

IGF MINING POLICY FRAMEWORK ASSESSMENT

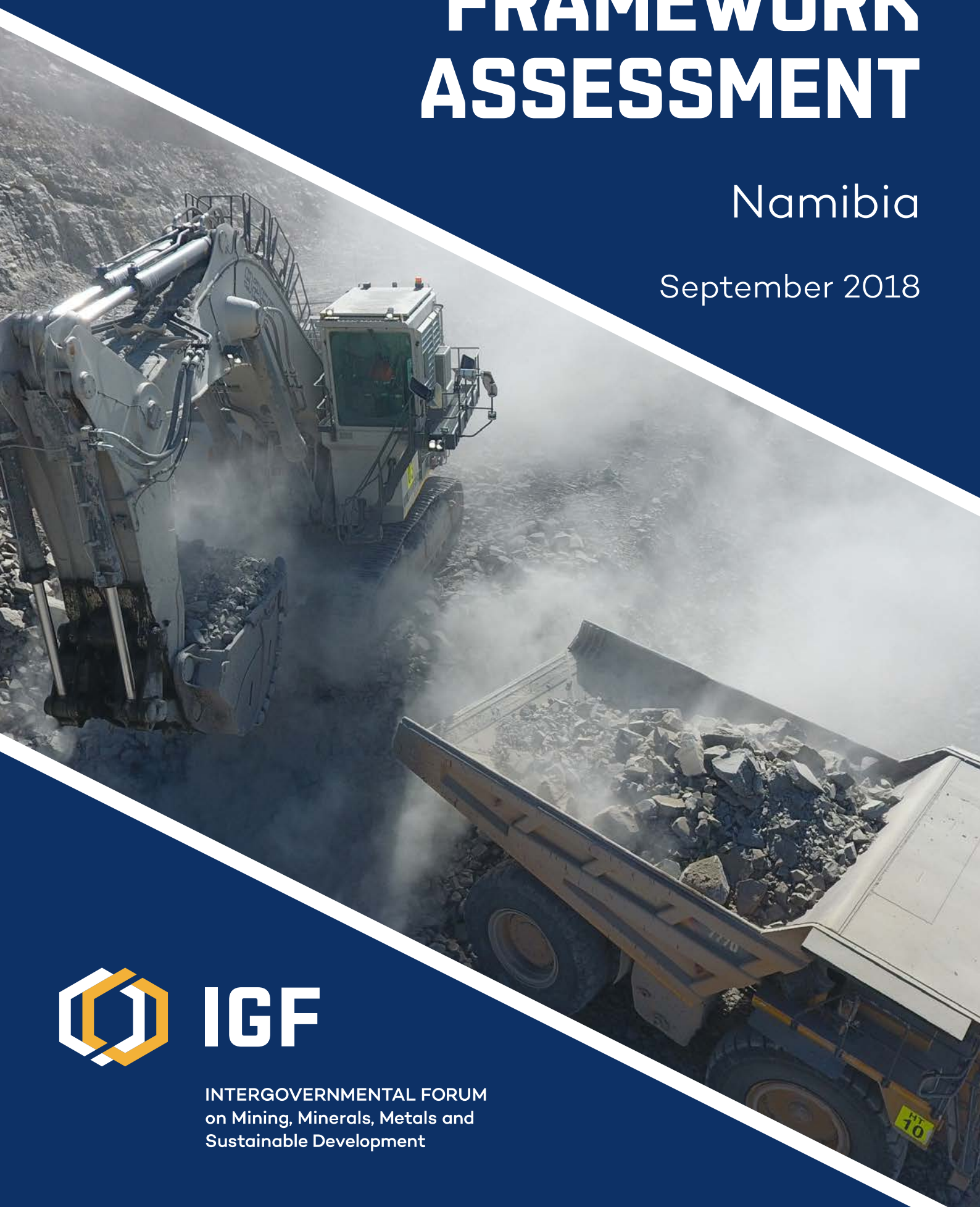
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The IGF is a member-driven organization which provides national governments the opportunity to work collectively to achieve their sustainable mining goals. It is devoted to optimizing the benefits of mining to achieve poverty reduction, inclusive growth, social development and environmental stewardship. The IGF serves as a unique global venue for dialogue between its 67 member country governments, mining companies, industry associations and civil society.

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IGF Mining Policy Framework Assessment: Namibia

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ABOUT THE MPF ASSESSMENT SERIES OF REPORTS

With support from the Government of Canada, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (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 or four assessments each year, in response to member requests.

The MPF assessment process itself is made up of two 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 both through desk- and field-based research involving diverse stakeholders. The assessment identifies key strengths, weaknesses and gaps in the country's mining laws and policies, as 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. Building on the outcomes of this assessment process, the second phase of the project involves working with the participating state to develop a capacity-building and technical support program that addresses key weaknesses and gaps, in the hopes that these strengthened capacities and increased understandings can enhance national legislation and policies, thereby optimizing the contribution of the mining sector to sustainable development.

This report presents the assessment for Namibia, with a view toward the following: helping the government target its efforts in implementing the MPF; informing capacity-building efforts; and allowing for monitoring of progress over time. The authors would like to thank their colleagues from the Government of Namibia, particularly those at the Ministry of Mines and Energy, for their help and support with this project. A special thanks to Isabella Chirchir and Minsozi Sibeso for their invaluable help and support in conducting this assessment.



ACRONYMS

AU	African Union
ASM	artisanal and small-scale mining
CBNRM	community-based natural resources management
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoM	Chamber of Mines
CSR	corporate social responsibility
DEA	Directorate of Environmental Affairs
EAP	Environmental Assessment Practitioner
EC	Environmental Commissioner
EIA	environmental impact assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPLs	Exclusive Prospecting Licences
EPZ	export processing zone
GDP	gross domestic product
GNI	gross national income
GRN	Government of the Republic of Namibia
GSN	Geological Survey of Namibia
IFC	International Finance Corporation
IGF	Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
IISD	International Institute for Sustainable Development
MARC	Minerals Ancillary Rights Commission
MAWF	Ministry of Agriculture, Water and Forestry
MC	Mining Commissioner
MET	Ministry of Environment and Tourism
MFMR	Ministry of Fisheries and Marine Resources



MGECW	Ministry of Gender Equality and Child Welfare
MITSMED	Ministry of Industrialization, Trade and Small and Medium Enterprise Development
MME	Ministry of Mines and Energy
MPF	Mining Policy Framework
NCE	Namibian Chamber of Environment
NDP	National Development Plan
NEPL	non-exclusive prospecting licence
NGO	non-governmental organization
NPC	National Planning Commission
NUST	Namibian University of Science and Technology
PPP	public–private partnership
QAQC	quality assurance and quality control
TSF	tailings storage facility
SACU	Southern African Customs Union (South Africa, Botswana, Swaziland, Namibia and Lesotho)
SADC	Southern African Development Community
SEA	strategic environmental assessment
SMEs	small and medium enterprises
UN	United Nations
UNDP	United Nations Development Programme
VAT	value-added tax



EXECUTIVE SUMMARY

This report presents an assessment of Namibia's readiness and capacity to implement the Mining Policy Framework (MPF) of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). The IGF Secretariat and local experts conducted the assessment between November 2017 and April 2018; the process involved an extensive desk-based review of key domestic and international laws and policies, as well as a 10-day field visit to the country, during which the project team met with a broad array of stakeholders from government, civil society, international organizations and the private sector. The assessment phase of this project concludes with this report.

The assessment team identified the following **key strengths** in Namibia's mining laws and policies:

- Namibia has a consolidated and extensive geological database, generated and maintained by a skilled and well-staffed Geological Survey Department.
- The mining sector generates a significant amount of revenue for Namibia through a variety of mechanisms (including taxes, royalties, equity, fees and levies), and the rates applied are generally regarded as fair, regionally competitive and equitably applied across the sector.
- Provisions within the Minerals Policy, supported by related legislation, encourage mining entities to prioritize the employment of Namibians in their operations, particularly women and formerly disadvantaged people, and to promote local procurement and contracts for service provision.
- The Environmental Management Act and its regulations, including requirements around the development of environmental impact assessments (EIAs) and environmental management plans (EMPs), as well as the environmental clearance certificate (ECC) process, are strong, and the ministry proactively continues to try to improve upon it.
- Artisanal and small-scale mining is a key pillar of the Minerals Policy, and efforts are underway to promote its economic and legal formalization.

The assessment team identified the following **key gaps and weaknesses** in Namibia's mining laws and policies:

- Key pieces of legislation and policy, including the Minerals (Prospecting and Mining) Act, the Minerals Policy, and the Water Act, are in need of revision, or are in a process of revision that is often seen as too lengthy and opaque.
- Stakeholders note that uncertainty around the content of future policies and laws could influence future investments in exploration.
- Legislation on occupational health and safety is outdated, its enforcement is limited, and it does not reflect the unique operating risks of the mining sector.
- Water and waste management legislation is outdated, and its enforcement is poorly resourced, ad hoc and uncoordinated.
- Mine closure, rehabilitation and the post-mining transition—and financing requirements for all three—are not adequately addressed in existing legislation or policy.
- There are no mechanisms in place or in legislation to improve the savings of ASM miners, to establish more acceptable forms of financing to improve access to credit, or to encourage responsible investment in the sector.
- Limited government revenues (taxes or royalties) are generated from small-scale mining, and progress on strengthening the appropriateness, viability and transparency of policies and systems for the collection, management and reinvestment of ASM revenue has been slow.



The major strengths and gaps of Namibia's mining policy and legislation, across all six pillars of the MPF, are summarized in Table ES1.

TABLE ES1. KEY STRENGTHS AND GAPS OF EACH PILLAR OF THE MPF

MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Legal and Policy Environment	MEDIUM	<ul style="list-style-type: none"> • Namibia has a consolidated and extensive GIS-based geological database that includes a significant historical record and maps covering a broad range of data types. • Geological information is publicly available. • The Minerals (Prospecting and Mining) Act and Mining Policy are both under review to incorporate changing knowledge and best practice. • The Minerals (Prospecting and Mining) Act stipulates a fair and transparent process for licensing. • Data and reporting requirements for permits and mining claim applicants are made clear in the Act. • Applicants for mining licences are required to submit an environmental impact assessment (EIA) prior to the granting of the licence. • EIAs are to be completed by an independent third party. • The protection of cultural heritage and national monuments is addressed in the permit application process through the EIA. • Full community consultation is required as part of the EIA process. 	<ul style="list-style-type: none"> • The Minerals (Prospecting and Mining) Act and Minerals Policy are largely outdated, and one supporting legislation is similarly out of date (i.e., the Water Act of 1956). • Geological data derived from exploration companies is seen as incomplete and poorly archived, and a lost resource for Namibia. • Mine closure is largely absent from the Minerals (Prospecting and Mining) Act, including financial assurances for closure. • The Minister of Mines and Energy has not, according to the current Act, had the ability to develop and pass mining regulations based on the legislation. • The permitting process should be completed in a timely, unambiguous and consistent manner, but in practice there can be significant delays and opacity. • Stakeholders noted the need for increased transparency in the granting or rejection of mine permits and licences.



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Financial Benefit Optimization	MEDIUM	<ul style="list-style-type: none"> • Mining generates a significant amount of revenue for the country, through a variety of mechanisms including taxation (corporate, income, VAT), royalties, fees and equity. • The rates applied for taxes and royalties are largely perceived as fair among private sector actors, and competitive with other Southern African Development Community (SADC) jurisdictions. • Namibia's Affirmative Action and Procurement policies are designed to promote increased domestic investment and ownership in the sector. • Revenues from the sector go toward broad support for national development. • There are not multiple layers of governance applied to those operating in the sector, simplifying the legal regime for mining in Namibia: the rules are largely the same for all stakeholders. • The Ministry of Finance has divisions devoted to investigating large taxpayers and to combatting transfer pricing. • The Auditor General has the capacity to audit results reported by mining companies. 	<ul style="list-style-type: none"> • There are no mechanisms or provisions in place in the tax code or other legislation to address commodity price volatility. • The licensing condition that new mineral exploration only happen with at least 5 per cent local Namibian ownership is seen by stakeholders as a barrier to investment. • The review process for mining law and policy is seen as too lengthy and slow, and is perceived by investors as a source of uncertainty, discouraging investment. • Mining licence fees are low. • The High Value Minerals Handling levies on semi-precious stones can act as a deterrent to domestic value addition. • Certain mining companies have been granted access to the government's Export Processing Zone (EPZ) and its preferential tax rates, giving them an advantage over other companies operating in the sector. • Limited links have been made between mining permits and Namibia's national policy objectives. • Transparency on mining revenue management is limited.



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Socioeconomic Benefit Optimization	MEDIUM	<ul style="list-style-type: none"> • The stated vision of Namibia's Minerals Policy includes the responsible development of the country's natural resources, and the government's commitment to ensuring that these resources make a sustainable contribution to the socioeconomic development of the country. • Evaluating the socioeconomic benefits of mining is included in the EIA process, prior to permitting and licensing. • The legal framework for occupational health and safety in the mining sector is enforced by the MME. The Chief Inspector of Mines has the power to recommend suspension or revocation of permits for breaches or contraventions. • The new Public Private Partnership Act provides a legal framework to promote private sector participation in the provisions of public services, including infrastructure. • Provisions in the Minerals Policy and in the special conditions attached to exclusive prospecting licences (EPLs) and mining licences direct mining companies to prioritize the employment of Namibians in their operations, particularly women and formerly disadvantaged people. • Local procurement and contracts for service provision are promoted through the Minerals Policy, and are supported through the Public Procurement Act (2015). • The Minerals Policy encourages the mining sector to participate in corporate social responsibility (CSR) program, though these are voluntary. • In line with the Affirmative Action Act, NDP5 and Vision 2030, the minister can impose special conditions prior to granting a mining licence or EPL, which can include provisions to improve the socioeconomic context in Namibia. 	<ul style="list-style-type: none"> • No requirement exists for capacity-building programs for communities to understand the potential environment and socioeconomic impacts identified during the EIA process. • Regulations for the health and safety of persons employed or otherwise present in or at mines made under the Minerals (Prospecting and Mining) Act have not been finalized despite multiple revisions. • The Labour Act does not specifically regulate the unique risks associated with Occupational Health and Safety in mining operations. • The mining sector is required to report sex-disaggregated data to the Ministry of Labour, but this information does not appear to be shared across government ministries.



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Environmental Management	MEDIUM	<ul style="list-style-type: none"> • An environmental clearance certificate (ECC) is required prior to undertaking a number of the activities associated with mining, and compliance with the act is generally strong. • Special and stringent conditions are placed on ECCs for projects that pose high or significant social or environmental risks. • The Environmental Management Act (EMA) empowers the Environmental Commissioner to monitor compliance with the act and with conditions stipulated in ECCs. The Environmental Commissioner can suspend or cancel an ECC for non-compliance. • An environmental management plan (EMP) is required as part of the environmental clearance certificate application. • While largely focused on research, the Geological Survey of Namibia also has programs in place for monitoring mineral contamination at mining operations, and has the technical skills, knowledge, ability and equipment required to conduct this monitoring. Information and knowledge generated through this monitoring is shared with the MET to strengthen their compliance monitoring. • The Environmental Management Act, through its EIA process, requires that mining companies identify and minimize the likelihood of impacts beyond the mine site. • The Minerals (Prospecting and Mining) Act makes reference to good practices with respect to mining, prospecting and reconnaissance. • The government has drafted a Policy for Prospecting and Mining in Protected Areas and National Monuments, which will allow these activities in these regions only under conditions of strict environmental management and after the completion of a full EIA. 	<ul style="list-style-type: none"> • The Water Act of 1956, which governs the use of water resources, is outdated, and the Water Resources Management Act (2013) was passed but is not enforced. • The Ministry of Agriculture, Water and Forestry (MAWF) has limited capacities to enforce and apply appropriate penalties for not complying with the Water Act, namely due to financial and human resources, while the penalties set in the act are inadequate. • Procedures to renew an ECC are not included in the EMA or its regulations. • The Ministry of Environment and Tourism (MET) has the mandate to regulate environmental performance, but lacks the technical skills, resources and equipment to regulate effectively. • The draft Policy for Prospecting and Mining in Protected Areas and National Monuments has not yet been adopted. • The implementation of the effluent permitting process for mining entities is inconsistently applied. Namibia does not have its own effluent discharge guidelines and relies on South African standards. • Environmental compliance reporting by companies to the MET occurs on a biannual basis; however, the MET has limited resources for reviewing environmental clearance certificates and biannual reports in a timely manner. • There is no Environmental Practitioners Act and no requirement for consultants conducting EIAs to be registered or certified. • It is unclear to what extent mining entities are reporting volumes of water abstracted and discharged, and its quality, to the MAWF as required. • MAWF and MET have a disjointed approach to enforcing compliance with water or discharge permits requirements.



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
			<ul style="list-style-type: none"> • No national noise or air quality standards exist for Namibia. • The Pollution Control and Waste Management Bill remains in draft form and should be finalized by parliament to become an act. • Neither MAWF nor MME have a clear legal framework to regulate sand mining. • There is no legal requirement for companies operating in Namibia to comply with international standards or guidelines for key environmental risk areas, for example in the design of tailings storage facilities. • The EMA does not require mining entities to commission independent experts to review and report to government prior to development approval, design change or at regular intervals. • The Environmental Commissioner has limited ability to enforce fines or penalties for non-compliance with the law; cases that require legal enforcement are handed over to the police.
Post-mining Transition	LOW	<ul style="list-style-type: none"> • The Minerals (Prospecting and Mining) Act includes some text on closure and rehabilitation, such as the polluter pays principle. • The Chamber of Mines has produced a framework for mine closure that is guided by its Code of Ethics, and which is endorsed by its members. • Environmental Management Plans address mine closure at a high level. • The EMA is in line with modern legislative trends on mine closure. • The Minerals Policy states that before a mining licence is granted, there should be a final mine closure plan together with a funding mechanism that describes how the company will deal with matters like groundwater pollution, soil degradation, wind pollution and infrastructure. 	<ul style="list-style-type: none"> • There is no legal framework for mine closure or relinquishment. • The EMA and the Minerals Policy explicitly refer to rehabilitation as a requirement but they lack a specific regulation and authorized agency, and sufficient resources to implement these requirements. • There is no formal system for handling the approval of closure plans. • There is no mandatory financial assurance mechanism to cover the costs of mine closure. • There are no incentives in place for progressive rehabilitation. • The penalties for inadequate closure are very low and usually cheaper than proper closure. • There is a reluctance to rehabilitate abandoned mines. • The legal framework does not require periodic assessment and auditing of mine closure plans



MPF THEME	LEVEL OF PROGRESS TOWARD MPF STANDARDS	STRENGTHS	GAPS
Artisanal and Small-Scale Mining	MEDIUM	<ul style="list-style-type: none"> • Mining Claims indicate that a process is in place for the formalization of small-scale mining. • ASM is a pillar of the Minerals Policy. • Child labour is not prevalent in the ASM sector in Namibia. • The Ministry of Mines and Energy, through the Minerals Ancillary Rights Commission, can act as a mediator between ASM and landowners should disputes arise. 	<ul style="list-style-type: none"> • There is limited understanding among miners of mining legislation, including environmental management and occupational health and safety. • There is a general lack of coordination among government ministries with regard to support services for the sector. • There is a lack of funding for training, education and innovation programming in the ASM sector. • There are no mechanisms in place or in legislation to improve the savings of ASM miners, to establish more acceptable forms of financing to improve access to credit, or to encourage responsible investment in the sector. • Minimal revenues are collected from small-scale miners. • MME capacities with regards to ASM are largely limited to geology, and do not include areas such as business development, marketing or gemology. • There is a general lack of geological mapping of semi-precious stones. • There are limited efforts in place to encourage initiatives for fair trade or conflict-free certification. • The national legislation on workplace health and safety does not apply to individuals working in ASM, particularly those without mining claims. • There are no defined ASM zones.



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1.0 INTRODUCTION

Mining is a central pillar of Namibia's economy and its future development. The country is heavily dependent on the extraction and processing of minerals for export: mining accounted for 12.2 per cent of gross domestic product (GDP) in 2017, and provides more than 50 per cent of foreign exchange earnings (Chamber of Mines, 2017; CIA, 2018). While mining presents a significant opportunity for growth and development, Namibians—including the government, civil society and the private sector—must work to ensure that meeting the needs of today's stakeholders does not compromise the needs of future generations.

For the mining sector to make a strong, positive contribution to Namibia's sustainable development, a strong legal and policy framework that maximizes the benefits accrued to the nation and to communities is required, a framework that promotes the development benefits of mining while upholding strong environmental and social standards. Mining can play a significant role in a nation's long-term social and economic development: it can generate revenues for the government; provide employment, skills development and business opportunities for local communities; and support investments in education, health, clean technology and infrastructure. At the request of the Government of Namibia, and in collaboration with the Ministry of Mines and Energy (MME), the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) is working to advance such policies and good governance practices in Namibia, through the use of its Mining Policy Framework (MPF).

This assessment report first presents Namibia's development, mining and legal contexts. It then highlights the key strengths and gaps in Namibia's mining policies and laws, across all six of the MPF's thematic areas, before making recommendations for further capacity building and reform. The six MPF thematic areas are: the Legal and Policy Environment, Financial Benefit Optimization, Socioeconomic Benefit Optimization, Environmental Management, the Post-Mining Transition, and Artisanal and Small-scale Mining (ASM). The IGF Secretariat carried out the assessment in late 2017 and early 2018 using the following methodology:

- Desk-based research, including an extensive review of the laws, policies, regulations and agreements that govern the national mining sector, as well as relevant literature on the sector: November 2017 to February 2018.
- Visit to Windhoek, Swakopmund and Karibib for consultations with relevant stakeholders from government, civil society and the private sector: January 2018.
- Drafting of the assessment report: January to April 2018.
- Completion of final assessment report: May 2018.



2.0 NAMIBIA: THE NATIONAL CONTEXT

Namibia lies along the Atlantic coast of southern Africa, bordered to the north by Angola, to the northeast by Zambia, to the east by Botswana and to the south by South Africa. It is one of the world's most sparsely populated countries, second only to Mongolia: 2.5 million people are spread across an area of 825,615 km² (UNDP, 2016). By comparison, Pakistan—a nation slightly smaller in size than Namibia—is home to nearly 200 million people. Nearly half of all Namibians live in cities, with Windhoek, Swakopmund and Walvis Bay being the largest urban centres. Increased rainfall and soil fertility in the north of Namibia results in much higher population densities in that part of the country. The lack of arable land and fresh water along the coast limits population densities along the Atlantic, with less than 5 per cent of the Namibian population living within 100 km of the ocean (Robertson et al., 2011).

The country has seen encouraging progress in key areas of human development since its independence in 1990 (see Table 1). Life expectancy has increased from 61.3 years to 65.1 years, in spite of the devastating local impacts of the HIV/AIDS epidemic. Children now spend on average just under 7 years in school, and Gross National Income per capita has nearly doubled, from USD 5,788 to USD 9,770 (UNDP, 2016). This places Namibia above the average for each indicator for sub-Saharan Africa. Inequality remains a persistent challenge: the country's Gini coefficient, used to measure the wealth distribution among a nation's residents, is high at 61. Health and education spending, as a percentage of GDP, are relatively high compared to other African nations: 5.4 per cent for health, as compared to an average of 2.4 per cent, and 8.3 per cent for education, as compared to 4.8 (UNDP, 2016). While both strong indicators of progress, more can still be done, as an estimated 45 per cent of the population continue to suffer from multidimensional poverty (UNDP, 2016).

TABLE 1. UNDP HUMAN DEVELOPMENT INDEX TRENDS, 1990-2015

	1990	2000	2010	2011	2012	2013	2014	2015
HDI score	0.578	0.556	0.612	0.625	0.630	0.636	0.642	0.645
Life expectancy at birth	61.3	55.2	62.6	63.4	64.0	64.5	64.8	65.1
Mean years of schooling	5.6	5.6	6.2	6.3	6.4	6.6	6.7	6.7
GNI per capita (USD)	5,788	6,159	8,063	8,393	8,488	9,078	9,473	9,770

Source: UNDP, 2017.

Child labour has deep cultural, social and economic roots that have granted it legitimacy and invisibility as a form of exploitation in many parts of the world (International Labour Organization [ILO], 2012). The Government of Namibia is committed to combating child labour and eliminating its worst forms. The Constitution of Namibia provides that all children are protected from economic exploitation, and they are not to be employed in or to perform work that is harmful or interferes with their health and development. Namibia has also ratified several international conventions and protocols relevant to child labour, and its Labour Act (2007) prohibits and restricts the use of child labour.

ECONOMIC CONTEXT

Namibia's GDP in 2015 was USD 24.1 billion (purchasing power parity, 2011), and it was growing at 6 per cent per year (UNDP, 2016). The economy remains overwhelmingly concentrated on natural resources. Mining is responsible for between 10 and 13 per cent of the country's GDP, and nearly half of all foreign exchange income, with diamonds, copper, gold, uranium, zinc and lead among the country's key minerals exports (Chamber of Mines, 2017). This dependence on mining makes the Namibian economy susceptible to commodity price fluctuations.

Beyond mining, key economic sectors include tourism, fishing and agriculture. The majority of the workforce is employed in the services sector (54 per cent) and in agriculture (31 per cent) (UNDP, 2016). The Namibian economy is closely tied to that of its southern neighbour, South Africa, with the Namibian dollar pegged to the South African rand, and a significant portion of the country's revenues coming from South Africa and from the Southern African Customs Union more broadly. It is recognized by authorities that more value addition needs to happen in-country to further grow the economy, while drought is also seen as a key economic challenge, as it can threaten food security and hamper economic growth across a number of sectors.

Among African nations, Namibia trailed only Mauritius, South Africa, and Botswana in the World Economic Forum's Global Competitiveness Report (2016–2017) (Schwab, 2016). More specific to the mining sector, the country has seen a drop in its ranking on the Investment Attractiveness Index, in Fraser Institute's Annual Survey of Mining Companies (2017): from 21st of 122 jurisdictions in 2014, to 54th of 91 jurisdictions in 2017 (Stedman, 2018). Despite this, Namibia still provides an attractive investment climate, due to the high levels of peace, stability and rule of law; the 2016 Global Peace Index ranked Namibia 55 out of 163 countries in the world (National Planning Commission, 2017).

GENDER CONTEXT

Namibia ranked 108 out of 159 countries on the UN's 2015 Gender Inequality Index (UNDP, 2016). The country's index value, 0.474, is better than the averages for both sub-Saharan Africa and the group of countries categorized as having medium human development. The state of gender equality in Namibia is reflected in a number of key indicators. Namibian women live longer than their male counterparts (an average of 67.5 years, versus 62.5 years), and they spend more time in school (an average of 6.9 years, versus 6.5 years) (UNDP, 2016). This educational advantage has not yet translated into higher earnings, which remain unequal: GNI per capita for women is just USD 7,971, compared to USD 11,667 for men (UNDP, 2016). Men's participation in the labour force is similarly higher, at 63.3 per cent for men aged 15 and older, compared to 55.7 per cent for women. In government, women are well represented, though parity has not yet been fully achieved: 41 per cent of Namibian parliamentarians are women, which is well above the global average of 23 per cent (World Bank, 2017).

The participation of women in the Namibian mining sector is low, a fact recognized by the government and actively addressed in the Minerals Policy (2003). In the policy, the ministry states its intention to specifically develop more opportunities for women to participate in large-scale mining, particularly

through targeted skills development. There have been initiatives in the past to promote women's participation in the sector, including by the Ministry of Gender Equality and Child Welfare and the Ministry of Labour. Article 23 of Namibia's constitution acknowledges gender and the discrimination women have historically faced in Namibia, and companies operating in the country are required to comply with the National Gender Policy. In addition, Namibia's Affirmative Action Act (1998) requires that companies submit an affirmative action plan to address both racial and gender discrimination.

The Women in Mining Association of Namibia (WiMAN) was launched in November 2017. WiMAN's main objectives include creating an empowering network that will inspire, support and develop the advancement of women working in the mining industry through providing access to education, skills development, mentorship and representation and ensuring conducive work environments for women. It remains to be seen to what extent the association will involve women in the small-scale mining sector. In addition, a number of SADC initiatives encourage member states to enact policies to remove cultural barriers preventing women's effective participation and contribution to the sector, and also to introduce communication and sensitization programs to remove resistance against women's empowerment.

ENVIRONMENTAL AND CLIMATE CONTEXT

Namibia's environment is hot and arid, and dominated by desert. Three rivers form the natural borders of Namibia: the Orange River in the south, the Kunene in the north and the Kavango in the northeast. Most other rivers outside of the country's wet northeast are seasonal and come and go with the rains. The north is lush than the rest of the country, particularly along the Caprivi Strip. The coast is largely inhospitable; for the most part, there is very little transition between the desert and the coastal waters. The coastal waters, dominated by the very cold, northward flowing Benguela Current of the South Atlantic, are low in species but extraordinarily high in productivity and biomass of both plants and animals (Robertson, et al., 2011). Moving inland, the land rises up from the coast through the Great Escarpment to the country's central plateau. The east of the country is covered by the Kalahari Desert.

Low population densities, both along the coast and elsewhere outside of Namibia's major cities, have facilitated the protection of a significant portion of the country's territory; national parks, game reserves and community conservancies cover over 40 per cent of Namibia's landmass. While coastal lands are extensively protected, mining is permitted in these areas; in fact, a majority of the country's mining sector (including diamonds and uranium) operates either in the west of the country or offshore.

Namibia is the driest country in sub-Saharan Africa: 92 per cent of the land is defined as semi-arid, arid or hyper-arid (Ministry of Agriculture, Water and Rural Development, 2000). Mean annual rainfall is less than 250 mm per year: 83 per cent of this moisture evaporates, 14 per cent goes to vegetation, 1 per cent recharges groundwater, and 2 per cent becomes runoff (MET, 2010). Climate change modelling for southern Africa suggests that temperatures in Namibia could rise on average by 1.1°C by 2035 (estimated shift ranging from 0.6°C to 1.6°C), 2.5°C by 2065 (from 1.7°C to 3.4°C), and 4.5°C by 2100 (from 3.3°C to 6.3°C) (Christensen, 2013). These increasing temperatures will lead to higher evapotranspiration rates across the country, putting additional stress on already vulnerable water systems (Daron, 2014). Climate modelling for rainfall in Namibia is less certain—some models see an increase in precipitation, some a decrease—but the government expects an increase in the frequency of floods and droughts, a rise in sea level of 30 cm, and more pronounced uncertainty in the climate that will be tougher to manage (MET, 2010). While Namibians have long coped with extreme climatic conditions and water scarcity, climate change presents the country with a significant challenge, as it will make living—and mining—in an already harsh, arid environment more difficult (Crawford, 2016).



3.0 NAMIBIA: THE MINING CONTEXT

Namibia's varied geology encompasses rocks of the Archaean to Phanerozoic age, and covers more than 2.6 billion years of the Earth's history. About half of the country's surface area is bedrock exposure, while the remainder is covered by the Cenozoic deposits of the Kalahari and Namib Deserts (Ministry of Mines and Energy, 2011). The most important mineral resources of the country are the diamondiferous beach and river gravels found along the Orange River and on the southwestern coast. These resources are found both offshore and onshore.

Mining has a long and complex history in Namibia. The earliest evidence of mining in the country is proven through archaeological evidence of copper smelting near the present day Matchless Mine, and dates back to the 17th century (Schneider, 1998). From these early activities, the sector has grown into one of the continent's most important: the country is among the world's top 10 gem-quality diamond producers, mined both on land and offshore, and it is the fourth-largest producer of uranium in the world (World Nuclear Association, 2017). Namibia also produces high-grade zinc, graphite, gold bullion, blister and refined copper, lead concentrate, salt and dimension stone.

Diamonds and uranium still represent the country's most significant commodities in terms of their economic contribution. Diamonds alone represented about 9 per cent of the GDP in 2016 (the mining sector in total made up 11.5 per cent of GDP that year) (Bank of Namibia, 2016). With land-based diamond deposits diminishing over time, Namibia's diamond output increasingly comes from offshore, deep-sea mining. These marine diamonds are produced through Namdeb, a 50/50 joint venture between the Government of the Republic of Namibia and De Beers, a global diamond mining and trading company.

There are two active uranium mines in Namibia: Rössing and Husab. The Chinese-owned Husab mine is the world's second-largest uranium mine, and produced its first barrel of uranium in December 2016 (Chamber of Mines Namibia, 2016). Once the Husab mine reaches full production, Namibia is expected to become the world's second-largest producer of uranium oxide (CIA, 2018). Rössing Uranium, which is majority owned by Rio Tinto, is the country's longest-running open pit uranium mine, having been in operation since 1976. Langer Heinrich Uranium is owned by Paladin Energy, and it recently went on care and maintenance. Both Rössing and Langer Heinrich produce uranium oxide "yellow cake" for export to power utilities in countries that are signatories to the Nuclear Non-Proliferation Treaty. Owing to the depressed commodity prices for uranium, Trekkopje mine, run by Orano (formerly Areva Resources Namibia), went into care and maintenance shortly after construction, and will only start production once the price for uranium improves.



Navachab gold mine, located roughly 170 km northwest of Windhoek, is owned and operated by QKR Corporation. Navachab, formerly owned by AngloGold, was the only industrial gold operation in Namibia until 2012, when the Canadian company B2Gold opened Otjikoto, located in northern Namibia. The mine started operating in December 2014 and commercial production is currently exceeding targets.

Weatherly Mining Namibia operates the Tschudi opencast copper mine near Tsumeb, producing pure refined copper metal on site. Further copper mines are in care and maintenance, as they wait to resume production once prices have adequately recovered (Chamber of Mines Namibia, 2016). In the south of Namibia, two major mining companies—Vedanta Zinc International and Glencore—produce zinc for the international market. Glencore’s Rosh Pinah mine is currently the only active underground mine in Namibia, and produces a concentrate of lead and zinc. Vedanta’s Skorpion Zinc open pit mine and Namzinc Refinery produce special high-grade (SHG) zinc for export to world markets.

Namibia also produces a wide variety of industrial minerals including graphite, wollastonite, bentonite, salt and others; apart from graphite and salt, these minerals are mined on a small scale (MME, 2002). Namibia is also known for its wide variety of quality semi-precious stones, which are mostly mined in the Karas, Erongo and Kunene regions. These include quartz (rose, clear, strawberry and smoky), tourmaline, sodalite, topaz, varieties of beryl (aquamarine, heliodore and morganite), garnet, diopside, chrysocolla and pyrophyllite and amethyst (Musiyarira, Tesh, Pillalamarry, & Namate, 2016). In addition, Namibia produces a wide variety of dimension stone, consisting mainly of marbles, granites, diorites and sodalite. Most of the dimension stone is exported as raw blocks, with only a small quantity being cut and polished locally (MME, 2002). Finally, Salt & Chemicals Ltd and its sister companies produce coarse salt at Walvis Bay for export to South Africa and other markets.

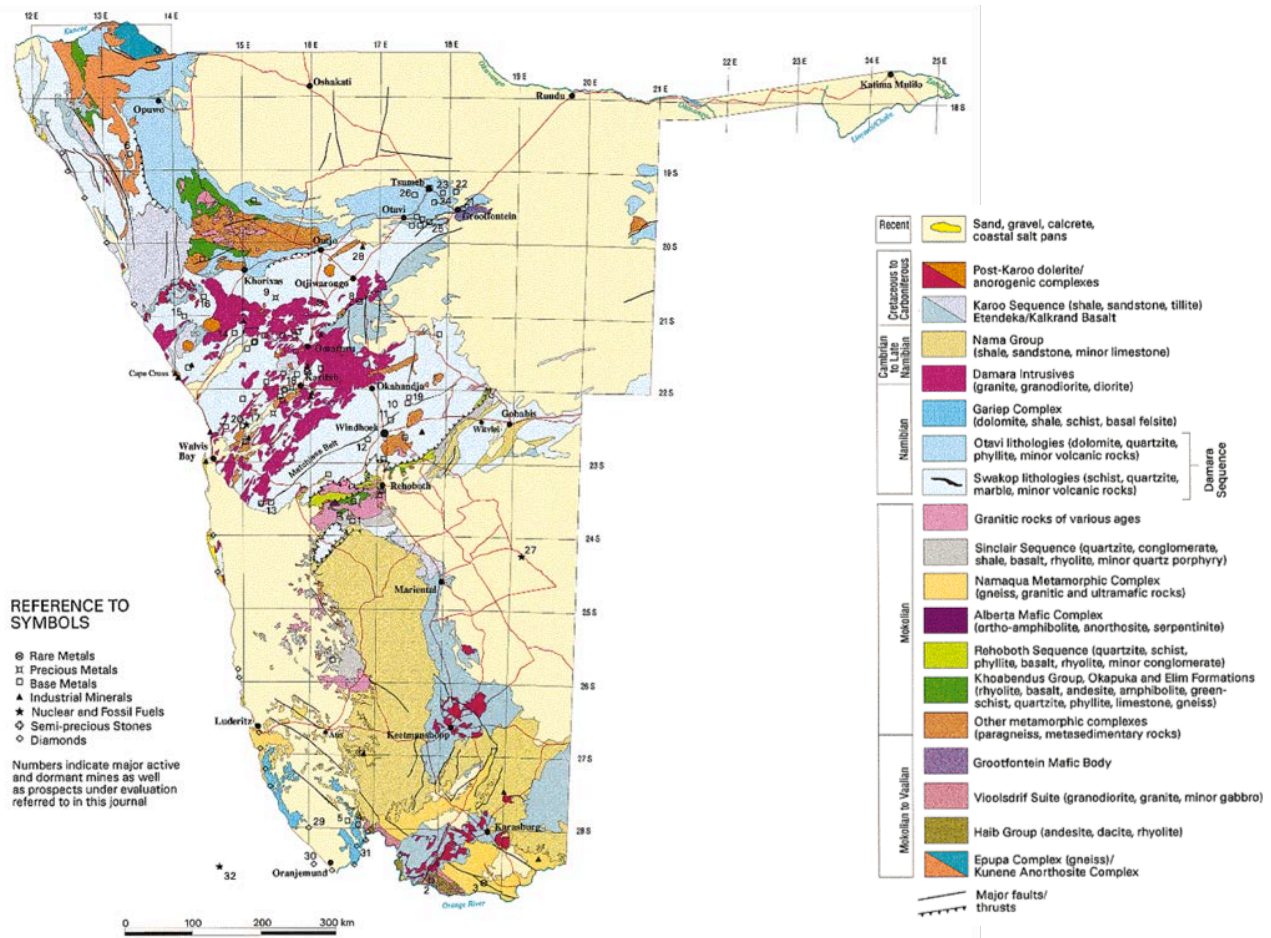


FIGURE 1. MAP OF NAMIBIA

Source: Geological Survey of Namibia, 2018.

Beyond production, the Government of Namibia continues to emphasize the need for the country to add value to raw materials domestically, to do more in-country manufacturing and to exploit the services market that contributes to the mining sector, especially through logistics and transportation. This has resulted in, for example, 11 cutting and polishing factories for diamonds being established. The factories, supplied with rough diamonds from Namibia Diamond Trading Company, now produce approximately USD 300 million worth of products annually (Ralston, Musiyarira, Tesh, Donegan, & Decabo, 2015).

Finally, the Epangelo Mining Company is a private mining company, with the Government of Namibia acting as the sole shareholder. The company was registered in 2008, and its objective is to ensure state participation in mineral resource development, mining, beneficiation, and the creation of mining related employment opportunities for Namibians. The company holds a number of exclusive prospecting licences, both on and offshore, and focuses much of its work on increasing the investment attractiveness of such projects.



4.0 NAMIBIA: KEY MINING INSTITUTIONS, LAWS AND POLICIES

The Republic of Namibia achieved its independence from South Africa in 1990. The country uses a mixed legal system of uncodified civil law, based on Roman–Dutch law, as well as customary law. The current Head of State is Dr. President Hage Geingob, who previously served as the country’s Prime Minister. President Geingob was elected in 2014 to serve a five-year term. The country’s constitution was adopted in 1990, and it was one of the first constitutions in the world to enshrine the protection of the environment. Administratively, Namibia is divided into 14 regions and subdivided into 121 constituencies, and Windhoek—the largest city—serves as the capital. For the purpose of regional and local governance, the country is divided into regional councils and local authorities.

KEY INSTITUTIONS

MINISTRY OF MINES AND ENERGY

The Namibian mining sector is governed by the Ministry of Mines and Energy (MME). MME’s mandate is to attract private investment in resource exploration and development through the provision of geological and geochemical information on minerals and energy resources, as well as through the management of an equitable and secure system of licences for the mining, energy and geothermal industries. In addition, MME regulates these industries, and ensures that health, safety and environmental standards are in place and consistent with other Namibian legislation, policies and regulations. Finally, MME is responsible for the collection of royalties from the mining and energy sectors; upon collection, the royalties are transferred to the national treasury.

MME is divided into three key departments and four directorates, three of which focus on mining. The Geological Survey of Namibia (GSN) is responsible for the generation and management of the country’s geoscientific data and information. The Department of Mines is responsible for promoting the responsible, sustainable and optimal exploitation of the country’s mineral resources, and integrating the mining sector into other sectors of the economy. The Department of Mines includes the following divisions: Minerals Rights and Resources Development; Mine Safety and Operations; Controlled Minerals and Research; and Small-Scale Mining. Finally, Diamond Affairs is the department tasked with protecting the Namibian diamond industry from illicit activities, and with optimizing the contribution of diamond mining to the country’s socioeconomic development. It controls and monitors diamond exploration and mining activities to ensure that the country derives the maximum



benefit from this mineral resource. For non-mining MME activities, there are directorates of energy, the national energy fund, petroleum affairs and Administration Services.

MINISTRY OF ENVIRONMENT AND TOURISM

The Ministry of Environment and Tourism (MET) is responsible for the protection and management of Namibia's natural environment. MET develops, administers and enforces environmental legislation and policy through three departments: Department of Environmental Affairs (DEA); Department of Natural Resources Management; and Department of Tourism, Planning and Administration.

The DEA is responsible for the administration of the environmental impact assessment process and enforcement duties (e.g., pollution control and waste management), and overall coordination of environmental issues with the Namibian government. The DEA is responsible for the granting of environmental clearance certificates, and the administration of the environmental impact assessment process. The DEA is also tasked with ensuring that mining companies comply with the EIA-related obligations that allow them to maintain their exploration or mining licence, through regular monitoring and inspection.

MINISTRY OF FINANCE

The Ministry of Finance (MoF) is responsible for the management of central government finances, including those revenues coming from the mining sector, and coordinates the central government budget, forecasts and analyses. Tax issues also fall under the MoF through the Receiver of Revenue department, including divisions focused on investigating large taxpayers and combatting transfer pricing. All collected government revenues go into Namibia's national budget, and revenues from specific sectors (including mining) are published by the MoF under "revenue heads" in the annual budget book. The allocation of funds within the national budget is not separated by "revenue heads," so it is not possible to track the distribution of revenues generated by specific sectors. The MoF also works closely with Namibia's regional neighbours, through the Southern African Customs Union (SACU) and the Southern African Development Community (SADC), to harmonize customs and tax issues across the region.

MINISTRY OF INDUSTRIALIZATION, TRADE AND SMALL AND MEDIUM-SIZED ENTERPRISE DEVELOPMENT

The Ministry of Industrialization, Trade and Small and Medium-sized Enterprise Development (MITSMED) is responsible for the development and management of Namibia's regulatory framework for the economy, and for the promotion of the country's economic growth and development through the formulation and implementation of policies that attract investment, increase trade, and develop and expand the country's industrial base. The ministry interacts with the mining sector in a number of ways, including through: the promotion of value addition in the sector; the implementation of the National Industrialization Policy (2012); the promotion of local content, skills development and employment; and the management of export processing zones.

In addition to the key government ministries, departments and agencies described above, the following ministries are also key government stakeholders in the management of the mining sector: the Ministry of Agriculture, Water and Forestry (MAWF); the Ministry of Fisheries and Marine Resources (MFMR); the Ministry of Gender Equality and Child Welfare; the Ministry of Health and Social Services; the Ministry of Labour and Social Welfare; the Ministry of Justice; and the National Planning Commission.

DOMESTIC LAW AND POLICY

THE CONSTITUTION OF THE REPUBLIC OF NAMIBIA, 1990, AMENDED 1998

Namibia's constitution was adopted just prior to the country's independence, in 1990. It contains a number of articles relevant to the management of the country's natural resources and its mining sector, as well as to the protection of the country's environment and the promotion of sustainable development precepts. The maintenance and protection of ecosystems, ecological processes, and biodiversity is enshrined in the constitution (Article 95), and the natural resources found below and above the land, territorial waters and continental shelf belong to the state if they are not otherwise lawfully owned (Article 100). In addition, Article 15 of the constitution, on Children's Rights, prohibits the employment in a mine of children under 14 years of age, and prohibits children under 16 years of age from economic exploitation and hazardous work, while Article 91 empowers the ombudsmen to investigate complaints relating to the irrational exploitation of non-renewable resources and the degradation and destruction of ecosystems.

MINERALS (PROSPECTING AND MINING) ACT, NO. 33 OF 1992

The Minerals (Prospecting and Mining) Act (1992) is the central piece of legislation governing the mining sector in Namibia. The act outlines the mineral rights in the country, describes how the sector is to be administered, and lays out the processes, procedures, rights and obligations relating to the various mining claims and licences available in Namibia. It also includes information on royalty rates and penalties for any infractions, sets mine closure requirements and establishes a Minerals Ancillary Rights Commission to help those licence holders who are unable to exercise their rights due to outside forces.

DIAMOND ACT, 1999

Diamond mining holds a unique and important place in the Namibian mining sector, and as such, the government developed and passed legislation specific to its activities in 1999. The Diamond Act proposes the establishment of a Diamond Board of Namibia to help manage the sector and a Diamond Board Fund to cover the cost of its operation. The Act also provides control measures relating to the possession, purchase, sale, processing, import and export of diamonds (including relevant licences and permits). It also provides for the establishment of a Diamond Valuation Fund, funded by export levies and to be used by the government to cover the costs of its valuing of unpolished diamonds.

MINERALS POLICY OF NAMIBIA, 2002

Adopted in 2002, the Minerals Policy lays out a vision for the responsible development of Namibia's mining sector to ensure that the sector makes a sustainable contribution to the country's socioeconomic development. It was developed through extensive consultations with relevant stakeholders.

The policy sets out to achieve a number of different objectives, in line with the country's national development goals. Through the implementation of the policy, the government hopes to create an enabling environment for private sector investment in the sector, facilitated by competitive policy and regulatory frameworks, security of tenure, and the provision of national geo-scientific data to stimulate exploration. Companies are in return expected to take responsibility for minimizing impacts to the environment, for mine closure, and for ensuring meaningful community involvement, and to support the empowerment of previously disadvantaged peoples while promoting gender balance and equality. The policy also prioritizes the promotion and development of orderly small-scale mining operations, particularly in those areas where large-scale mining is not cost-efficient. To fully achieve national development goals will require building up the skills base of Namibians (particularly women),



assigning gender responsive budgets, and adding value to mineral and metal resources in-country. Finally, this must all be done with a commitment to transparency and maintaining global best practice in the sector's governance and operation, in a manner that respects and protects both the environment and the health and safety of workers and affected communities.

ENVIRONMENTAL MANAGEMENT ACT, NO 7 OF 2007

Namibia's Environmental Management Act (EMA) and the Environmental Impact Assessment Regulations govern the environmental aspects of the mining life cycle, including exploration, construction, production, closure and post-closure. In accordance with the Act and its regulations, a number of listed activities relevant to exploration, mining and quarrying cannot be undertaken without an environmental clearance certificate (ECC). The EMA describes the steps that must be successfully completed by applicants prior to being granted an ECC; these include the preparation of an initial scoping report and an environmental management plan (EMP) and, if the expected environmental and social impacts are significant, an environmental impact assessment (EIA). A valid ECC is required for the application of various mining licences and licence renewals.

INTERNATIONAL COMMITMENTS

Namibia has signed and ratified a number of international agreements and commitments relevant to the mining sector, including but not limited to the following international laws, protocols and conventions:

- Namibia supports several key international human rights conventions and declarations, including the **Universal Declaration of Human Rights (1990)**, **United Nations (UN) Convention on the Elimination of All Forms of Discrimination Against Women** (ratified 1992), and the **UN Convention on the Rights of the Child** (ratified 1990).
- Namibia has ratified a number of central UN conventions relating to the environment, including the **UN Framework Convention on Climate Change** (ratified 1995) and the **Paris Accord** (2016), the **Convention on Biological Diversity** (1997), the **Ramsar Convention on Wetlands** (1995), the **UN Convention to Combat Desertification** (1997), and the **Convention on the Illegal Trade in Endangered Species of Wild Fauna and Flora** (1990, accession).
- Namibia has also committed to the **Basel Convention for Controlling Transboundary Movements of Hazardous Wastes and their Disposal** (1995, accession), the **Stockholm Convention on Protecting Human Health and the Environment from Persistent Organic Pollutants** (2005, accession), and the **Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade** (2005, ratification).
- Namibia has ratified the **International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL)** and its subsequent regulations relating to preventing pollution.
- Namibia ratified the **Minamata Convention on Mercury** in 2017.
- Namibia is a member state of the International Labour Organization (ILO), and has ratified all of the ILO's eight fundamental conventions: the **Freedom of Association and Protection of the Right to Organise Convention** (1995), the **Right to Organise and Collective Bargaining Convention** (1995), the **Forced Labour Convention** (2000), the **Abolition of Forced Labour Convention** (2000), the **Worst Forms of Child Labour Convention** (2000), the **Minimum Age Convention** (2000), the **Discrimination (Employment and Occupation) Convention** (2001), and the **Equal Remuneration Convention** (2010).
- Namibia is not a member of the Extractive Industries Transparency Initiative (EITI).
- Namibia is a member of the African Union, the Southern African Development Community, and the Southern African Customs Union.



5.0 ASSESSMENT: NAMIBIA AND THE MINING POLICY FRAMEWORK

LEGAL AND POLICY FRAMEWORK

The first thematic area of the MPF focuses on national mining laws and policies, and licensing processes. It encourages a mature, modern legislative system with clear lines of responsibility and accountability, and highlights the types of laws and policies that serve as a basis for good governance and sustainable development. The MPF standards featured in this thematic area 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 timely, transparent, unambiguous and consistent permitting process that requires:
 - Consultation with communities in the planning and development stages of a mine
 - Submission of integrated social, economic and environmental impact assessments
 - Identification of sustainable development opportunities
 - Planning for mine closure, with adequate financial assurance
 - Protection of indigenous rights and cultural heritage, and addressing resettlement and community safety and security issues

KEY LAWS AND POLICIES

- The Constitution of the Republic of Namibia, 1990
- Minerals (Prospecting and Mining) Act, 1992
- Diamond Act, 1999
- Environmental Management Act, 2007
- Minerals Policy of Namibia, 2003
- Environmental Assessment Policy, 1995
- Namibia's 5th National Development Plan, 2017/2018–2021/2022
- Namibia Vision 2030



THE LICENSING SYSTEM

The Minerals (Prospecting and Mining) Act governs the licensing process for mining in Namibia. The process is administered by the Mineral Rights and Resources Development Division of the MME and is overseen by the Mining Commissioner.

There are a variety of mining licences and claims available to those operating in the sector, as outlined in Table 2. As per the Act, they are granted on a first-come, first-served basis. Large investors operate according to the requirements of their mining licence and any attached conditions; special mining agreements or contracts are no longer used in Namibia. Mining licences can only be transferred with the approval of the minister.

TABLE 2. MINING LICENCES AND CLAIMS IN NAMIBIA

LICENCE TYPE	DESCRIPTION	DURATION	RENEWABLE	RESTRICTIONS
Non-exclusive prospecting licence (NEPL)	Gives the right to prospect on any land for any mineral or group of minerals.	12 months	No	Anyone over the age of 18 can apply; non-transferable.
Mining claims	For Namibians mining on a small scale.	Three years	Two-year extension, unlimited (Providing the claim is being worked on)	A maximum of 10 claims can be held at any one time. Available to Namibian citizens only.
Reconnaissance licence	Regional, mainly remote sensing exploration for identification of exploration targets.	Six months	No	Not transferable.
Exclusive prospecting licence (EPL)	For an area of up to 1,000 km ² (100,000ha). Granted for a specific mineral or group of minerals.	Three years	Twice for two-year periods, with the area decreasing by 25 per cent with each renewal	Exclusive exploration rights to the land. (Renewals beyond seven years require special approval by the minister).
Mineral deposit retention licence	Allows exploration company to retain tenure on exclusive prospecting licence, mining licence or mining claim without any mining obligations.	Five years	Two-year periods	Must meet work and expenditure obligations and submit regular project reviews.
Mining licence (ML)	Exclusive rights to the mining area.	25 years or life of mine	15-year periods	Must demonstrate financial and technical ability to develop and operate a mine.
Transfers/Joint ventures	Applicable to all of the above except the NEPL and Reconnaissance.			
Amendments	Involves addition of a commodity group and an increase or decrease in area size. Applicable to all of the above except the NEPL.			
Export permits	Issued for mineral exported outside of Namibia.			
High-Value Minerals permit	Permit to buy and sell high-value minerals.			

Source: Ministry of Mines and Energy

All mining and quarrying activities in Namibia require an ECC, as per the Environmental Management Act. Permits cannot be granted without this ECC in place, and as such applicants must assess the environmental impacts of their proposed activities in their permit application, whether through a scoping report or a more detailed and comprehensive environmental impact assessment (EIA). As part of this process, they must record baseline environmental conditions and expected environment and social impacts of their activities, as well as any corresponding mitigation and prevention efforts that will be taken. An environmental management plan is required for both the scoping and EIA levels of assessment. Prior to granting a licence, the commissioner must be satisfied that the applicant will take appropriate measures to minimize or prevent any pollution of the environment prior to the approval of the application. For most permits, the applicant must also demonstrate that they have the technical knowledge and financial resources required to operate a mine. Ministry staff (and their spouses) are prohibited from holding mining licences or shares in a mining company.

Mining activities should only proceed with the consent of the landowner, and claims must be clearly demarcated. The licence or claim holder must carry out mining operations or prospecting operations in the area in accordance with good mining or prospecting practices; must prevent or minimize pollution of the environment; minimize impacts to the community and participate in meaningful community engagement; and must secure the safety, welfare and health of persons employed in the claim area. Clear reporting requirements are listed in the Minerals Act (including the required contents of yearly and closing reports), and permits can be cancelled due to a lack of compliance on the part of the holder. While the holder of a licence or claim is required to rehabilitate a site following their exploration or mining activities, limited language is contained in the Act on how this should be undertaken, nor how it should be paid for. Mining is allowed in protected areas; however, the minister has the authority to restrict mining from certain areas on environmental grounds, allowing it only if special conditions or terms are met.

Additional conditions are applied by the MME to both prospecting (EPLs) and mining licences. For EPLs, conditions include the stipulation that a minimum 20 per cent of the applicant company's management structure represent historically disadvantaged Namibians; that at least 5 per cent of the company be owned by Namibians or a company wholly owned by Namibians; and that the proposed project help address the government's objective of poverty eradication, with a particular focus on benefitting youth and women. The minister is empowered to suggest amendments to the proposal should the application not meet these requirements. For mining licences, additional conditions include those on management, ownership and poverty eradication as listed for EPLs, as well as conditions on value addition: where value addition projects exist locally, the applicant should ensure that 30 per cent of the final product from the mine is locally added value. Where such projects do not exist locally, the applicant should establish such a value-addition facility in Namibia.

STRENGTHS

- Namibia has a consolidated and extensive GIS-based geological database which covers 98 per cent of the country. This includes a significant historical record and maps covering a broad range of data types, including geophysical, geochemical and electro-magnetic data and 3D modeling. Efforts are underway to increase the resolution of geological maps, with funding coming from the MME budget. In addition, the Geological Survey of Namibia (GSN) is well staffed, with approximately 60 employees. Geological information from exploration companies is required, and is integrated into the national database after relinquishment to avoid conflicts around confidentiality. Finally, the GSN also receives drill cores from companies operating in Namibia.



- Geological information is publicly available, but with minimal fees attached (although exemptions can be made for some stakeholders, such as academic institutions accessing the information for research purposes). For new seismic stations, the GSN will follow open data policies.
- The Minerals (Prospecting and Mining) Act and Minerals Policy, while old, are both under review to incorporate changing knowledge and best practice.
- The Minerals (Prospecting and Mining) Act stipulates a fair and transparent process for licensing. Data and reporting requirements for mining permit and mining claim applicants are made clear in the act.
- Applicants for mining licences are required to submit an EIA prior to the granting of the licence. This is a requirement for all mining and quarrying activities; both must obtain an ECC prior to operations. The EIA must include a baseline description of current conditions, potential risks and impacts from mining activities and operations, and the proposed mitigation and management measures that will be taken to minimize these impacts. EIAs are to be completed by an independent third-party consultant.
- The protection of cultural heritage and national monuments is addressed in the permit application process through the EIA.
- Full community consultation is required as part of the EIA process. Entities are required to report on all consultations, and notices of activities associated with the project must be posted in the Gazette and on public notice boards. Proponents must establish and maintain a register of all affected and interested parties, and consider any and all objections raised by them. Scoping reports and EIAs must be offered to affected and interested parties for review prior to their approval. Affected and interested parties are then given the opportunity to review and comment on plans from mining companies.

GAPS

- Geological data derived from exploration companies is seen as incomplete and poorly archived, and a lost resource for Namibia. In addition, GSN's database is not linked to the EIA process, despite the fact that this could be a valuable resource for those conducting the assessments, particularly with regards to mine design, waste management and tailings. Full, free and online access to geological information would benefit the sector and would ensure robust EIAs are completed to minimize long-term impacts.
- The Minerals (Prospecting and Mining) Act and Minerals Policy are largely outdated, and supporting legislation is mixed. While the Environmental Management Act does reflect good practice for EIAs, the Mine Health and Safety Regulations have been under multiple rounds of review without adoption for a number of years. Despite the update to the act and policy, the review process is seen as too lengthy and slow, and is seen by investors as a source of uncertainty, discouraging investment.
- Mine closure is largely absent from the Minerals (Prospecting and Mining) Act, including financial assurances for closure. The Chamber of Mines has independently established a framework for mine closure, which its members have endorsed, but implementation is not legally mandated. There are also limited provisions in the act on the post-mining transition, small-scale mining and sand mining. There are no legal provisions for mine closure accounting or to secure funds for closure.
- The Minister of Mines and Energy does not, according to the current act, have the ability to develop and pass mining regulations based on the legislation. This has been rectified in the new Minerals Bill.
- The permitting process, as outlined in the act, should be completed in a timely, unambiguous and consistent manner. In practice, however, there can be significant delays. Companies



report that the “first-come, first-served” principle enshrined in the law is not always followed; that applications—particularly for EPLs—can face significant delays; that transparency could be improved in the granting or rejection of permits and licences; and that land-locking mining claims with EPLs for speculative purposes occurs, and consequently discourages investment. It was also noted that, prior to the full implementation of the EMA, licences had been issued without the completion of full EIAs.

- The establishment of the Epangelo Mining Company was not included as part of either the 2002 Minerals Policy, the 1992 Minerals Act or any related amendments. This has resulted in a lack of clarity around the state-owned company’s mandate. Epangelo is alluded to in directives issued by the Namibian Cabinet, which in 2011 declared uranium, gold, copper, coal, diamonds and rare earth metals as constituting “strategic minerals.” The cabinet initially stated that licences for these minerals would be issued only to a state-owned company, which would be allowed to enter into joint ventures with interested parties, but this was not implemented following consultations with stakeholders.

FINANCIAL BENEFIT OPTIMIZATION

The Mining Policy Framework’s second thematic area focuses on the optimization of financial benefits through taxes, royalties and other payments, and reflects the value of mineral resources to society. The other major subtopic of this pillar is revenue transparency, on the municipal and national levels. 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

- Minerals (Prospecting and Mining) Act, 1992
- Diamond Act, 1999
- Minerals Policy of Namibia, 2003
- Value Added Tax Act, 10 of 2000
- Customs and Excise Act, 1998
- Income Tax Act, 1981

TAXATION, ROYALTIES AND OTHER REVENUE SOURCES FROM MINING

The Namibian government generates revenues from the mining sector through a variety of mechanisms, helping to ensure a steady stream of revenues across the mining life cycle. Combined, the revenues derived from taxes (including corporate taxes, income taxes on employee salaries, land taxes, and value-added tax [VAT]), royalties, levies, equity and fees represent a significant portion



of the country's GDP and the government's operating budget. According to the 2017 annual report of the Namibian Chamber of Mines, the mining sector represented 12.2 per cent of GDP that year, while mining companies paid NAD 5.16 billion in wages and salaries (approximately USD 350 million), NAD 2.13 billion in corporate taxes (USD 140 million), NAD 113.2 million in export levies (USD 7.5 million) and NAD 1.52 billion in royalties (USD 100 million). All revenues collected from the mining sector go into the national budget for distribution. Total receipts from mining are listed in the annual budget under a separate "Revenue Head" category by the Ministry of Finance; these mining revenues are not linked to specific spending activities. All income accruing to the central government is deposited into the State Revenue Fund (Article 125 of the Constitution).

Corporate income taxes in Namibia are applied to company profits. The tax rates applied to companies in the mining sector differ from those applied to other companies operating in Namibia; while the standard corporate income tax rate is 32 per cent, mining companies are taxed at 37.5 per cent, with diamond mining companies taxed at 55 per cent. Mining companies can write off exploration costs, and the capital expenditures and fuel costs associated with construction, at the start of production. This limits the amount of tax collected by the state in the early stages of production, but lessens the tax burden on those companies not generating revenues in the early stages of the mining life cycle.

In addition to corporate taxes, the Namibian government generates revenues from payroll taxes, land taxes and VAT. Salaries in Namibia are taxed at progressive rates depending on earnings, and the withholding tax rate in Namibia is currently 10 per cent, down from 25 per cent. Unique among taxes, the land taxes collected from mining companies can be traced from collection to distribution: they are put not into the national treasury and budget, but rather into a separate fund used for state land acquisitions. Finally, mining companies are charged the standard 15 per cent VAT on their purchases (with some exemptions and refunds available to companies, primarily during the construction phase). Any capital gains made on the sale of mining leases are also taxed.

Royalty rates differ according to metal or mineral type, ranging from 2 per cent for industrial minerals and semi-precious stones to 10 per cent for diamonds. Royalties are collected by the MME, and then transferred to the treasury. The MME, working with the Auditor General, is responsible for auditing production levels and corresponding royalty payments. Current royalty rates are not enshrined in the Minerals (Prospecting and Mining) Act, but were proclaimed in Government Notice No. 45 by the minister in 2009. The rates are:

TABLE 3. CURRENT ROYALTY RATES BY MINERAL CATEGORY

MINERAL	ROYALTY RATE (%)
Semi-precious stones	2
Dimension stones	5
Base and rare metals	3
Precious metals	3
Diamonds	10
Industrial minerals	2
Non-nuclear fuels	2
Nuclear fuels	2

Source: MME.



In addition to taxes and royalties, the state generates revenues from levies, fees and equity stakes in mining operations. An export levy of 5 per cent is applied to raw materials leaving the country; however, some mining companies have avoided this levy by applying for—and being granted— access to the government’s export processing zone (EPZ). Companies are not restricted from operating with EPZ status by their sector, provided that their exports are destined for markets outside the SACU region, earn foreign exchange and employ Namibians. EPZ benefits include no corporate tax, no import duties on the importation of capital equipment or raw materials, and no VAT, sales tax, or stamp or transfer duties on goods and services required for EPZ activities. The government also provides grants to EPZ companies for training programs aimed at improving Namibian workers’ skills and productivity. Mining companies operating through the EPZ system also receive exemptions on manufacturing equipment.

The Namibian government also generates revenue through equity in mining operations and through the state-run mining company, Epangelo Mining, which focuses on exploration and joint ventures, and holds a number of onshore and offshore EPLs. Finally, further revenues are generated through licensing fees and the sale of geological information by the GSN.

STRENGTHS

- Mining generates a significant amount of revenue for the country, through a variety of mechanisms including taxation (corporate, income, VAT), royalties, fees and equity. The mix of revenue-generating mechanisms allows the government to generate revenue throughout the mining cycle. Taxes based on profits are used for large- and small-scale commercial mining, though many miners operating in the small-scale sector do not make the minimum amount required to qualify for taxation. Investors also have access to VAT exemptions during the construction phase, easing the tax burden for these investors when they are not yet in the production phase.
- The rates applied for taxes and royalties are largely perceived as fair among private sector actors, and competitive with other SADC jurisdictions. There is a SADC working group on tax issues, trying to harmonize taxation across the region. These stakeholders see future investments hindered more by policy and legal uncertainty than by tax and royalty rates.
- Namibia’s Affirmative Action and Procurement laws are designed to promote increased domestic investment and ownership in the sector. This helps align the sector with national development goals.
- The central role that the mining sector plays in the national economy guarantees that revenues from the sector will go toward broad support for national development. That said, the revenues from the mining sector are distributed via the national budget. As such, it is difficult to identify direct support from the mining sector that is channeled into specific social spending or economic sectors.
- Mineral or mining agreements are not employed in Namibia, and standards conditions have been prepared which are attached to most large-scale permits. This ensures that there are not multiple layers of governance applied to those operating in the sector, simplifying the legal regime for mining in Namibia. The rules are largely the same for all stakeholders.
- The Ministry of Finance has divisions devoted to investigating large taxpayers and to combatting transfer pricing. The country still very much struggles with the latter.
- The Auditor General has the capacity to audit results reported by mining companies, and helps MME, for example, audit the royalty and production numbers reported by companies.



GAPS

- There are no mechanisms or provisions in place in the tax code or other legislation to address commodity price volatility: rates do not increase in times of windfall profits, nor do they decrease in times of price declines. The impact can be significant: Orano (formerly Areva) has not yet been able to produce any uranium following construction of the mine, because current market prices mean that continued care and maintenance is more economically viable than production.
- The condition of licensing that new mineral exploration—already considered an expensive and risky venture—only happens with at least 5 per cent local ownership is seen by stakeholders as a barrier to investment. International companies have difficulties finding qualified local partners with both the required financing and appetite for risk, and exploration investments can only move forward—in the absence of a willing and able local partner—if the proponent directly negotiates with the minister to lower or remove this requirement. Investment—and jobs—could in turn shift to neighbouring countries.
- While existing mines operate at a good balance between generating government revenues and ensuring adequate return on investment, companies notes that uncertainty around future policies and laws could deter investments in exploration.
- The High Value Minerals permit on semi-precious stones can act as a deterrent to domestic value addition, as it can make it cheaper to export the stones outside of the country for beneficiation than to do that value addition domestically. Similarly, the requirement that tourists pay a 2 per cent export levy on their semi-precious stone purchases, and that they can only do so in Windhoek on weekdays before noon at the MME office, can discourage these purchases.
- Certain mining companies have been granted access to the EPZ and its preferential tax rates, giving them an advantage over other companies operating in the sector. The EPZ was initially established to benefit manufacturing, rather than mining companies. The finance minister announced in March 2018 that the government would repeal the Export Processing Zone Act and its related tax incentives for manufacturers.
- Limited links have been made between mining permits (and licences) and Namibia's national policy objectives. Clear and transparent links between the development of the country's mining sector and its national development objectives (NDP5, Vision 2030) would help all stakeholders—mining companies, the government, civil society—in finding opportunities to collaborate in working toward and monitoring these goals.
- Transparency on the management of mining revenues is limited; once these revenues are collected and integrated into the national budget for distribution they cannot be differentiated from revenues coming from other sectors. The Ministry of Finance does publish, annually and through Revenue Heads, the amount of funding collected from the sector and contributing to the national budget, but the transparency and traceability ends there. This results in local communities not seeing visible development benefits coming out of mining, though low population densities around mine sites lessens the significance of this gap.

SOCIOECONOMIC BENEFIT OPTIMIZATION

The third thematic area of the MPF examines how domestic laws and policies promote the conversion of extracted natural capital into human capital, so that the socioeconomic benefits of mining are optimized for local, regional and national stakeholders. The policy recommendations under this thematic area include the following categories:

- Integration of the mining sector into community, regional and national fabrics and strategies, for example, by making socioeconomic planning part of the permitting process and by



ensuring that consultations with affected stakeholders take place at various stages of the mining cycle.

- Working collaboratively with governments to ensure that mining activities consider and support education and community health services.
- Ensuring high standards of occupational health and safety.
- Optimizing employment and business opportunities at and around the mine site with an objective of ensuring economic growth beyond the life of the mine.
- Addressing potential security issues.
- Considering the respect of human rights, indigenous people and cultural heritage through norms that are aligned with international laws and standards.

KEY LAWS AND POLICIES

Key laws on this topic include:

- The Constitution of the Republic of Namibia, 1990
- Namibia's 5th National Development Plan, 2017/2018–2021/2022
- Namibia Vision 2030
- Environmental Management Act, 2007
- Environmental Impact Assessment Regulations: Environmental Management Act, 2007
- Environmental Assessment Policy, 1995
- Minerals (Prospecting and Mining) Act, 1992
- Diamond Act, 1999
- Minerals Policy of Namibia, 2003
- Export Processing Zone (EPZ) Act 9, 1995
- Namibia's Public Procurement Act, 2015
- National Energy Policy, 2017
- Labour Act, 2007
- Value Added Tax Act, 10, 2000
- Customs and Excise Act, 1998
- Public Private Partnership Act, 2017
- Affirmative Action Act, 1998

SOCIOECONOMIC POTENTIAL IN NAMIBIA

Namibia's National Development Plans (NDPs) serve as blueprints for the nation's development. In 2017, the country's launched NDP5, its Fifth National Development Plan, which sets out Namibia's development strategy for the five-year period between 2017 and 2022. The four key development goals included in the plan are to:

- Achieve inclusive, sustainable and equitable economic growth
- Build capable and healthy human resources
- Ensure sustainable environment and enhance resilience
- Promote good governance through effective institutions.



The mining sector is integrated into all four key pillars of NDP5, and the goals broadly align with the socioeconomic policy recommendations included in the MPF. Mining holds a vital role in the country's economy, and as such will play a key role in the implementation of NDP5.

STRENGTHS

- The stated vision of Namibia's Minerals Policy includes the responsible development of the country's natural resources, and the government's commitment to ensuring that these resources make a sustainable contribution to the socioeconomic development of the country.
- Socioeconomic planning is integrated into the EIA process, and must be reported on regularly. Applicants for mining permits and licences must also identify the socioeconomic benefits of their mining project, and include them in their submissions. These benefits should in part be identified during the stakeholder consultations conducted in the EIA process.
- The Minerals Policy asks that companies take responsibility for ensuring community involvement in their planning and implementation processes, and stakeholder consultations are required during the EIA process. Encouraging and facilitating the active participation of all stakeholders is a key objective of the Policy.
- Provisions in the Minerals Policy and in the special conditions attached to EPLs and mining licences direct mining companies to prioritize the employment of Namibians in their operations, particularly women and formerly disadvantaged people. To ensure competitiveness, the policy also prioritizes the strengthening of the domestic skill base, to ensure that Namibians can engage with the sector; specific mention is made here of the need to increase the opportunities available for women in the sector. The policy also seeks to promote and encourage local participation in exploration and mining. These provisions in the policy are further supported by the Affirmative Action Act (1998), which aims to address racial and gender discrimination and achieve equal opportunity in employment, in accordance with the Namibian Constitution.
- Local procurement and contracts for service provision are promoted through the Minerals Policy, and are supported through the Public Procurement Act (2015). Another key objective of the policy and the special conditions attached to EPLs and mining licences is to promote and encourage local beneficiation of mineral products in order to maximize the retention of economic benefits by Namibians. Both local procurement and value addition aim to promote the development of local businesses and service providers that support the mining sector in an effort to expand the socioeconomic benefits retained by local communities and the country more broadly.
- The newly passed Public Private Partnership Act (2017) provides a legal framework for public–private partnership (PPP) projects. The act was designed to encourage private sector participation and cooperation in the provision of public services, including infrastructure. The potential for the mining sector to further contribute to Namibia's socioeconomic development through PPP projects has not yet been fully explored. However, conversations between the sector and the government have started around how mining company investments in shared infrastructure—such as roads and railways—could benefit both a company's operations and the country more broadly.
- The Minerals Policy encourages the mining sector to participate in corporate social responsibility (CSR) programs. Though voluntary, companies in the sector actively invest in CSR projects; a significant amount of funding, for example, is allocated to projects that support community education and health services, two central pillars of the national development strategy. In 2017, mining and exploration companies contributed NAD 79.7 million toward CSR activities (Chamber of Mines, 2017). In addition, the Chamber of Mines and the Namibian Chamber of Environment have established a sustainable development offset



system for the mining sector that further supports the objectives of the Minerals Policy, whereby the Council of the Chamber of Mines established a joint fund to invest in sustainable development in Namibia, covering both environmental and socioeconomic projects that are aligned with the objectives of Namibia's development priorities as set out in the Harambee Prosperity Plan, NDP5 and Vision 2030. The focus of this support is in non-mining regions of the country, which have traditionally received less support from the sector than have the mining regions (Namibian Chamber of Environment, 2018).

- The legal framework for occupational health and safety in the mining sector is enforced by the MME's Mine Safety and Services division. According to the Minerals Act, the Chief Inspector of Mines has the power to recommend suspension or revocation of permits should an operator breach or contravene occupational health and safety standards.

GAPS

- Occupational Health and Safety in Namibia is governed by the Labour Act (2007) in conjunction with the "Regulations Relating to the Health and Safety of Employees at Work" (Regulation 156). The Labour Act does not contain specific provisions to regulate the technical and high-risk occupational health and safety risks present in mining operations.
- Regulations protecting the health and safety of persons employed or otherwise present in or at mines, originally made under the Minerals Act, are not yet finalized and are in their 10th revision.
- Ongoing consultations by mining entities with affected stakeholder groups, including locally affected communities, are not required by law, though most EIAs include provisions on continual engagement with stakeholder groups.
- There are no requirements in the Minerals Policy for building the capacities of communities to understand the potential environment and socioeconomic impacts presented during the EIA process. Some stakeholders are generally well informed, but while the main socioeconomic focus of the mining sector tends to be job creation, there is often limited information on other socioeconomic factors, such as gender inclusivity or the promotion of local content.
- The mining sector is required to report sex-disaggregated data to the Ministry of Labour, but this information does not appear to be shared across other government ministries, particularly the Ministry of Gender Equality and Child Welfare (MGECW). This hinders the ability of the MGECW to engage with the sector. The Chamber of Mines does not report sex-disaggregated data in its annual reports; however, most mines do report sex-disaggregated data in their corporate annual reports as required by international standards or reporting frameworks.
- In the absence of an Environmental Practitioners Bill, which would require that consultants conducting EIAs be fully qualified and certified, the quality and effectiveness of stakeholder engagement is undermined. The unqualified practitioner may, unintentionally, exclude some stakeholders from the process due to the nature and content of the material being presented, coupled with the generally lower education level in rural areas where mining occurs.

ENVIRONMENTAL MANAGEMENT

The environmental management section of the Mining Policy Framework recognizes the importance of ecosystem management to any society seeking to become more sustainable. The categories covered under the fourth thematic area of the MPF include:

- Management of water resources, surface and groundwater, guaranteeing the quality and quantity of mining effluents discharged to the environment.



- Avoiding and minimizing potential adverse effects to biodiversity through different actions and measures.
- Managing mine wastes by creating facilities, commissioning reviews by experts and preparing reports to submit to the government.
- The development and implementation of an emergency preparedness program prior to the commencement of operations, updating this program during the life of the mine to meet best practice standards.

KEY LAWS AND POLICIES

- The Constitution of the Republic of Namibia, 1990
- Namibia's Green Plan, 1992
- Namibia Vision 2030
- Namibia's 5th National Development Plan

ENVIRONMENT

- Environmental Management Act No. 7, 2007
- Environmental Impact Assessment Regulations: Environmental Management Act, 2007
- Environmental Assessment Policy, 1995
- Environment Investment Fund of Namibia Act No. 13, 2001
- The National Drought Policy and Strategy, 1997
- Namibia's Climate Change Policy, 2011

MINING

- Minerals (Prospecting and Mining) Act No. 33, 1992
- Policy for Prospecting and Mining in Protected Areas and National Monuments, 1999
- Atomic Energy and Radiation Protection Act No. 5, 2005
- Diamond Act No. 13, 1999
- Namibian Ports Authority Act, No. 2, 1994

WATER

- Marine Resources Act No. 27, 2000
- Water Act No. 54 of 1956
- Water Resources Management Act No. 11, 2013
- National Water Policy White Paper, 2002
- Water Supply and Sanitation Policy, 1993

POLLUTION

- International Convention for the Prevention of Pollution from Ships (MARPOL), 1973
- Prevention and Combating of Pollution of the Sea by Oil Amendment Act 24 of 1981
- National Oil Spill Contingency Plan (NOSCP) was established to give effect to Namibia's obligation under the United Nations Convention on the Law of the Sea, 1982

AIR QUALITY

- Atmospheric Pollution Prevention Ordinance, No. 11, 1976



WASTE

- Pollution Control and Waste Management Bill, 1999
- Hazardous Substances Ordinance No. 14 of 1974

BIODIVERSITY

- Nature Conservation Ordinance, 1975

HERITAGE

- National Heritage Act No. 27, 2004

ENVIRONMENTAL LAW AND POLICY IN NAMIBIA

Since Namibia's independence, protection of the environment has been a key aspect of the government's laws and policies. The country was one of the first to enshrine environmental protection in its constitution, and to promote the wise use of natural resources in that founding document. In 1992, Namibia's Green Plan was presented to the UN Conference on Environment and Development in Rio de Janeiro. The plan identified the country's main environmental challenges, and set an action plan to address them (Walmsley & Patel, 2011). The plan emphasized the close relationship between a healthy environment and healthy society, and the link between the state of the economy and the state of the environment (Tarr & Figueira, 1999). It was eventually incorporated into the National Development Plan to form the foundation and strategic approach for achieving Vision 2030.

Vision 2030 fully embraces sustainable development. It states that the country shall develop its natural capital for the benefit of its social, economic and ecological well-being. It will do so by adopting strategies that: promote the sustainable, equitable and efficient use of natural resources; maximize Namibia's comparative advantages; and reduce all inappropriate resource use practices. The vision recognizes, however, that natural resources alone cannot sustain Namibia's long-term development, and that the nation must diversify its economy and livelihood strategies (Walmsley & Patel, 2011).

The Namibian government recognizes the potential impacts of human activities on the natural environment, and understands that Namibia faces a range of difficult environmental challenges (Ruppel & Ruppel-Schlichting, 2013). Addressing these challenges requires a firm commitment and determination on the part of policy-makers to ensure a harmonized, integrated, and non-fragmented approach to the multidisciplinary field of environmental protection is applied (Ruppel & Ruppel-Schlichting, 2011).

STRENGTHS

- There are a number of activities listed in the Environmental Management Act (2007) and its regulations that require an environmental clearance certificate (ECC) before they can be undertaken. The majority of these activities apply to the mining sector, particularly large-scale operations: mining and quarrying; energy generation and transmission; waste management, treatment, handling and disposal; forestry; land use and development; water resource management; hazardous substance treatment, handling and storage; and infrastructure. The ECC must be obtained before a mining licence or permit is granted. Namibia relies heavily on the ECC process, as set out in the EMA, to ensure protection of the environment, and all mining projects, and/or amendments, must go through the ECC process.
- An environmental management plan (EMP) must be developed and submitted as part of the ECC application, and must be reviewed and resubmitted every three years for the renewal of the ECC. The EMP is a key document for environmental protection, and should include



the measures to be taken to eliminate, offset or reduce to acceptable levels the adverse environmental impacts of mining across the mine life cycle (EMA, 2007). Encouragingly, public pressure to ensure that EMPs are publicly available and that data is presented expeditiously and routinely continues to grow.

- The EMA, through the EIA process, requires that mining companies identify and minimize both the local and transboundary impacts from their operations. Continued pressure from the public and from interested and affected parties helps reinforce the importance of companies consistently working to prevent adverse environmental impacts beyond their mines' boundaries.
- Special—and stringent—conditions are placed on ECCs for those projects that pose high or significant environmental risks. For example, an application for an ECC for a recent marine phosphate mining project included conditions to compel the proponent to comply with international environmental standards, and to provide ongoing, real-time and public streaming of the project's monitoring data. Public outcry over the controversial project led to the retraction of the proponent's ECC by the MET.
- The Minerals (Prospecting and Mining) Act makes reference to licence holders following good practices with respect to mining, prospecting and reconnaissance. These practices are those "which are generally accepted by persons involved in mining operations, prospecting operations or reconnaissance operations, as the case may be, in other countries of the world as good, safe and necessary in carrying out any such operations in relation to a mineral or a group of minerals." The Mining Commissioner is empowered to make directives to the holders of mineral licences with respect to a number of issues, including construction and environmental issues, giving due regard to good practices (Section 57 and Section 100). Where environmental pollution, spilling, loss or damage is caused, the act requires that the remedial measures to be adopted also be in line with good practices (Section 130(1) (b)).
- The Geological Survey of Namibia has sound environmental monitoring programs in place for mining operations. It has the technical skills, knowledge, ability and equipment to conduct monitoring, and could serve as an important source of information for the MET, which has the mandate to regulate environmental performance.
- The EMA empowers the Environmental Commissioner to conduct inspections of mines to monitor compliance with the act and with the conditions stipulated in the ECC. If monitoring and inspections reveal that a proponent is not abiding by the conditions of the ECC or has contravened the EMA, the Environmental Commissioner has the power to suspend or cancel the ECC for a period s/he may determine.
- The Minerals (Prospecting and Mining) Act makes no reference to mining in protected areas, though the Minister of Environment and Tourism has the discretion to limit or prevent mining activities from occurring in certain areas (Section 122). Namibia's Policy for Prospecting and Mining in Protected Areas and National Monuments was drafted to promote sustainable development in Namibia by allowing prospecting and mining in protected areas under conditions of strict environmental management. The policy has not yet been adopted, but stipulates that any mining developments in a National Park must be balanced against the risk that it could negatively interfere with long-term sustainable development.

GAPS

- Procedures for the renewal of ECCs are missing from the EMA and its regulations. This is to be addressed in a revision of the act, to be conducted in 2018. In the meantime, companies have been asked to update and resubmit their EMPs on a regular basis, to ensure that companies are periodically reviewing and revising the environmental management of their operations.
- The Water Act (1956) continues to govern the use of water resources, despite being outdated. The Water Resources Management Act (2013), passed but still pending regulations (which are



said to be imminent), is generally complied with by the sector as best practice, and provides a framework for managing water resources based on the principles of integrated water resource management. The MAWF is restricted in its ability to monitor and enforce compliance with the Water Act, primarily due to limited resources, and the penalties for non-compliance set in the act are largely inadequate. Implementation of the 2013 Act, through the passing of regulations, would help address the outdated legislation and its inadequate penalties.

- The effluent permitting process for mining entities is inconsistently applied; some companies have the permits required to ensure that quality and quantity of mine effluent discharged into the environment is managed and treated to meet established effluent discharge guideline values, while others are able to operate without these permits. Namibia does not have its own effluent discharge guidelines—these are not included in the 1956 Act—and relies on the South African standard. Compliance with these standards is reported by the mining entities on a biannual basis to the MET, but the DEA has limited resources to give these biannual reports the attention they need.
- There is a disjointed approach across a multitude of ministries in relation to enforcing compliance with respect to environmental management pollution, permitting and reporting. For example, responsibility for monitoring water management around mining operations lies with MAWF and MET; however, overlapping mandates and limited resources often result in either a duplication of effort or neither ministries adequately ensuring compliance.
- There is no legislation governing noise and dust pollution in Namibia. In the absence of these laws, the country relies on the South African National Standard (SANS) and South African guidelines. The passing of the draft Pollution Control and Waste Management Bill would be a major step toward ensuring a more effective instrument drawing together the waste management and pollution control functions from all ministries involved.
- Appropriate environmental management measures for the use of surface and groundwater is implemented through the EIA process and is partially controlled by the DEA's compliance division; however, most sites report that the DEA does not conduct compliance audits. Furthermore, the MET does not have a laboratory to independently analyze samples to verify a site's performance.
- Neither MAWF, MET or MME have a clear legal framework to fully regulate sand mining, and no permitting system is in place for the activity. Governance of sand mining is shared between ministries: MAWF regulates sand mining within a riverbed, MME regulates sand mining outside of a riverbed, and MET issues ECCs for sand mining activities. The permitting process for sand mining is not covered by the Minerals (Prospecting and Mining) Act as sand is not deemed an economical resource.
- There is no legal requirement for companies to comply with international standards or guidelines for key environmental risk areas, including the design, placement or closure of a tailings storage facility. This is exacerbated by the fact that environmental practitioners are not required to be certified to practice in Namibia, which can result in inexperienced practitioners making recommendations for key risk areas without the critical knowledge or experience they need to understand of the long-term impacts and risks these facilities may present.
- At a policy level there is a clear direction to ensure that environmental matters are managed across a multidisciplinary framework; however, in practice the monitoring of mine sites is often disjointed. GSN conducts mineral contamination monitoring at mine sites, and this is undertaken as a geo-environmental research activity. Their mandate is geological research, and therefore they do not have authority to enforce or regulate environmental performance. GSN findings are shared with the MET, which is a regulatory authority. Conversely, the MET and MAWF have the mandate to regulate and monitor aspects of environmental performance but lack the technical skills, knowledge and equipment to do this effectively.



- While there are legal provisions stipulated in the Minerals (Prospecting and Mining) Act with respect to Accessory Works, as well as provisions in the Environmental Act with respect to the environmental contracts between the mineral rights holders and the MET, there are no explicit guidelines or minimum requirements for the construction and management of mine-specific infrastructure, such as waste dumps and tailings storage facilities, to ensure this infrastructure is planned, designed, and operated to assess and manage geotechnical risks and environmental impacts throughout the entire mine life cycle, including after mine closure.
- Legislation has not been passed to prevent and regulate the discharge of pollutants from mine sites, to establish a system of waste planning and management, and to enable Namibia to comply with its obligations under international law. The draft Pollution Control and Waste Management Bill was developed to do so, but despite being drafted in 1999 it has not yet been adopted by the government. In the absence of such legislation, the EIA process requires that mining entities ensure that structures are designed and operated in accordance with responsible waste management standards. The mining sector, like many others in Namibia, produces hazardous waste, and the disposal of this waste is problematic, as the country does not have a registered hazardous waste site that is compliant with international standards. This poses a problem for international companies operating in Namibia, as they have internal standards that require the disposal of hazardous waste at registered facilities. The Chamber of Mines' environmental subcommittee recognizes the need for a hazardous waste site, and the sector is working with key stakeholders to develop a strategic waste site through a PPP.
- The EMA does not require mining entities to commission independent experts to review plans and report to government prior to a development's approval or any design changes. The implementation of such a reporting requirement from government would work toward ensuring improved sector regulation without additional strain on already stretched government resources.
- The Minerals (Prospecting and Mining) Act requires mine sites to have an emergency response plan in place; however, this typically relates to human emergency response, rather than a plan to ensure emergency preparedness programs are in place for key environmental impacts or natural disasters.
- The EMA empowers the Environmental Commissioner to conduct inspections to monitor compliance with the Act and with conditions stipulated in the ECC; however, the commissioner cannot enforce fines or penalties. In cases that require legal enforcement the matter is handed over to the police.
- Namibia's draft Policy for Prospecting and Mining in Protected Areas and National Monuments was designed to allow these activities in protected areas only under conditions of strict environmental management, but has yet to be adopted.
- Legislation does not offer adequate protections for biodiversity in the face of mine construction and operation: the Forestry Act provides provisions for vegetation removal and the removal of protected trees, while the draft Parks and Wildlife Bill would address biodiversity holistically, but has yet to be adopted.

POST-MINING TRANSITION

This pillar of the Mining Policy Framework establishes the need to ensure an organized and planned post-operation transition. Adequate measures and plans required to guarantee this transition need to be taken into account and developed throughout the life cycle of the mining operation. Specifically, the aspects of this section of the MPF relate to governments:

- Ensuring that the closure plans prepared by mining companies 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

- The Constitution of the Republic of Namibia, 1990
- Minerals (Prospecting and Mining) Act, 1992
- Minerals Policy of Namibia, 2003
- Environmental Management Act, 2007
- Environmental Impact Assessment Regulations: Environmental Management Act, 2007
- Regulations for Strategic Environmental Assessment and Environmental Management Plan (EMP), 2008
- Namibia's 5th National Development Plan, 2017/2018–2021/2022
- Prospecting and Mining in Protected Areas and National Monuments Policy

STRENGTHS

- The Minerals (Prospecting and Mining) Act contains some text on mine closure and rehabilitation, including provisions on the polluter pays principle.
- In the absence of extensive text on closure in the act, the Namibia Chamber of Mines has produced a framework for mine closure for its members. The framework is guided by the Chamber's Code of Ethics, and has been endorsed by its members. This adopted framework is, however, non-binding for members and not applicable to non-members. It does represent a desire from industry to support the implementation of the Minerals Policy, which stipulates that the government will develop guidelines on closure and will monitor compliance with this guidance. The Minerals Policy is currently under review, and these guidelines will be developed once the policy has been adopted. The CoM mine closure framework does not prescribe how financial provisions for closure should be implemented; determining how to allocate closure funds is left to the members themselves.
- It is expected that mine closure plans that incorporate both rehabilitation and socioeconomic issues are required as part of the EIA process: the environmental management plans (EMPs) generated as part of the EIA process address mine closure at a high level, though they are not detailed enough. While EIAs are developed through a highly consultative process, mining entities are not required to engage with stakeholders on closure plans once the EIA is approved.
- The Environmental Management Act (EMA) and the Minerals Policy are aligned with a number of modern legislative trends on mine rehabilitation and closure. These include adherence to the polluter pays principle; the inherent need to incorporate adequate provisions to achieve "reduction-at-source" in the areas of pollution control and waste management; and the need to consider alternatives and to avoid or minimize negative impacts wherever possible.
- The Minerals Policy stipulates that mine closure is planned for and that it forms part of an integrated land-use strategy involving communities. The policy states that before a mining licence is granted, there should be a final mine closure plan that describes how the company will deal with matters like groundwater pollution, soil degradation, wind pollution and infrastructure. A mechanism for funding closure and rehabilitation should also be established. The Minerals Policy further also incorporates the polluter pays principle to ensure that mining companies are held liable for rehabilitation costs. Companies will also have to establish a guarantee to cover the full costs of environmental rehabilitation when applying for



an ECC, though this requirement is not supported in the Act or regulations. Such measures are designed to ensure that mining companies calculate the costs of rehabilitating the environment early in the project and factor them into the costs of doing business, removing that responsibility from the state.

GAPS

- There is no legal framework for mine closure or relinquishment. While the Minerals (Prospecting and Mining) Act refers to remedying the environmental impacts that result from the cancellation and/or abandonment of mining rights, the legislation does not explicitly address the ideals of life-cycle responsibility, or concurrent or post-closure rehabilitation. Many of these principles do appear in the EMA, which provides a starting point for addressing this shortcoming.
- The EMA and the Minerals Policy explicitly refer to rehabilitation as a requirement, but they lack specific regulation, an authorized agency, and sufficient resources (human, financial and infrastructure) to implement these requirements. In addition, the government has limited technical capacities on mine closure, with key local experts in mine closure mostly employed by mining and consulting companies.
- There is no formal system within the government for handling the approval of mine closure plans. Current practice is to include a high-level closure plan in the EIA and obtain approval for that plan through the ECC approval process, conducted by the MET. As such, MME is not involved in the process of reviewing and approving of closure plans.
- The high cost of rehabilitation necessitates clear funding mechanisms for environmental rehabilitation, management and control, but there is no mandatory financial assurance mechanism included in the act to cover the costs of mine closure in Namibia. No financial guarantee is required from operators at the onset of prospecting, exploration or mining operations to cover the costs of environmental degradation, damage or rehabilitation. In addition, the renewal of the ECC and licence rights does not require decision-makers to engage with the MME to establish whether there has been substantial compliance with the terms and conditions of the licence right, including to what degree environmental obligations have been met. The Minerals Policy attempts to address this, stating that well-funded environmental rehabilitation offers the opportunity for more sustainable land development and use, and reduces the burden on Namibian taxpayers to fund the rehabilitation of abandoned mines.
- There are no incentives in place for progressive or concurrent rehabilitation. The government mostly operates on the polluter pays principle, and does not have alternative mechanisms in place for incentivizing companies to adopt progressive or concurrent rehabilitation plans throughout the mine's life.
- The penalties in place for inadequate closure are minimal. Namibia's environmental legislation contains stringent measures for non-compliance, in which offenders can face revocation of their ECC, fines of up to NAD 500,000, imprisonment for up to 25 years, or a combination thereof. However, the penalty for inadequate closure (NAD 100,000) is completely inadequate, and will lead to situations where mining companies find it cheaper to pay the fine than to carry out adequate rehabilitation and closure.
- There is also a general reluctance and lack of resources to rehabilitate the country's many abandoned mines. In the absence of government guidelines for mine closure, mining entities can keep renewing licences for operation while avoiding the costs of closure. Companies can also decide to go under care and maintenance, and use the period to look for opportunities to pass on the liability to the next buyer or owner.
- The legal framework does not require periodic assessment and auditing of mine closure plans. The use of external experts for the development of closure plans and the validation



of risk assessments (especially of high-risk elements such as tailings dams) is not a requirement of the Minerals (Prospecting and Mining) Act. Fortunately many members of the Chamber of Mines do so despite the absence of legislation, as dictated by their own internal policies and processes.

ARTISANAL AND SMALL-SCALE MINING

Artisanal and small-scale mining (ASM) is the sixth thematic area of the MPF. With regards to ASM, the MPF aims to enhance the health, safety and quality of life of those miners working in the sector informally and outside the legal framework. It also seeks to enhance the contribution of the ASM sector to sustainable development. Policy recommendations within the ASM pillar focus on the following:

- Integrating ASM into the formal legal system through appropriate legal frameworks, technical support and formalization strategies.
- Integrating ASM into the formal economic system through the promotion of savings and investment in the sector, 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.

KEY LAWS AND POLICIES RELEVANT TO ASM

- Minerals Policy of Namibia, 2003
- Minerals (Prospecting and Mining) Act, 1992
- Minerals Development Fund of Namibia Act, 1996
- Labour Act, 2007
- Environmental Management Act, 2007
- Environmental Impact Assessment Regulations: Environmental Management Act, 2007
- Regulations for Strategic Environmental Assessment and Environmental Management Plan (EIA), Government Notice No. 1 and the Procedures and Guidelines
- Namibia's 5th National Development Plan, 2017/2018–2021/2022
- Namibia Vision 2030
- Growth at Home Strategy, 2015–2020

ARTISANAL AND SMALL-SCALE MINING IN NAMIBIA

ASM in Namibia can be split into four main categories: mineral specimens and coloured gemstones; ornamental stones; building materials; and tin and tantalum (Krappmann, 2006). The coloured gemstones are mostly mined in three regions of Namibia, namely Karas, Erongo and Kunene, and include quartz, tourmaline, sodalite, topaz, beryl, garnet and amethyst. The small-scale production of diopside, chrysocolla and pyrophyllite is also noteworthy (MITSMED Report, 2016). In addition, Namibia produces a wide variety of dimension stones, consisting mainly of marbles, granites, diorites and sodalite. Most of these dimension stones are exported as raw blocks, with only a small quantity cut and polished locally (Musiyarira, Tesh, Namate, & Pillalamarri, 2016).

ASM is currently restricted to Namibian nationals who have been granted mining claims, though informal ASM mining does occur. It is estimated that there are between 6,000 and 10,000 people



currently involved in the sector. It is traditionally dominated by men, with limited opportunities for women, who make up only 10 per cent of the ASM workforce. This number would rise to 18 to 20 per cent if the whole value chain is considered. Attempts are being made through the National Gender Policy and Education to strengthen the role and security of women in ASM.

The Minerals (Prospecting and Mining) Act makes some provisions for the activities of small-scale miners, and the government has introduced a simplified, centralized claim registration system for ASM, involving the pegging and registering of mining claims. MME's Small-scale Mining Division offers training and technical support to the ASM sector and is working toward the decentralization of the licensing process. Despite these efforts to formalize the sector, many ASM miners continue to work informally or illegally, resulting in few royalties returning to the state. There are low levels of compliance with reporting requirements among ASM miners, in large part a function of their low levels of familiarity with the details of the law. As a result, most production and export figures reported by MME are an underestimate of the sector's actual output (MITSMED, 2016).

The government's vision for ASM is to promote the mining of coloured gemstones while simultaneously curbing the illicit flows of raw gemstones and securing maximum benefits for the country through value addition. Despite ASM having the potential to improve the livelihoods of a significant number of Namibians, the sector has long been neglected in the country's development agenda. This recently changed with the launch of the government's Growth at Home Strategy. ASM, in Namibia as in many other countries, is plagued with many problems, including inadequate legal and regulatory frameworks, low levels of productivity and the application of rudimentary and inappropriate technology. The sector is also isolated from the mainstream of economic development, and suffers from adverse environmental effects, health challenges and occupational hazards (Hayes, 2008). Faced with such challenges, the Growth at Home Strategy targets the coloured gemstones sector in order to ensure that these challenges are addressed, while simultaneously ensuring that the impact and results of the efforts are substantive. It will also aim to develop local and regional value chains for coloured gemstones, while emphasizing the importance of commodity-based industrialization.

The EMA has made it mandatory for ASM practitioners to complete an environmental questionnaire to ascertain whether an environmental clearance certificate can be granted, or if a full environmental impact assessment is required. Abandonment and lack of rehabilitation plague the sector: miners excavate gemstones without reclaiming the pits, posing a danger for both communities and wildlife and leading to tensions and conflicts between ASM miners and landowners. The MME, through the Minerals Ancillary Rights Commission (MARC), acts as a broker for dialogue between ASM miners and landowners on issues surrounding access to private land and the infringement of mineral licences, but their mandate does not extend to environmental issues. A perennial challenge remains the lack of capacity within the government to enforce regulations set through various acts of parliament relating to safety, the environment, health and labour.

Namibia's Labour Act outlines the health, safety and welfare obligations of employers and employees. Most ASM mining activities violate these requirements, with workers digging in the extreme heat with basic hand tools, and often in locations where miners work at great heights without safety equipment, with poor sanitation and with limited water supplies. The Mine Safety and Operations division under MME mainly deals with health and safety matters for large-scale mining (LSM) operations, rather than ASM. To address this, MME is currently in the process of drafting new legislation that will address health and safety regulations in mines, and will apply to all mineral licence areas within Namibia, including ASM.



STRENGTHS

- The availability of mining claims indicates that there is a process in place for the formalization of small-scale mining. In addition, the Minerals (Prospecting and Mining) Act makes provisions for the activities and licensing of small-scale miners, ASM is a key pillar of the Minerals Policy, and there is a division within MME devoted to small-scale mining. While formalized ASM operations are still a small portion of all ASM, they are increasing.
- Child labour is not prevalent in the ASM sector in Namibia. Namibia's Labour Act and Constitution prohibit and restrict child labour, and a child under 14 must not be employed under any circumstances. Employers found be doing so are subject to steep fines and possible imprisonment.
- Most land implicated in ASM activities in Namibia belongs either to the government or to farmers. Should disputes arise, MME has mechanisms in place, through the Minerals Ancillary Rights Commission (MARC), to mediate conflicts between stakeholders and reach agreement for land access between landowners and ASM miners. To further empower the MARC there is need to develop guidelines to assist in the settlement of land disputes.

GAPS

- There is limited understanding among miners of existing mining legislation, including laws on environmental management and occupational health and safety. As in many other countries, measures for the prevention of mining accidents and other fatalities in small-scale gemstone mining do not exist. Health problems related to dust (which causes silicosis), noise (which causes tinnitus), and extreme heat are common, as are physical injuries due to rock falls and mine collapses.
- There is a general lack of coordination among government ministries. The Namibian government has various support initiatives that apply to ASM, but these are spread across different ministries, affecting their long-term effectiveness and resulting in wasted resources. For example, the urgent pressure to deliver equipment to stone centres without a broader semi-precious sector growth strategy is believed to constrain the scope for innovation and correction in the sector (Musiyarira et al., 2016). This lack of knowledge and coordination can lead to the design and implementation of inappropriate technologies and support services for the sector.
- There is a lack of revenue for training, education and extension services programs for ASM miners since the depletion of the Minerals Development Fund (MDF). Although there are three regional small-scale mining associations in place to assist miners in the development and implementation of appropriate technology, none are working efficiently and hence are failing to meet their mandate. Mechanisms have been established for providing loans to viable small-scale mining projects through existing financial structures such as the MDF, and for providing technical support to ASM miners through the MME's Small-scale Mining Division. Both have been stalled due to lack of funding. The Ministry of Industrialisation, Trade and SME Development has devised a number of interventions aimed at providing targeted support to the ASM sector, including the Equipment Aid Scheme and the Business Support Service Programme.
- The provision of financial services to ASM miners is limited. There are no mechanisms in place or in legislation to improve the savings of ASM miners, to establish more acceptable forms of financing to improve access to credit, or to encourage responsible investment in the sector.
- Limited government revenues (taxes or royalties) are generated from small-scale mining, and progress on strengthening the appropriateness, viability and transparency of policies and systems for the collection, management and reinvestment of ASM revenue has been slow. The lack of transparent record keeping on ASM production statistics compounds the problem,



as the production and export figures reported by the MME are likely an underestimate of the actual output from the sector (MITSMED, 2016). While the Mineral Policy stipulates that mining claim holders should submit periodic reports on “the mass, volume, nature and value of any such mineral or group of minerals sold or otherwise disposed of,” in practice these reports are not usually submitted. There is a need for improved coordination between various stakeholders on ensuring that accurate records are maintained for the production, processing and export of semi-precious stones.

- MME capacities with regards to ASM are largely limited to geology, and do not include areas such as business development, marketing or gemology. The government has limited capacities to monitor the ASM sector and enforce its regulations, including ensuring the health and safety of miners, environmental protection and adherence to national legislation on child labour.
- GSN support for ASM is limited, as it does not have extensive mapping coverage for semi-precious stones.
- There are limited efforts in place to encourage initiatives for fair trade or conflict-free certification or standards within the ASM sector. In the aforementioned Growth at Home Strategy, proposed interventions with respect to ASM branding and fair trade include setting up laboratories for certifying gemstone products, establishing industry standards and establishing regional valuation and trading hubs to conduct fair trade. This has the potential to encourage initiatives for standards and the certification of ASM fair trade, conflict-free minerals, but the strategy has yet to be implemented.
- National legislation on workplace health and safety does not apply to most individuals working in ASM, particularly those operating without a mining claim. While Namibia’s Health and Safety Regulations address health and safety regulations in mines—and the Chief Inspector of Mines is responsible for the administration and implementation of the regulations set out in the legislation—the regulations and standards do not pertain to independent small-scale mining in Namibia. In addition, most small-scale miners have less formal education, making it difficult for them to understand the importance of health and safety.
- Namibia has no defined ASM zones, which would enable small-scale miners to benefit from economies of scale in terms of the costs associated with EIAs, and other services and amenities required in the mining areas.



6.0 RECOMMENDATIONS

Namibia's commitment to the principles of sustainable development and environmental protection has been a key pillar of its legislation since independence in 1990; it was one of the first countries, to enshrine both in its constitution. This commitment, coupled with the country's long history of mining and that sector's central role in its economy and continued development, has ensured that there is a good foundation in place for optimizing the contribution of mining to Namibia's continued development.

The Government of Namibia recognizes that its existing legislation can be improved, and its eager participation in this assessment process reflects a willingness and openness to strengthening its governance of the sector. Challenges remain; volatile international prices for key Namibian commodities remain a challenge, as do resource constraints—both technical and financial—for the implementation and enforcement of existing policies and laws. Thankfully the appetite for improved governance is there, and with broad stakeholder support from both private stakeholders and civil society, it is an opportune time to press forward with legislative changes to ensure that mining continues to underpin the country's development.

Improvements can be made to existing laws and policies across all six pillars of the MPF; however, it is recommended that the government prioritize change in mine closure and the post-mining transition; the legal and policy context; environmental management; and artisanal and small-scale mining.

PRIORITY AREA 1: MINE CLOSURE AND POST-MINING TRANSITION

Modern legal and policy frameworks for mining must require that entities develop detailed plans for both mine closure and the post-mining transition, that developers provide the necessary financial assurance to implement mine closure and rehabilitation, and that mine closure plans are revisited and implemented in a progressive manner throughout the life of the mine. While mine closure is included in both the Minerals (Prospecting and Mining) Act and the Minerals Policy, its integration into legislation and policy can be strengthened, particularly with regards to requiring financial assurances to cover the associated costs. Specifically, MME and its ministerial partners (such as MET) should:

- Develop a mandatory, clear financial assurance mechanism to cover the costs of mine closure, including environmental rehabilitation and management, and a mechanism for incentivizing companies to adopt progressive or concurrent rehabilitation plans throughout the mine's life.
- Put in place stringent and enforced measures and penalties for inadequate mine closure.



- Develop a formal system within the government for handling the approval of mine closure plans, and adopt specific regulations, establish an authorized agency, and allocate sufficient resources (human, financial and infrastructure) to ensure the effective implementation of this system.
- Invest in the training and development of MME staff in all aspects of mine closure and rehabilitation, including financial assurances, and consider engaging mine closure experts on a project-by-project basis to review critical mining components, to partially address the resource constraints of employing specialists full time.
- Address the need for periodic assessment and auditing of mine closure plans. In contexts of insufficient technical and financial resources, the use of external experts for the development of closure plans and the validation of risk assessments (especially of high-risk elements such as tailings dams) should be a requirement of the revised Minerals (Prospecting and Mining) Act.

PRIORITY AREA 2: LEGAL AND POLICY CONTEXT

A mature, modern legislative regime for the mining sector provides clear lines of responsibility and accountability for both governments and companies. Such a regime should provide the foundation of good governance and contribute to sustainable development in all aspects of a population's social and economic life. The Government of Namibia is in the process of reviewing and updating a number of pieces of key legislation and policy relating to the mining sector, and should prioritize the finalization and implementation of the following:

- Minerals Policy, 2018
- Parks and Wildlife Bill (to replace the Nature Conservation Ordinance, 1975)
- Pollution Control and Waste Management Bill (3rd Draft September 2003)
- Public and Environmental Health Bill, 2014
- Regulations for the Health and Safety of persons employed or otherwise present in or at mines (10th revision)
- Water Resources Management Act No. 11 of 2013
- Environmental Practitioner Bill
- Namibia's Policy for Prospecting and Mining in Protected Areas and National Monuments

In addition, the government, through its improved legislation, should aim to:

- Ensure that all aspects of mining, from exploration to closure and post-closure management, are adequately integrated into revised mining codes and standards.
- Legislate that permit applications include acceptable mine closure plans, including the provision of adequate financial assurances to cover the costs of closure and the ongoing monitoring of the site.
- Improve the timeliness, transparency and consistency of the mine permitting process, to ensure that the process is easily understood by all stakeholders, that ambiguities are avoided and resolved, and that all applicants are treated in a fair and consistent manner.

PRIORITY AREA 3: ENVIRONMENTAL MANAGEMENT

Addressing the environmental challenges of mining requires firm commitment and determination from policy-makers to ensure that a harmonized, integrated and non-fragmented approach to the multidisciplinary field of environmental protection is applied (Ruppel & Ruppel-Schlichting, 2011). The legal framework for environmental management in the Namibian mining sector is varied; a number of laws overlap, regulatory gaps persist, and the multitude of administering agencies results in either a



duplication of effort or no ministries adequately ensuring compliance. To strengthen this thematic area, the government should:

- Harness the enthusiasm of an engaged public and civil society and establish a national, publicly available database for all ECC applications and associated reports (including biannual report), and make site monitoring data available.
- Strengthen and harmonize waste and pollution control in Namibia by passing the Pollution Control and Waste Management Bill, and establish a regulatory body within the MET DEA to oversee all waste and pollution monitoring and control functions. The draft bill, currently under review, is up to date and would require very little revision, having already undergone extensive consultation during its development and subsequent revisions. It also already contains references to a number of other relevant acts. With passage, the act could be in place and enforced within two years, addressing a number of the legal gaps surrounding waste and pollution.
- Establish partnerships with independent and academic laboratories to strengthen capacities in testing and monitoring in areas of key environmental concern, including soil and water.
- Ensure that there is a legal process in place in the EMA for renewing ECCs.
- Require that all mine-related plans and designs be reviewed by an independent, certified expert prior to the submission of an ECC or permit application, and that the experts submit a report to government detailing the findings of that review. The implementation of such a reporting requirement from government would help ensure improved sector regulation without further stretching the government's often-constrained financial and human resources.
- Adopt and implement the draft Policy for Prospecting and Mining in Protected Areas and National Monuments, which was originally designed to promote sustainable development in Namibia by allowing prospecting and mining in protected areas under conditions of strict environmental management.
- Ensure, through the passing of the Environmental Practitioners Bill, that consultants conducting EIAs are registered and certified.

PRIORITY AREA 4: ARTISANAL AND SMALL-SCALE MINING

With regards to ASM, the MPF aims to enhance the health, safety and quality of life of those miners working in the sector informally and outside the legal framework. In order to enhance the contribution of the ASM sector to Namibia's sustainable development and to its formal economy, the government should:

- Develop guidelines for ASM related to the Safety, Health and Environmental issues affecting the miners, and invest in awareness raising and training campaigns on existing mining legislation targeting ASM miners.
- Set mechanisms or put in place legislation to improve the savings of ASM miners, to establish more acceptable forms of financing to improve access to credit, or to encourage responsible investment in the sector.
- Strengthen the appropriateness, viability and transparency of policies and systems for the collection, management, fair trade and reinvestment of ASM revenue.
- Create defined ASM zones, which will enable small-scale miners to benefit from economies of scale in terms of the costs associated with EIAs, as well as other services and amenities required in ASM mining areas.
- Improve coordination among the various support initiatives that are offered to the ASM sector but are spread across different ministries, and improve coordination among various stakeholders on ensuring that accurate records on the sector's production, processing and exports activities are maintained.



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ANNEX: LIST OF LAWS AND POLICIES REVIEWED

LAWS

- Affirmative Action Act, 1998
- Atmospheric Pollution Prevention Ordinance, No. 11 of 1976
- Atomic Energy and Radiation Protection Act No. 5 of 2005
- Customs and Excise Act, 1998
- Diamond Act No. 13 of 1999
- Environment Investment Fund of Namibia Act No. 13 of 2001
- Environmental Impact Assessment Regulations: Environmental Management Act, 2007
- Environmental Management, Act 7 of 2007
- Export Processing Zone (EPZ) Act 9 of 1995
- Hazardous Substances Ordinance No. 14 of 1974
- Income Tax Act, 1981
- Labour Act, 2007
- Marine Resources Act No. 27 of 2000
- Minerals (Prospecting and Mining) Act No. 33 of 1992
- Minerals Development Fund of Namibia Act, 1996
- Namibia's Public Procurement Act, 15 of 2015
- Namibian Ports Authority Act, No. 2 of 1994
- National Heritage Act No. 27 of 2004
- Nature Conservation Ordinance, 1975
- Petroleum (Exploitation and Production) Act No. 2 of 1991
- Petroleum Laws Amendment Act, 1998
- Petroleum Products and Energy Act No. 13 of 1990
- Prevention and Combating of Pollution of the Sea by Oil Act No.6 of 1981
- Public Private Partnership Act, 2017
- Regulations for Strategic Environmental Assessment and Environmental Management Plan (EIA), Government Notice No. 1 and the Procedures and Guidelines
- Soil Conservation Act No. 76 of 1969
- The Constitution of the Republic of Namibia, 1990
- Value Added Tax Act, 10 of 2000
- Water Act No. 54 of 1956
- Water Resources Management Act No. 11 of 2013



POLICIES AND CONVENTIONS

- Environmental Assessment Policy, 1995
- Growth at Home Strategy, 2015–2020
- International Convention for the Prevention of Pollution from Ships (MARPOL), 1973
- Marine Resources Policy (2004)
- Minerals Policy of Namibia, 2003
- Namibia Vision 2030
- Namibia's 5th National Development Plan
- Namibia's Climate Change Policy, 2011
- Namibia's Draft Wetland Policy, 2004
- Namibia's Green Plan, 1992
- National Energy Policy, 2017
- National Oil Spill Contingency Plan (NOSCP) was established to give effect to Namibia's obligation under the United Nations Convention on the Law of the Sea, 1982
- National Water Policy White Paper, 2002
- Prospecting and Mining in Protected Areas and National Monuments Policy, 1999
- The National Drought Policy and Strategy, 1997
- Water Supply and Sanitation Policy, 1993

LAWS IN PREPARATION

- Minerals Policy, 2018
- Parks and Wildlife Bill (to replace the Nature Conservation Ordinance, 1975)
- Pollution Control and Waste Management Bill (3rd Draft September 2003)
- Public and Environmental Health Bill, 2014
- Regulations for the Health and Safety of person employed or otherwise present in or at mines
- Water Resources Management Act No. 11 of 2013



ANNEX: LIST OF CONSULTED STAKEHOLDERS

GOVERNMENT

- Ministry of Mines and Energy
 - Department of Mines
 - Mineral Rights and Resource Development Division
 - Small-scale Mining Division
 - Geological Survey of Namibia
 - Controlled Minerals and Research Division
- Ministry of Environment and Tourism
- Ministry of Industrialization, Trade and SME Development
- Ministry of Finance
- Ministry of Agriculture, Water and Forestry
- Ministry of Justice
- National Planning Commission of Namibia
- Ministry of Labour, Industrial Relations and Employment Creation
- Ministry of Gender Equality and Child Welfare

CIVIL SOCIETY

- The Namibia Chamber of Environment
- Institute for Public Policy Research
- Erongo Regional Small Miners Association
- Uiba Oas Gem Market
- Neu Schwaben Independent Miners Association

PRIVATE SECTOR

- The Namibia Chamber of Mines
- B2Gold
- Skorpion Zinc/Vedanta Zinc
- Namibian Uranium Association
- Desert Gems
- Environmental Compliance Consultancy
- Mineworkers Union of Namibia
- Namdeb
- De Beers
- Epangelo Mining Company
- Areva

ACADEMIA AND EDUCATION

- Namibian University for Science and Technology
- Karibib Gemstone Centre



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INTERGOVERNMENTAL FORUM
on Mining, Minerals, Metals and
Sustainable Development