customs, and other payments, (ii) indirect payments and economic multipliers on jobs and expenditures on supporting goods and services, and (iii) foreign revenue earnings on exports of commodities and value-added products.
  - Environmental measures that consider (i) the cost to government and society of pollution monitoring, mitigation, and clean-up, (ii) the cost of legacy issues that include abandoned mines and tailings dams, and industry contributions to address such issues (iii) contributions of the sector towards environmental enhancements in terms of shared infrastructure for tourism and recreation, (iv) industry contributions through shared environmental monitoring of water and air resources, (v) industry contributions towards habitat protection and enhancement, biodiversity, and reforestation, (vi) sustainable communities post mine closure.

- Social measures that consider (i) gender issues and inequalities, (ii) family issues relating to domestic violence, substance abuse, and the impact of migratory labor, (iii) access of local populations to education, (iv) affirmative action policies related to the empowerment of disadvantaged ethnic groups, and black economic empowerment, (v) HIV/ AIDS education and preventative measures, and (vi) the outcomes of voluntary resettlement and effective resolution of disputes
- Define within mining law and/or regulations the need for:
  - Community mining plans as a part of the mine permitting process to ensure that local objectives are included within the mine development plan, are monitored and reported regularly, and are evaluated in terms of measuring effective outcomes.
  - Base-line data and a schedule of targets / objectives by which a particular project will be measured annually for sustainability.
  - Regular monitoring of mining projects and economic incentives to offset the cost of this activity.
  - aggregation across operations to annually estimate sector sustainability
- Periodic review of the mineral policy and mining law to ensure that desired outcomes are being met. A mineral policy and mining law are only as effective as their implementation. Even the best of policies and laws will fail under weak institutions, poor governance, and non-enforcement of regulations and penalties. Mineral policies and laws should be revised periodically and implementation plans clearly defined and followed to ensure goals are attained.

### **Industry Application: The Global Reporting Initiative**

The Global Reporting Initiative (GRI) is becoming a recognized global sustainability reporting framework. In 2003 the GRI and the International Council for Mining and Metals (ICMM) convened a multi-stakeholder working group with the purpose of developing a Mining and Metals Sector Supplement (the Supplement) to the Guidelines. The GRI framework targets the mining company rather than individual operations. Nonetheless, it provides an interesting overview of sustainability indicators for application in the minerals industry.

In preparing reports, companies should provide information on the overall approach, giving attention to key issues such as social and economic capacity building at the community level. Likewise, the use of partnerships has increasingly become effective to meet challenges to sustainable development in the sector and companies are encouraged to include a narrative discussion about partnerships they have developed. To this end, topics of particular importance for inclusion in the narrative include “stakeholder engagement” and “community engagement and support” to (i) formalize policies for community engagement and consultation processes, (ii) dispute resolution processes, and (iii) develop mechanisms for the sharing of benefits, and better community planning (for a more complete discussion see Predevelopment social planning above).

#### Proposed new GRI Sustainability Indicators

<i><b>ASPECT</b></i>	<i><b>PROPOSED INDICATORS</b></i>
Economic	revenue capture, management, and distribution,; and value-added equal to total revenues – total cost of procurement, disaggregated to the country level
Environmental	material stewardship; emissions, effluents, and waste; biodiversity
Social	human rights; livelihoods; community (both programs and incidents); resettlement; operations closure; land rights; emergency preparedness; health & safety

Source: Mining and Metals Sector Supplement: Output from fourth meeting for review and approval by Working Group

## ANNEX A: THE EVALUATION SYSTEM

The evaluation system employed uses a simple measure of “presence” or “absence” to record the inclusion of each component in either the policy or law. This is an imprecise analysis in that the source documents used are themselves derivatives of the policies and laws of the nation. As such, missing information (in that it was not reported) could be misconstrued as indicating absence from the instrument itself. To this end, care has been taken to assess whether a component is indeed not included or simply overlooked in the reporting. In some instances, reporting of one component naturally implies the presence of related components (i.e. the right of the state to periodically inspect mining operations suggests the presence of a mining inspectorate).

Additionally, the information has been checked against the Draft Report Harmonisation of Mining Policies, Standards, Legislative and Regulatory Frameworks in Southern Africa<sup>2</sup>. This improves the overall reporting quality and has reduced the information uncertainty. That information included in the evaluation matrix that comes from the UN study is noted by an \*.

There was a widespread need to differentiate between a particular component being present versus present but not implemented or enforced. This latter situation is widespread, as evidenced by the general discussions that conclude each of the source documents. Where observed, the overall governance rating of the country has been lowered.

Some components carry the descriptor “very important”, as indicated by a bold font and yellow highlight in the tableau. This addresses the need to discern major trends within overarching instruments that specifically provide guidance on sustainability.

Results are recorded within the evaluation matrix. For each theme (i) components that are present are noted using green highlight, and (ii) the relative level of information is indicated in the bottom of the cell using a horizontal yellow bar. For example, the theme P1. Governance encompasses policy components P1a. through P1i. For any one country, the level of reporting for P1h. could be very detailed whereas there might be scant reporting of P1a. through P1g. The composite score for P1. Governance requires a subjective estimate of completeness, reported on a scale from 0 (no reporting at all) to 3 (extensively reported across all of the components within the theme). This measure is presented in the evaluation matrix as a horizontal bar emanating from in the lower right corner of the cell.

The graphs describing statistical summaries (i.e. Figures 1, 2 and 3) are based on a simple calculation: # times present for the component (i.e. 5/9) times the information quality factor (0-3) where 1 = 0.33, 2 = 0.66, and 3 = 1.0.

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<sup>2</sup> United Nations Economic Commission for Africa, Southern Africa Office, Prepared for ad hoc Expert Group Meeting, October 2004, by Minerals and Energy Policy Centre (MEPC), Johannesburg, South Africa.

## EVALUATION MATRIX: MINERAL POLICY

	Zimbabwe	Tanzania	Namibia	South Africa	Botswana
<b>P1. GOVERNANCE</b>					
Guiding principles; mineral ownership; role of the state, sustainable development objectives, artisan mining, and access to minerals	P1a. P1b. P1c. P1d. P1e. P1f. P1g. P1h. P1i. 2	P1a. P1b. P1c. P1d. P1e. P1f. P1g. P1h. P1i. 2	P1a. P1b. P1c. P1d. P1e. P1f. P1g. P1h. P1i. 3	P1a. P1b. P1c. P1d. P1e. P1f. P1g. P1h. P1i. 3	P1a. P1b. P1c. P1d. P1e. P1f. P1g. P1h. P1i. 2
<b>P2 Economic: Business Climate</b>					
Equal treatment of mineral rights holders, encouraging development, transparency, fiscal & regulatory regime, revenues management	P2a. P2b. P2c. P2d. P2e. P2f. 1	P2a. P2b. P2c. P2d. P2e. P2f. 2	P2a. P2b. P2c. P2d. P2e. P2f. 2	P2a. P2b. P2c. P2d. P2e. P2f. 2 - 3	P2a. P2b. P2c. P2d. P2e. P2f. 1 - 2
<b>P3 Environment: Stewardship</b>					
Risk, management, and reclamation	P3a. P3b. P3c. 1	P3a. P3b. P3c. 2	P3a. P3b. P3c. 2	P3a. P3b. P3c. 2 - 3	P3a. P3b. P3c. 1
<b>P4 Social: Mining &amp; Communities</b>					
Consultation, compensation, and gender / family issues	P4a. P4b. P4c. 1	P4a. P4b. P4c. 2	P4a. P4b. P4c. 2	P4a. P4b. P4c. 2	P4a. P4b. P4c. 1

<b>P5 SUSTAINABLE DEVELOPMENT:</b>					
<b>Implementation</b>					
Land-use planning, closure, roles & partnerships, and outcomes	P5a. P5b. P5c. P5d. P5e. P5f. P5g. P5h. P5i. <b>1</b>	P5a. P5b. P5c. P5d. P5e. P5f. P5g. P5h. P5i. <b>2 - 3</b>	P5a. P5b. P5c. P5d. P5e. P5f. P5g. P5h. P5i. <b>2</b>	P5a. P5b. P5c. P5d. P5e. P5f. P5g. P5h. P5i. <b>2</b>	P5a. P5b. P5c. P5d. P5e. P5f. P5g. P5h. P5i. <b>1</b>

**EVALUATION MATRIX: MINING LAW**

	Zimbabwe	Tanzania	Namibia	South Africa	Botswana
<b>L1. INTRODUCTION</b>					
Purpose & scope of law, role of state	L1a. L1b. L1c. L1d. <b>0</b>	L1a. L1b. L1c. L1d. <b>2</b>	L1a. L1b. L1c. L1d. <b>2</b>	L1a. L1b. L1c. L1d. <b>2 - 3</b>	L1a. L1b. L1c. L1d. <b>2</b>
<b>L2 Economic</b>					

	Zimbabwe	Tanzania	Namibia	South Africa	Botswana
Tenure, transparency, flexibility, types of rights, obligations, incentives, violations, dispute resolution	L2a. L2b. L2c. L2d. L2e. L2f. L2g. L2h. L2i L2j. L2k. L2l. L2m. L2n. L2o. L2p. L2q. 1	L2a. L2b. L2c. L2d. L2e. L2f. L2g. L2h. L2i L2j. L2k. L2l. L2m. L2n. L2o. L2p. L2q. 1 - 2	L2a. L2b. L2c. L2d. L2e. L2f. L2g. L2h. L2i L2j. L2k. L2l. L2m. L2n. L2o. L2p. L2q. 2	L2a. L2b. L2c. L2d. L2e. L2f. L2g. L2h. L2i. L2j. L2k. L2l. L2m. L2n. L2o. L2p. L2q. 3	L2a. L2b. L2c. L2d. L2e. L2f. L2g. L2h. L2i. L2j. L2k. L2l. L2m. L2n. L2o. L2p. L2q. 2
<b>L3 Environment: Stewardship</b>					
Assessment, management, health & safety, reclamation	L3a. L3b. L3c. 2	L3a. L3b. L3c. 2	L3a. L3b. L3c. 3	L3a. L3b. L3c. 3	L3a. L3b. L3c. 3
<b>L4 Social: Mining &amp; Communities</b>					
Consultative processes, frameworks, mitigation, compensation, and gender issues	L4a. L4b. L4c. L4d. 1	L4a. L4b. L4c. L4d. 0	L4a. L4b. L4c. L4d. 1	L4a. L4b. L4c. L4d. 2	L4a. L4b. L4c. L4d. 1
<b>L5 SUSTAINABLE DEVELOPMENT: Community Plan (mine closure plan)</b>					
Economic, environmental, and social development; and artisan mining issues	L5a. L5b. L5c. L5d. 1	L5a. L5b. L5c. L5d. 0	L5a. L5b. L5c. L5d. 2	L5a. L5b. L5c. L5d. 3	L5a. L5b. L5c. L5d. 0

	Zimbabwe	Tanzania	Namibia	South Africa	Botswana
<b>L6. ADMINISTRATION OF LAW</b>					
Competent authorities; responsibilities, inspection, violations and penalties, resolution and appeals	L6a. L6b. L6c. L6d. L6e. L6f. L6g. <span style="background-color: yellow;">1</span>	L6a. L6b. L6c. L6d. L6e. L6f. L6g. <span style="background-color: yellow;">1</span>	L6a. L6b. L6c. L6d. L6e. L6f. L6g. <span style="background-color: yellow;">1 - 2</span>	L6a. L6b. L6c. L6d. L6e. L6f. L6g. <span style="background-color: yellow;">2</span>	L6a. L6b. L6c. L6d. L6e. L6f. L6g. <span style="background-color: yellow;">2</span>

#### EVALUATION MATRIX: GENERAL ADMINISTRATION

	Zimbabwe	Tanzania	Namibia	South Africa	Botswana
<b>G1. Constitutional Authorization</b>					
Guiding principles	G1a. <span style="background-color: yellow;">2</span>	G1a. <span style="background-color: yellow;">0</span>	G1a. <span style="background-color: yellow;">3</span>	G1a. <span style="background-color: yellow;">3</span>	G1a. <span style="background-color: yellow;">3</span>
<b>G2. Other Legislation: Tax and Fiscal</b>					
Reference to tax laws	G2a. G2b. G2c. G2d. <span style="background-color: yellow;">1</span>	G2a. G2b. G2c. G2d. <span style="background-color: yellow;">0</span>	G2a. G2b. G2c. G2d. <span style="background-color: yellow;">2</span>	G2a. G2b. G2c. G2d. <span style="background-color: yellow;">1</span>	G2a. G2b. G2c. G2d. <span style="background-color: yellow;">1</span>

<b>G3. OTHER LEGISLATION: REGULATORY &amp; MISC.</b>					
Reference to other regulatory compliances	<p>G3a. G3b. G3c. G3d. G3e. G3f. G3g. G3h. G3i. G3j. G3k. G3l.</p> <p style="text-align: right;">2</p>	<p>G3a. G3b. G3c. G3d. G3e. G3f. G3g. G3h. G3i. G3j. G3k. G3l.</p> <p style="text-align: right;"><u>0</u></p>	<p>G3a. G3b. G3c. G3d. G3e. G3f. G3g. G3h. G3i. G3j. G3k. G3l.</p> <p style="text-align: right;">1</p>	<p>G3a. G3b. G3c. G3d. G3e. G3f. G3g. G3h. G3i. G3j. G3k. G3l.</p> <p style="text-align: right;">2</p>	<p>G3a. G3b. G3c. G3d. G3e. G3f. G3g. G3h. G3i. G3j. G3k. G3l.</p> <p style="text-align: right;">1</p>

## EVALUATION TABLEAU: COMPONENT DESCRIPTIONS - MINERAL POLICY

### P1. Governance

<i>Code</i>	<i>Component</i>	<i>Description</i>
P1a.	guiding principles	<ul style="list-style-type: none"> <li>The mineral policy honors the constitution, in that the policy itself provides the intent of the government, and laws and regulations are viewed as instruments for guidance.</li> <li>Policy principles may include sustainable development, poverty abatement, and self determination. For each guiding principle, some metric should be provided where by the policy works towards broad objectives</li> </ul>
<b>P1b.</b>	ownership of mineral resources	Role of the state as owner of mineral resources, the role of minerals in the national interest, and provisions for assigning temporary mineral rights to individuals and corporations in order to stimulate investment and development.
P1c.	overview of economic contribution of the industry	Role of the mining sector in the overall economy, its current and expected economic contributions
<b>P1d.</b>	role of the state as regulator	Role of the state as regulator of mineral industries
P1e.	defining economic, environmental, and social objectives at the regional & local scale, including community mining agreements	<ul style="list-style-type: none"> <li>Societies expectations for mineral development – guided by the principles of sustainable development using economic, environmental, and social objectives</li> <li>Consideration given to impacts at the local, regional, and national scale; and consultative frameworks through which impacted communities are empowered to participate in the planning and execution of impact management and benefit programs related to mining.</li> </ul>
P1f.	objectives of the policy	What the policy intends to accomplish, with specific reference to developing short, mid, and long-term strategies within a holistic framework
<b>P1g.</b>	artisanal & small-scale mining	<ul style="list-style-type: none"> <li>Safeguard policies (i.e. environment, child-labor, hazardous materials management, and health &amp; safety) for artisanal and small-scale miners to protect and enhance their well-being, and mechanism to assign mineral rights to those having established customary use of specific mineral resources</li> <li>Policies and mechanisms to organize and formalize the sector, including ways for artisanal miners to graduate to entrepreneurial mining enterprises.</li> </ul>
<b>P1h.</b>	mineral access <ul style="list-style-type: none"> <li>inspection &amp; control</li> <li>capacity building</li> <li>mining cadastre</li> <li>geological survey (promotion of resource potential)</li> </ul>	Transparent, non-discriminatory public access to mineral resources through the provision of mineral rights, subject to compliance with the Mining Law and Mining Regulations <ul style="list-style-type: none"> <li>with the state authorized to regulate mineral industries through a transparent and non-discriminatory mines inspectorate</li> <li>with the state providing and implementing programs to improve sector governance through capacity building</li> <li>with the state authorized to administer mineral rights through a transparent and non-discriminatory mining</li> </ul>

<i>Code</i>	<i>Component</i>	<i>Description</i>
		<p>cadastre</p> <ul style="list-style-type: none"> <li>with the state providing public access to geologic data in order to stimulate investment in the sector through promotion of mineral resource potential</li> </ul>
<b>P1i.</b>	right of recourse, administrative appeals, judicial appeals, dispute resolution, arbitration	<ul style="list-style-type: none"> <li>Rights recourse to resolve disputes through administrative, judicial, or arbitration processes</li> <li>Procedures for administrative appeals and the remedies available and defined within the Mining Regulations</li> <li>Procedures for judicial appeals and the general principles of law that apply are clearly defined</li> <li>Dispute resolution includes definition of provisions in contracts and agreements, amicable settlement through discussion, and courts of arbitration and binding agreement</li> <li>Arbitration clauses that define domestic and international courts available and rules for arbitration.</li> </ul>

## **P2. Economic: Business Climate**

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>P2a.</b>	equal treatment of domestic and foreign investors	Equal access to mineral resources for both domestic and foreign investors through transparent, non-discriminatory sector regulation
<b>P2b.</b>	encouraging development & exploration	The state encourages exploration and development by creating a competitive business climate through the application of international best practices in regulatory and fiscal policies
P2c.	promotion of the private sector, economic growth, & job creation	Role of the private sector in providing investment capital
<b>P2d.</b>	transparency of the licensing process	Mining Regulations clearly define the procedure for acquiring mineral rights, and the concept of preference given to applications according to the order they are filed.
<b>P2e.</b>	fiscal & regulatory regime <ul style="list-style-type: none"> <li>stability</li> <li>competitiveness</li> <li>efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Whether the government supports the concept of stability of fiscal and regulatory terms and conditions, as defined in the mining agreement, for a defined period of time</li> <li>Fiscal and regulatory reforms that reflect international standards and make the state competitive in attracting private sector investment</li> <li>Programs and efforts towards administrative reforms and institutional strengthening to improve governance in the sector. This may also include setting time limits within regulatory processes to ensure that unnecessary delays in administrative functions are removed.</li> </ul>
<b>P2f.</b>	revenues management and EITI	The state endorses EITI - a program sponsored by the British Department for International Development (DIFD) to increase transparency over payments by companies to governments and government-linked entities, as well as transparency over revenues by those host country governments.

### P3. Environmental: Stewardship

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>P3a.</b>	risk assessment & management	<p>Policies that seek to safeguard the environment from harm by requiring Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP) for mining activities:</p> <ul style="list-style-type: none"> <li>• Environmental impact assessment (EIA) is an instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.</li> <li>• Environmental management plan (EMP): An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.</li> </ul>
<b>P3b.</b>	health & safety	<p>Policies that seek to ensure health &amp; safety standards for workers and mine-impacted communities. This policy generally refers to another policy specifically detailing objectives for the industry</p>
<b>P3c.</b>	mine reclamation	<p>A clear policy on reclamation of mining lands, including responsibilities and obligations for:</p> <ul style="list-style-type: none"> <li>• planned closures</li> <li>• abrupt closures</li> </ul>

### P4. Social: Mining & Communities

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>P4a.</b>	consultation processes	<p>A demonstration of a framework for community consultation in mine planning, development, ongoing operations, and closure. This includes:</p> <ul style="list-style-type: none"> <li>• Consultative processes for assessing the socio-economic impact of mining</li> <li>• Consultative processes for developing voluntary community mining agreements</li> <li>• Frameworks that integrate communities into closure and post-closure planning</li> </ul>
<b>P4b.</b>	resettlement & compensation	<p>A resettlement policy framework and action plan for resettlement, that includes:</p> <ul style="list-style-type: none"> <li>• Identification of affected populations</li> <li>• Legal frameworks</li> <li>• Compensation frameworks</li> <li>• Resettlement assistance</li> <li>• Organizational responsibilities</li> <li>• Dispute resolution</li> <li>• Budgeting and financing</li> <li>• Implementation (action steps)</li> <li>• Monitoring and evaluation</li> </ul>
<b>P4c.</b>	Community Well-Being	<p>Affirmative action policies related to empowerment of disadvantaged ethnic groups and/or indigenous people</p>

		<p>Policies to address mining-impacted communities, including specific consideration of</p> <ul style="list-style-type: none"> <li>• gender – discrimination &amp; equality</li> <li>• family issues – family welfare, substance abuse prevention and control, access to education</li> <li>• empowerment of NGO's and other partners in this regard</li> </ul>
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## P5. Sustainable Development: Implementation

Code	Component	Description
P5a.	land-use planning	A policy for holistic integrated land-use plans that consider both mining activities and complementary / competing land-uses. Some statement as to how to support long range planning of this activity at the community / regional level where capacity might be deficient
<b>P5b.</b>	mine closure planning	A clear policy on the need for mine closure plans prior to development that include: <ul style="list-style-type: none"> <li>• Considerations for retraining and redeployment of workers after closure</li> <li>• Re-conversion of plant site</li> <li>• Community sustainability</li> </ul>
<b>P5c.</b>	capacity-building education	The state's commitment to building capacity within its institutions, in regional government, and at the local level
<b>P5d.</b>	local / regional economic & business development	Programs or policies to foster small-to-medium enterprises at the local level using mining as an engine of growth. The policy should define: <ul style="list-style-type: none"> <li>• capacity for ensuring sustainability at the community level</li> <li>• effective dispute resolution processes for communities</li> <li>• social safeguard policies for vulnerable groups</li> <li>• frameworks for local economic development</li> </ul>
P5e.	roles of civil society, community, governments, and companies	Roles of the state, regional governments, community, NGO's, and company in defining, implementing, and monitoring sustainable development programs. A clear statement as to funding sources for major obligations should be included
P5f.	partnerships in social development: <ul style="list-style-type: none"> <li>• social</li> <li>• economic</li> <li>• environmental</li> </ul>	The state's expectations for partnerships to achieve sustainable development goals. Includes a consideration potential partners for each of the three main objectives
P5g.	inter-regional cooperation <ul style="list-style-type: none"> <li>• social</li> <li>• economic</li> <li>• environmental</li> </ul>	How the state can facilitate and support inter-regional cooperation on mining related issues. Includes a consideration of trans-boundary issues and regional cooperation agreements
<b>P5h.</b>	measuring outcomes (policy implementation)	The state's role in implementing its policy, including: <ul style="list-style-type: none"> <li>• key programs and associated time lines</li> <li>• measuring program performance</li> <li>• reporting on programs, to whom, when</li> <li>• mechanisms for program adjustments</li> </ul>
<b>P5i.</b>	HIV/AIDS	A policy to address the problems of HIV/AIDS infected staff and communities, and specific short, medium, and long-term strategies to arrest the spread of infection

## COMPONENTS DESCRIPTION - MINING LAW & RELATED REGULATIONS

### L1. Introduction

<i>Code</i>	<i>Component</i>	<i>Description</i>
L1a.	purpose & scope of law	A provision as to <ul style="list-style-type: none"> <li>the role of private investment</li> <li>definitions for key terminology</li> <li>scope of the law covering all mineral activities</li> </ul>
L1b.	objectives of the law	Clear statements regarding objectives for the law in regulating the sector
<b>L1c.</b>	ownership of mineral resources	a provision for state ownership in which mineral investment by the private sector provides broader social benefit
<b>L1d.</b>	role of the state as regulator	The role of the state clearly defined to: <ul style="list-style-type: none"> <li>promote efficient development by the private sector</li> <li>mandate that state owned enterprises, if any, are subject to the law</li> </ul>

### L2. Economic

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>L2a.</b>	security of tenure	provision of suitable guarantees for the investor against arbitrary actions that would threaten mineral rights
<b>L2b.</b>	transparent, clear, non-discriminatory licensing framework	Statements regarding the licensing framework that reflect the granting of licenses in the order of application filed, what rights are provided, to whom, how, and under what obligations
L2c.	promotion of the private sector, economic growth, & job creation	The reliance on the private sector to provide investment capital, with expectations for economic multipliers in the economy, and job creation
<b>L2d.</b>	flexibility in timing of exploration, development, exploitation, period & extensions	The issuance of mineral rights that allow a holder to determine the timing of their program within the bounds of the mineral right, the right to proceed from exploration to exploitation subject to regulatory compliance, and the ability to file for extensions of mineral rights
<b>L2e.</b>	mineral rights: types of rights & eligibility cancellation	The types of mineral rights that can be acquired, eligibility requirements that are non-discriminatory, and clearly defined regulations for cancellation of such rights
<b>L2f.</b>	mineral rights: common provisions for period, extension, renewal, transfer, relinquishment, withdrawal, termination	The period of a mineral right, processes for extension of perimeters, processes for transfer of rights to third parties, the right and regulatory process for a holder at any time to relinquish whole or a part of a right, conditions and processes for temporary withdrawal or permanent termination of a mineral right, and process for appeals of the above actions
<b>L2g.</b>	mineral rights: obligations for maintenance, relations with surface land owners & between holders of rights, infrastructure, health & safety, protection of cultural heritage	The obligations of a mineral right holder to maintain good standing through payments of fees and / or work completion of commitments, to maintain good relations with surface owners and other rights holders in the area, processes for resolution of disputes in this regard, procedures for the provision and / or sharing of infrastructure, compliance with local health & safety regulations, and safeguards for the protection of cultural heritage, vulnerable groups, and communities in general

<i>Code</i>	<i>Component</i>	<i>Description</i>
L2h.	mineral rights: obligations for taxes, duties, royalties	A clear statement of obligations on holders of mineral rights to pay taxes, duties, and royalties; what agency and authorized person collects those obligations - including procedures, schedules for payment, and applicable rates
L2i.	Mining related taxation, including provisions for preproduction and production expenditures, tax stability, and incentives	<ul style="list-style-type: none"> <li>• A clear statement as to the authorization of the appropriate government agency to provide financial tax provisions for amortization of pre-production expenses, (accelerated) depreciation of capital investments, and loss-carried-forward.</li> <li>• A clear statement as to the ability of the government to provide for binding tax stability for a period of time agreed upon with the holder of a mineral right, and courses of actions should the stability clause be involuntarily terminated</li> </ul>
L2j.	secondary processing of materials	<ul style="list-style-type: none"> <li>• A clear statement as to prevailing regulations regarding materials beneficiated from secondary sources including scrap, waste streams and piles, and recycling.</li> <li>• Provisions to encourage value-added (downstream) mineral processing</li> </ul>
<b>L2k.</b>	Informal and small-scale mining	<ul style="list-style-type: none"> <li>• Special provisions for the issuance of mineral rights, regulatory compliance, and / or financial obligations of artisanal miners</li> <li>• Special regulations should be included for: employment of pregnant or post natal women, child labor and forced labor of disabled persons, processing mineral ores in surface waters, using chemicals hazardous to health, control of black markets</li> </ul>
L2l.	other mineral activities	Provisions relating to other mineral activities that might include crafts, collection of gem specimens, and fossils
<b>L2m.</b>	fiscal requirements: closure funds / environmental guaranty	<ul style="list-style-type: none"> <li>• Obligations on the holder of mineral rights to provide financial certainty of mine closure through instruments that include: one-time, sinking fund, or bonded closure funds and tax treatment of these instruments</li> <li>• Obligations on the holder of mineral rights to provide financial certainty of funds to cover environmental abatement, mitigation, and clean up in the case of accidents; and tax treatment of instruments used</li> </ul>
<b>L2n.</b>	closure plan: initial plan at time of license application, updated periodically	Obligations on the holder of mineral rights to provide a comprehensive mine closure plan at the time of application for an exploitation right. This plan would include consideration of economic, environmental, and social impacts and remedies by which the company, community, and government might individually or in partnership achieve sustainability during and post-closure of operations. The closure plan should define financial and social obligations on the holder of the mineral right, and procedures for regular update and consultation of the plan
<b>L2o.</b>	A clear statement of violations, penalties, and powers of enforcement	A clear statement of actions constitute violation of the law, a schedule of civil and criminal penalties (or reference to applicable law), the civil and criminal powers of the state over the sector, and enforcement powers
<b>L2p.</b>	Recognized dispute resolution mechanisms and appeals	A clear statement of dispute resolution procedures, including election to voluntary arbitration, rights of recourse to

<i>Code</i>	<i>Component</i>	<i>Description</i>
		international courts, mechanisms and procedures for filing appeals, and time limits set on the above
<b>L2q.</b>	Revenue sharing with communities	<ul style="list-style-type: none"> <li>• A provision to share revenues from mining (i.e. royalties and fees) with local impacted communities.</li> <li>• Is there a mechanism to direct mining contributions from central accounts to local accounts</li> </ul>

### **L3. Environmental Stewardship**

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>L3a.</b>	risk assessment & management during exploration & exploitation	<p>A clear statement of environment safeguards required by rights of mineral holders. This includes defining when Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP) are to be prepared, references to frameworks for preparing these plans, and procedures for submission, public comment (if applicable), and approval:</p> <ul style="list-style-type: none"> <li>• Environmental impact assessment (EIA) is an instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.</li> <li>• Environmental management plan (EMP): An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.</li> </ul>
<b>L3b.</b>	health & safety and emergency preparedness	Clear statements regarding the obligation of holders of mineral rights to maintain health & safety and emergency preparedness plans and action teams when and when applicable
<b>L3c.</b>	mine reclamation	Clear statement as to expectations for mine area reclamation, including rehabilitation plans, restoration of flora and fauna, performance standards, and penalties for non-compliance

### **L4. Social: Mining and Communities**

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>L4a.</b>	consultation frameworks	<p>Requirements to develop frameworks for community consultation / empowerment on resource planning and development. This may include reference to:</p> <ul style="list-style-type: none"> <li>• consultation frameworks for community impact analysis</li> <li>• consultation frameworks for grievances and dispute resolution</li> <li>• consultation and empowerment of local communities on land-use planning and post-mining activities</li> </ul>
<b>L4b.</b>	Pre-development social planning	<ul style="list-style-type: none"> <li>• Social Impact Assessment - requirements for holders of mineral rights applying to obtain a mineral exploitation right to assess social impacts in local communities. This would include consideration of vulnerable groups and gender issues</li> <li>• Requirements for holders of mineral rights applying to</li> </ul>

<i>Code</i>	<i>Component</i>	<i>Description</i>
		obtain a mineral exploitation right to prepare a social mitigation plan to address adverse impacts identified in the social impact assessment and enhance opportunities for vulnerable groups and gender issues
<b>L4c.</b>	resettlement & compensation	Reference to safeguards policies for voluntary resettlement and equitable compensation for residents
<b>L4d.</b>	community well-being	<ul style="list-style-type: none"> <li>• A specific reference to gender and family issues with respect to social impact assessment and social mitigation planning</li> <li>• A specific reference to affirmative action for community members and minority or disadvantaged groups</li> </ul>

### **L5. Sustainable Development: Community Plan**

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>L5a.</b>	Economic closure planning <ul style="list-style-type: none"> <li>• local economic development</li> <li>• diversification</li> </ul>	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve economic sustainability: <ul style="list-style-type: none"> <li>• fostering local economic development through procurement of goods and services in mine impacted communities and the region</li> <li>• economic development programs to lessen across time the dependence of local companies on the mine, as prepared for the mine closure plan</li> <li>• opportunities to partner with local / regional economic development agencies to share infrastructure and foster new alternative land-uses</li> </ul>
<b>L5b.</b>	Environmental closure planning <ul style="list-style-type: none"> <li>• reclamation plan</li> <li>• environ. / habit enhancement</li> </ul>	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve environmental sustainability: <ul style="list-style-type: none"> <li>• mine closure according to the reclamation plan</li> <li>• creation of habitat, biodiversity, and protected areas</li> <li>• ongoing monitoring and reporting for a defined period of time</li> </ul>
<b>L5c.</b>	Social closure planning <ul style="list-style-type: none"> <li>• retraining</li> <li>• re-conversion</li> </ul>	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve economic sustainability: <ul style="list-style-type: none"> <li>• re-skilling of mine workers for professional advancement and increased technological capacity</li> <li>• redeployment of redundant mine labor through retraining for other sectors</li> <li>• opportunities and incentives to partner with local or regional development agencies on job placement in other sectors</li> <li>• opportunities and incentives for re-conversion of closed mining facilities for other purposes</li> </ul>
L5d.	Informal & Small-Scale Mining	<ul style="list-style-type: none"> <li>• Clear provision of the legal status of informal / unlicensed operators, and processes by which they might register</li> <li>• Assistance made available to small scale mines from larger mining operations and the government on</li> </ul>

Code	Component	Description
		issues of legal & administrative, health & safety training, technical training on equipment and mechanized mining, environmental protection, and access to fair & competitive markets.

## L6 Administration of law

Code	Component	Description
<b>L6a.</b>	competent authorities: responsibilities, inspections, controls	Ensuring that responsibilities of regulatory offices are clearly defined (Mines Inspectorate, Mining Cadastre, Geologic Survey), and that these agencies have clearly defined protocols for regulatory inspection and controls.
L6b.	misc. provisions: data status, mining cadastre and geological database, access to information	<ul style="list-style-type: none"> <li>Data status relates to the collection and dissemination of geological and exploration data, including to whom does the data belong, which data are public domain versus confidential or classified.</li> <li>Mining Cadastre – should have clearly defined functions and procedures</li> <li>Geological database is maintained, updated, and administered by the geological survey, and that there is open, equal access to land status, mineral rights, and geologic information for investors.</li> </ul>
L6c.	classification of mineral deposits	That the government uses a recognized, industry accepted system for the classification of mineral resources using classifiers such as commodity type, quality (coal) or industry-standard nomenclature such as rock type (quarry materials).
<b>L6d.</b>	provisions including miscellaneous, transitional, transparency, public inspection, confidentiality, and repeals	<ul style="list-style-type: none"> <li>Miscellaneous includes the obligation of transparency, availability of information for public inspection, confidentiality, and consistency of the mining regulations with the mining law.</li> <li>Transitional includes the promulgations of regulations, establishment of data inventories, and treatment of existing mineral rights.</li> <li>Transparency includes the Extractive Industries Transparency Initiative – a program sponsored by the British Department for International Development (DIFD) to increase transparency over payments by companies to governments and government-linked entities, as well as transparency over revenues by those host country governments.</li> <li>Public inspection – that the state shall compile and make publicly available reports concerning mineral rights, mineral production, state revenues and other direct or indirect economic benefits received.</li> <li>Confidentiality – the confidential treatment by the state or sector ministry of technical, geological, or financial data; as submitted by the holders of mineral rights and as may be required by law. The period of confidentiality will be defined within the Mining Regulations.</li> <li>Repeals - those laws that have been nullified through changes to the current set of laws.</li> </ul>
L6e.	authorizations for construction of infrastructure	The entitlement of holders of mineral rights to build and maintain infrastructure required for the activities connected with the mineral rights

<i>Code</i>	<i>Component</i>	<i>Description</i>
<b>L6f.</b>	processing, transportation and sale of mineral products	The entitlement of holders of mineral rights to process mineral substances, transport and store mineral products, and sell products at freely negotiated prices.
<b>L6g.</b>	clearly defined violations and penalties	Clearly defined <ul style="list-style-type: none"> <li>• violations defined according to the statutes of the Mining Law and corresponding Mining Regulations.</li> <li>• Offenses established by the sector ministry punishable by civil (fines) or criminal (fines / imprisonment) penalties.</li> <li>• Powers of enforcement and courts of competent jurisdiction clearly defined.</li> </ul>

## COMPONENT DESCRIPTION - GENERAL

### G1. Constitutional Authorization

<i>Code</i>	<i>Component</i>	<i>Description</i>
G1a.	reference to the constitution and its guiding principles	<ul style="list-style-type: none"> <li>• equality of people (incl. gender equality)</li> <li>• all people have the right to live in clean communities</li> <li>• all people have the right to own property, and those rights are protected</li> <li>• all people have the right to information</li> </ul>

### G2. Other Legislation: Tax and Fiscal

<i>Code</i>	<i>Component</i>	<i>Description</i>
G2a.	reference to direct taxes: income, sales	Includes references to other laws containing general provisions for the assessment and payment of taxes, basis for calculation of taxes, taxpayers affected, jurisdictions and powers of the government to levy taxes
G2b.	indirect taxes: VAT, presumptive business	Includes references to other laws containing provisions relating to assessment and payment of taxes, basis for calculation of taxes, taxpayers affected, jurisdictions and powers of the government to levy taxes
G2c.	investment & banking	Includes references to other laws containing provisions for <ul style="list-style-type: none"> <li>• the protection of investments, foreign exchange and state guarantees, treatment of domestic and international bank accounts</li> <li>• state guarantees including the freedom for holders of mineral rights to organize and conduct business as they see fit, import / export goods and services, and the free circulation of personnel according to international conventions.</li> </ul>
G2d.	customs duties and tariffs	Includes references to other laws containing duty and tariff schedules for the temporary and permanent import / export of goods, and state guarantees for the free movement of these goods as is required for the activities connected with the mineral rights

### G3. Other Legislation: Regulatory and Misc.

<i>Code</i>	<i>Component</i>	<i>Description</i>
G3a.	environ. impact assessment, and environ. management plan,	A clear statement regarding regulatory authority and the use of EIA's and EMP's in safeguarding the environment during

<i>Code</i>	<i>Component</i>	<i>Description</i>
	guidelines for reporting	<p>exploration, exploitation, and post-mining activities</p> <ul style="list-style-type: none"> <li>• Environmental impact assessment (EIA) is an instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.</li> <li>• Environmental management plan (EMP): An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.</li> <li>• Reference to an atmospheric pollution prevention act</li> <li>• Reference to a waste management act</li> </ul>
G3b.	water regulations	A clear statement regarding regulatory authority for the protection and use of water in mining
G3c.	forest regulations	A clear statement regarding regulatory authority and applicable forest regulations that apply to the activities of mineral rights holders, including restricted and limited use areas
G3d.	protected areas incl. cultural and natural	A clear statement regarding regulatory authority and restrictions to the holder of mineral rights vis a vis access and permissible activities within protected areas.
G3e.	health & safety	A clear statement regarding regulatory authority for health & safety issues associated with mining
G3f.	labor & social welfare incl. training & re-skilling, technology transfer, resettlement, wages & pensions, union-related	<p>A clear statement regarding applicable labor &amp; social welfare regulations as they apply to the activities of the holder of mineral rights:</p> <ul style="list-style-type: none"> <li>• Training &amp; re-skilling includes redeployment of redundant labor through education and vocational training</li> <li>• Resettlement considers safeguard policies that promotes participation of displaced people in resettlement planning and implementation, and economic objectives to assist displaced persons in their efforts to improve or at least restore their incomes and standards of living after displacement</li> </ul>
G3g.	planning and public works incl. construction codes & standards	A clear statement regarding regulatory authority for public works
G3h.	urban / rural, and land-use planning	A clear statement regarding regulatory authority for land-use planning at the federal, regional, and local scale, and any coordinating bodies that would assist in mine planning in this regard
G3i.	inspection and control	A clear statement regarding regulatory authority for agencies to inspect, monitor, and control mining activities
G3j.	workforce movement	A clear statement regarding regulatory authority for the importation of labor and control of migration associated with mining activities
G3k.	local regulations	A clear statement regarding regulatory authority for local authorities with respect to mining activities
G3l.	emergency response planning	A clear statement regarding regulatory authority for civil defense to protect and otherwise safeguard mines during emergencies