UN SECRETARY-GENERAL'S WORKING GROUP
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES
FOR SUSTAINABLE DEVELOPMENT

# UN Guidance for Action on

# Critical Energy Transition Minerals

A document of the UN Secretary-General's Working Group on Transforming the Extractive Industries for Sustainable Development

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Unsplash/Tobias Kleeb

# About this Document

This document was prepared by the UN Secretary-General's Working Group on Transforming the Extractive Industries for Sustainable Development under the leadership of the United Nations Environment Programme and supported by Professor Daniel Franks, Director of the Global Centre for Mineral Security at The University of Queensland's Sustainable Minerals Institute. It was developed to inform collective action in the implementation of the Guiding Principles on Critical Energy Transition Minerals proposed by the Secretary-General's Panel on Critical Energy Transition Minerals.

On 26 January 2022, the UN Secretary-General created the UN Secretary-General's Working Group on Transforming the Extractive Industries for Sustainable Development to coordinate UN work on extractives;  serve as an information and knowledge hub to scale up and replicate best practices and build synergies across initiatives; provide policy advice and technical assistance to stakeholders in the extractives sector; and help integrate relevant work into broader UN initiatives like the Financing for Development Initiative (FfDI).

The Working Group is co-chaired by the UN Regional Economic Commissions (the United Nations Economic Commission for Africa, the United Nations Economic Commission for Europe, the United Nations Economic Commission for Latin America and the Caribbean, the United Nations Economic and Social Commission for Asia and the Pacific, the United Nations Economic and Social Commission for Western Asia), the United Nations Environment Programme, UN Trade and Development, and the United Nations Development Programme, on a rotating basis. Other members include the Executive Office of the Secretary-General; International Labour Organization, the International Trade Centre, the Office of the High Commissioner for Human Rights, Sustainable Energy for All, the United Nations Youth Office, the United Nations Industrial Development Organization, the United Nations Office on Drugs and Crime, and the World Trade Organization. Special thanks to the UN Special Rapporteur on Climate Change and Human Rights, Elisa Morgera, for her contributions.

# Table of Contents

# INTRODUCTION

**In response to calls from developing countries, the UN Secretary-General established a Panel on Critical Energy Transition Minerals, to develop Guiding Principles which can serve as guardrails for the energy transition.**

The Panel was co-chaired by Ambassador Nozipho Joyce Mxakato-Diseko of South Africa and Director-General for Energy Ditte Juul Jørgensen of the European Commission and comprised of expert representatives diverse by geography, gender and age nominated by governments, intergovernmental and international organizations, and non-state actors. The final report of the Panel, Resourcing the Energy Transition: Principles to guide critical energy transition minerals toward equity and justice, proposed seven voluntary Principles and five Actionable Recommendations. The Guiding Principles build on existing international norms and legal obligations to which governments have already committed and the Actionable Recommendations aim to ensure all people benefit from the opportunities inherent in a transition to renewable energy. The Panel was mandated to provide recommendations for the development of terrestrial resources and used the term 'critical energy transition minerals' (CETMs) to refer to the mineral commodities that are necessary for the construction, production, distribution and storage of renewable energy and associated infrastructure.

This UN Guidance for Action on CETMs identifies policies and practices that can help implement the Principles and Actionable Recommendations of the Panel ensuring coordinated action across the UN and its partners to support UN Member States. It is expected to exist in two forms: (1) a concise written document; and (2) an online resource that allows the guidance to live and grow as it develops. The resources detailed herein are not exhaustive and may not be appropriate to all circumstances and any implementation should carefully consider the specific context and benefit from public participation and inclusive design. Their inclusion here should not be taken as an endorsement by the United Nations. The following section summarises enabling standards, policies and practices, and the knowledge resources, partnerships and programmes that may assist in the implementation of each of the Guiding Principles.

## GUIDING PRINCIPLES

1. Human rights must be at the core of all mineral value chains.
2. The integrity of the planet, its environment and biodiversity must be safeguarded.
3. Justice and equity must underpin mineral value chains.
4. Investments, finance and trade must be responsible and fair.
5. Development must be fostered through benefit sharing, value addition and economic diversification.
6. Transparency, accountability and anti-corruption measures are necessary to ensure good governance.
7. Multilateral and international cooperation must underpin global action, and promote peace and security.

## ACTIONABLE RECOMMENDATIONS

1. A High-Level Expert Advisory Group to accelerate greater benefit-sharing, value addition and economic diversification in critical energy transition minerals value chains as well as responsible and fair trade, investment, finance, and taxation.
2. A global traceability, transparency and accountability framework along the entire mineral value chain – from mining to recycling – to strengthen due diligence, facilitate corporate accountability and build a global market for critical energy transition minerals, though the framework should not be used as a unilateral trade barrier.
3. A Global Mining Legacy Fund to build trust and address legacy issues as a result of derelict, ownerless or abandoned mines, and strengthen financial assurance mechanisms for mine closure and rehabilitation.
4. An initiative that empowers artisanal and small-scale miners to become agents of transformation to foster development, environmental stewardship and human rights.
5. Equitable targets and timelines for the implementation of material efficiency and circularity approaches across the entire life cycle of critical energy transition minerals.

# 1

# Human rights
## must be at the core of all mineral value chains

Human rights are vital to ensuring a just, equitable and people-centred energy transition. Human rights are rights inherent to all people, regardless of race, sex, age, nationality, ethnicity, language, religion, or any other status. Human rights include the individual and collective rights of Indigenous Peoples, and other rights holders with ancestral ties and rights to land and other resources.

Given the context of mineral value chains, particular attention must be paid to protecting the rights of children, youth, women, workers, Indigenous Peoples and local communities, and to recognise everyone's right to a clean, healthy and sustainable environment as well as the right to development, for the enjoyment of all human rights.

The Guiding Principles emphasise the importance of implementing the existing international human rights and labour rights law and frameworks; applying credible industry standards throughout all parts of the value chain; performing human rights due diligence and human rights impact assessments; engaging with and involving affected people meaningfully in decision-making; putting into effect accessible, culturally appropriate and effective grievance handling and redress mechanisms; protecting the civic space for environmental human rights and anti-corruption defenders; ensuring safe and healthy working environments; and consulting and cooperating in good faith with the Indigenous Peoples, through their own representative institutions in order to obtain their free, prior, and informed consent before the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.

**The rights of Indigenous Peoples, workers, women, youth, and local communities must be protected** across mineral value chains.

## Principle 1 Relevant commitments and standards

Universal Declaration of Human Rights

ILO Declaration on Fundamental Principles and Rights at Work

International Covenant on Civil and Political Rights

International Covenant on Economic, Social and Cultural Rights

Convention on the Elimination of All Forms of Racial Discrimination

Convention on the Elimination of All Forms of Discrimination against Women

Convention on the Rights of the Child and General Comment no 26 on Children's Rights and a Healthy Environment

Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families

Convention on the Rights of Persons with Disabilities

Stockholm Declaration of the United Nations Conference on the Human Environment

United Nations Declaration on the Rights of Indigenous Peoples

United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas

United Nations Declaration on Human Rights Defenders

United Nations Declaration on the Right to Development

UN Framework Principles on Human Rights and the Environment

UN General Assembly Resolution A/73/18

ILO Convention 169 - Indigenous and Tribal Peoples

ILO Convention 182 - Worst Forms of Child Labour Convention

UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention)

Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazu Agreement)

Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework

UN Global Compact

IFC Performance Standards on Environmental and Social Sustainability

## 1.1 Human rights due diligence

Human rights (and environmental) due diligence are the systematic and continuous evaluation of human rights (and environmental) risks and impacts by a business enterprise throughout the value chain, adhering to international norms. Due diligence typically involves identifying, preventing, mitigating and accounting for adverse impacts, both actual and potential, and integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed.[1] It is an ongoing, proactive and reactive process, whereby business enterprises build and integrate responsible business conduct into their operations and supply chains.[2] Human rights due diligence may be encouraged by downstream actors, incorporated into traceability and supply chain initiatives with auditing or certification mechanisms, aided by tools such as impact assessment (see following sections) and/or required by law.

As part of their human rights due diligence, companies should pay particular attention to the rights of individuals and groups who are at heightened risks of adverse impacts from business, such as children, women, Indigenous Peoples, persons with disabilities, national or ethnic, linguistic and religious minorities, and migrant workers and their families. Additionally, in situations of armed conflict, companies should respect international humanitarian law and international human rights law.

### Knowledge Resources and Tools

- UN Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework
- Extracting Good Practices: A Guide for Governments and Partners to Integrate Environment and Human Rights into the Governance of the Mining Sector – Swedish Environmental Protection Agency and UNDP
- Assessing the Rule of Law in Public Administration: The Mining Sector – UNDP
- OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
- OECD Handbook on Environmental Due Diligence in Mineral Supply Chains
- OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector
- ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration)
- EU Corporate Sustainability Due Diligence Directive
- The German Act on Corporate Due Diligence Obligations in Supply Chains – German Due Diligence Law of 2023
- LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre (1) - Légifrance – French Due Diligence Law of 2017
- ICMM's Human Rights Due Diligence Guidance
- Code of Risk mitigation for Artisanal and small-scale mining engaged in Formal Trade (CRAFT)
- RMI's Responsible Minerals Assurance Process (for smelters and refiners sourcing)
- Transition Minerals Tracker – Business & Human Rights Resource Centre

### Knowledge Partners and Programmes

- OECD Centre for Responsible Business Conduct
- ILO Helpdesk for Business On International Labour Standards
- European Partnership for Responsible Minerals (EPRM)
- Responsible Minerals Initiative (RMI)
- Alliance for Responsible Mining (ARM)
- Shift

1 United Nations, 2011. Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. Office of the High Commissioner for Human Rights. New York and Geneva.

2 OECD, 2016. OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Third Edition, OECD Publishing, Paris.

## 1.2 Human Rights Impact Assessment

Impact assessment is the process of analysing, monitoring and managing the intended and unintended consequences, both positive and negative, of planned interventions (policies, programs, plans, projects).[3]

Impact assessment may be required by legislation or corporate policy and is commonly conceived of as a ex-ante assessment conducted prior to an intervention, however, it is best thought about as an adaptive management process, involving ongoing or periodic assessment, management and monitoring. In the context of human rights, a Human Rights Impact Assessment (HRIA) is a structured process of identifying, analysing, and addressing the potential or actual adverse human rights impacts of a project, policy or plan and ensuring consistency with international human rights law. HRIAs may be independent or integrated into broader impact assessment processes. Similarly, while HRIA alone is not sufficient for human rights due diligence it is a critical component. HRIAs are connected to the obligations of free, prior and informed consent as well as ensuring fair and equitable benefit-sharing for the protection of the human rights of Indigenous Peoples and other communities.[4]

### Knowledge Resources and Tools

- Guiding principles on human rights impact assessments of economic reforms – Human Rights Council
- Akwé: Kon Voluntary Guidelines - Convention on Biological Diversity
- Human Rights Impact Assessment Guidance and Toolbox – Danish Institute for Human Rights
- A Collaborative Approach to Human Rights Impact Assessments – Columbia Center on Sustainable Investment, Danish Institute for Human Rights, SciencesPo Law School
- Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects – International Association for Impact Assessment
- Mining Sector Diagnostic Tool – World Bank
- Child Rights and Mining Toolkit – UNICEF
- BeneLex Learning Module on benefit-sharing and the rights of Indigenous Peoples over natural resources – University of Strathclyde

### Knowledge Partners and Programmes

- Centre for Social Responsibility in Mining
- Danish Institute for Human Rights
- Environmental Governance Programme for Sustainable Natural Resource Management – UNDP and the Swedish Environmental Protection Agency
- Institute for Human Rights and Business

3 Vanclay, F., Esteves, A.M., Aucamp, I. and Franks, D., 2015. Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment. Fargo, United States.

4 Morgera, E. Fair and equitable benefit-sharing in international law (OUP, 2024).

**Box 2** **Case study of Principle 1**

## Ex-ante Human Rights Impact Assessment of the African Continental Free Trade Agreement

The Office of the High Commissioner for Human Rights (OHCHR), jointly with the Economic Commission for Africa and Friedrich Ebert Stiftung Geneva, published an ex-ante human rights impact assessment of the African Continental Free Trade Agreement (AfCTA) in 2017. The assessment identified priority areas where the AfCFTA could promote or undermine human rights and provided human rights-based recommendations to national negotiators on the contents of the agreement and its monitoring and implementation mechanisms. The assessment made visible the situation of populations who would be left behind if trade negotiators only considered estimated economic growth without evaluating the potential distribution of the impacts and benefits of AfCFTA, for instance, women in informal cross-border trade, and to understand the differentiated impacts of trade liberalization on different populations.

**While HRIA alone is not sufficient for human rights due diligence,** it is a critical component.

## 1.3 Free, Prior and Informed Consent

Free, prior and informed consent (FPIC) is a human rights obligation to seek and obtain the consent of Indigenous Peoples before undertaking projects that may affect their lands, territories, or resources. It involves an absence of coercion, intimidation or other undue pressure access to timely and sufficient information– including from Human Rights Impact Assessments and environmental assessments, respect for cultural protocols, and genuine dialogue conducted in good faith to ensure Indigenous Peoples can meaningfully influence decision-making processes, including on ensuring fair and equitable benefit-sharing.[5] Indigenous Peoples must have the freedom to be represented as traditionally required under their own laws, customs and protocols, which are vital for guiding FPIC processes and upholding their rights to self-determination, participation, and autonomous decision-making. FPIC is a key tenet of the United Nations Declaration on the Rights of Indigenous Peoples and must be operationalised by legislation and corporate policy.

### Knowledge Resources and Tools

- Free, prior and informed consent: a human rights-based approach – Expert Mechanism on the Rights of Indigenous Peoples
- Akwé: Kon Voluntary Guidelines - Convention on Biological Diversity
- Dynamics in Consultation and Consent – Centre for Social Responsibility in Mining
- Securing Indigenous Peoples Right's to Self-Determination: A Guide on Free, Prior and Informed Consent – Cultural Survival, First Peoples Worldwide and SIRGE Coalition
- Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America – ECLAC
- IRMA Standard - Supplementary Guidance on FPIC – IRMA
- BeneLex Learning Module on benefit-sharing and the rights of Indigenous Peoples over natural resources – University of Strathclyde

### Knowledge Partners and Programmes

- Community-smart consultation and consent - BHP Foundation, Landesa, RESOLVE, Conservation International, and The University of Queensland's Centre for Social Responsibility in Mining
- Securing Indigenous Peoples' Rights in the Green Economy (SIRGE) Coalition (in collaboration with Cultural Survival and First Peoples Worldwide
- UN Permanent Forum on Indigenous Issues
- Expert Mechanism on the Rights of Indigenous Peoples

5 United Nations (2018). Free, Prior and Informed Consent: A human rights-based approach. Study of the Expert Mechanism on the Rights of Indigenous Peoples. A/HRC/39/62.

## 1.4 Human rights compliant security and protection of civic space

Implementing human rights-compliant security in critical energy transition minerals value chains involves a participatory assessment of security risks and potential threats to human rights with local communities, including environmental human rights defenders (EHRDs); undertaking background checks, human rights training, and clear codes of conduct with private security providers; seeking assurances from public security providers on respecting human rights, with the development of shared protocols and support for joint training; regular monitoring and reporting of security conduct; and accessible grievance mechanisms so that any concerns can be properly addressed.[6]EHRDs are vital to the protection of the environment and human rights and the promotion of shared benefits around mineral development. Despite recognition of their vital role, EHRDs face growing threats, including harassment, criminalization, and restrictions on participation, information, and access to justice. A safe and enabling environment is essential to protect their ability to defend rights, including the right to a healthy environment, advocate for a just transition, and address the root causes of environmental crises.

### Knowledge Resources and Tools

- Guidance on Respecting the Rights of Human Rights Defenders – Voluntary Principles on Security and Human Rights
- UN Framework Principles on Human Rights and the Environment - HRC
- European Union Guidelines on Human Rights Defenders
- Role of Host Governments in Enabling or Preventing Conflict Associated with Mining – UNDP and CIRDI

### Knowledge Partners and Programmes

- Voluntary Principles on Security and Human Rights
- Environmental Rights Initiative – UNEP
- UN Special Rapporteur on Human Rights Defenders
- UN Special Rapporteur on Freedom of Expression
- UN Special Rapporteur on Freedom of Peaceful Assembly and Association
- Special Rapporteur on Environmental Defenders under the Aarhus Convention
- Special Rapporteur on Human Rights Defenders of the African Commission on Human and Peoples' Rights
- Special Rapporteur on Human Rights Defenders of the Inter-American Commission for Human Rights

6 Voluntary Principles on Security and Human Rights.

## 1.5 Grievance Handling Mechanisms

A grievance handling mechanism is a structured, transparent process that allows stakeholders to raise and seek resolution for any concerns at company level. These are additional to the State's justice system which ensures the protection of human rights. The grievance handling mechanism typically includes clear procedures for receiving and investigating complaints, timely responses, and remedial actions when required. Effective mechanisms ensure accessibility (e.g., through culturally appropriate channels), confidentiality where needed, and ongoing engagement with stakeholders and are periodically evaluated and reviewed. When designing grievance mechanisms, companies should embed safeguards against retaliation and address the barriers to participation that some individuals and groups who are in situations of marginalisation or vulnerability might face. They should be geared towards redressing imbalances in information and expertise and enabling effective dialogue with affected stakeholders.

### Knowledge Resources and Tools

- Operational-level grievance mechanisms fit for children – UNICEF Child Rights and Business
- Access to Remedy in Cases of Business-Related Human Rights Abuse: A Practical Guide for Non-State-Based Grievance Mechanisms – OHCHR
- Special Procedures Communications (for submitting complaints)
- A Guide to Designing and Implementing Grievance Mechanisms for Development Projects – Compliance Advisor Ombudsman (CAO)
- Handling and Resolving Local-Level Concerns and Grievances – International Council on Mining and Metals
- Community Grievance Mechanism Toolbox – IPIECA

### Knowledge Partners and Programmes

- National Contact Points for Responsible Business Conduct – OECD
- Working Group on Business and Human Rights – OHCHR

## 1.5 Elimination of child labour on mine sites

Governments and businesses can adopt frameworks that enforce minimum age requirements for hazardous work and mandate strong inspection and verification practices at mine sites. They can develop a multi-stakeholder strategy to integrate national child protection agencies, civil society organisations, Indigenous Peoples, mining companies and local communities to address and monitor child labour cases and tackle underlying issues such as poverty through educational scholarships, effective communal child-care and school attendance measures, vocational training for older youth, and financial support for families.[7] It is important to differentiate policy responses for different forms of child labour ranging from situations of coercion, exploitation and hazardous work through to situations where children are present at informal mine sites alongside parents or relatives who may depend on artisanal or small-scale mining for survival, and do not have access to child care options. In all cases, representatives of parents, artisanal miners, and their associations should be involved in policy design and implementation.

Not all work by children can be defined as child labour, and not all child labour falls under the internationally recognised legal definition of the 'worst forms of child labour,' but in practice, there is very little, if any work in mining that would not be considered hazardous and thus meet the definition of 'worst forms of child labour.' ILO Convention No. 138, sets the minimum age of work for children at 15, however, work that meets the criteria of worst forms of child labour, including hazardous work, is prohibited for persons below the age of 18.

Understanding the context, taking collective action, and addressing the root causes of systemic child rights issues are key to effectively preventing child labour. It is important to note that contractual clauses and verification mechanisms often do not lead to the prevention of child labour and might lead to unintended consequences. Child labour is both a cause and a consequence of wider children's right infringements that businesses can cause or contribute to. Addressing wider child rights abuses and deprivations early on, can enable companies to contribute to preventing child labour in a more effective and sustainable way.

### Knowledge Resources and Tools

- Practical actions for companies to identify and address the worst forms of child labour in mineral supply chains – OECD
- Framework for action on child labour 2023-2025 – International Labour Organization
- Fact Sheet: Contemporary Forms of Slavery – OHCHR
- Report on contemporary forms of slavery including its causes and consequences – UN Special Rapporteur on Contemporary Forms of Slavery
- Child Labour Guidance Tool for Business – ILO and IOE
- Prevention of Child and Forced Labour Protocol – TSM

### Knowledge Partners and Programmes

- International Programme on the Elimination of Child Labour (IPEC+) – International Labour Organisation
- Critical Minerals Advisory Group (CMAG)/ Cobalt Action Partnership – Global Battery Alliance
- UN Special Rapporteur on Contemporary Forms of Slavery
- UN Voluntary Trust Fund on Contemporary Forms of Slavery

7 International Labour Office and United Nations Children's Fund, 2021. Child Labour: Global estimates 2020, trends and the road forward. New York.

# 2

# The integrity of the planet, its environment and biodiversity must be safeguarded

Mineral production places risks on the environment which must be safeguarded to ensure the long-term health and resilience of people and the planet.

The Guiding Principles call on actors in the value chain to assess, manage and monitor environmental, social and cultural risks – and use this information to inform decision-making, participatory land use planning, and geological exploration; avoid, reduce, eliminate and remediate pollution and waste – and where waste cannot be eliminated, safely manage and store it to prevent interaction with the environment; halt and reverse biodiversity loss; reduce greenhouse gas emissions and decarbonise production processes; implement environmental bonds or other forms of financial assurance; declare, protect and conserve no-go areas; and promote product and process circularity and material and energy efficiency.

**The Principles** call on actors in the value chain to assess, manage and monitor **environmental, social and cultural risks.**

## Principle 2 Relevant commitments and standards

Rio Declaration of the United Nations Conference on Environment and Development

The Future We Want – United Nations Conference on Sustainable Development (Rio+20)

Transforming Our World: The 2030 Agenda for Sustainable Development

UN Framework Convention on Climate Change (UNFCCC) & Paris Agreement

Convention on Biological Diversity

Kunming-Montreal Global Biodiversity Framework (GBF)

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

Stockholm Convention on Persistent Organic Pollutants

United Nations Resource Management System – Principles and Requirements

United Nations Framework Classification for Resources (UNFC)

IRMA Standard for Responsible Mining

EU Principles for Sustainable Raw Materials

Global Reporting Initiative

## 2.1 Environmental and social impact assessment

Impact assessment is the process of analysing, monitoring and managing the intended and unintended consequences, both positive and negative, of planned interventions (policies, programs, plans, projects).[8]

Impact assessment may be required by legislation or corporate policy and is commonly conceived of as a report conducted prior to an intervention, however, it is best thought about as an adaptive management process, involving ongoing or periodic assessment, management and monitoring. Impact assessments may be conducted at varied scales (e.g. project level, strategic and regional) and at any stage, including after the intervention has commenced.

Environmental and social impact assessments must take a holistic approach to environmental risks, including biodiversity and climate change and transboundary environmental impacts, as well as their connections to human rights impacts and to the fair and equitable sharing of benefits.

### Knowledge Resources and Tools

- Guidance for Governments: Improving legal frameworks for environmental and social impact assessment and management – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Participatory Environmental Monitoring Committees in Mining Contexts – Swedish Environmental Protection Agency and UNDP
- Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects – International Association for Impact Assessment
- IFC Performance Standards on Environmental and Social Sustainability
- Guidelines For Biodiversity-Inclusive Impact Assessment – Convention on Biological Diversity
- Akwé: Kon Voluntary Guidelines - Convention on Biological Diversity
- UN Framework Principles on Human Rights and the Environment - HRC
- Guidebook for Evaluating Mining Project EIAs – Environmental Law Alliance Worldwide
- BeneLex Learning Module on benefit-sharing and the rights of Indigenous Peoples over natural resources – University of Strathclyde

### Knowledge Partners and Programmes

- International Association for Impact Assessment
- UN Special Rapporteur on the right to a clean, healthy and sustainable environment
- UN Special Rapporteur on the promotion and protection of human rights in the context of climate change

8 Vanclay, F., Esteves, A.M., Aucamp, I. and Franks, D., 2015. Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. International Association for Impact Assessment. Fargo, United States.

**Box 3** **Case study of Principle 2**

## Mining Policy Framework, Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development

The Mining Policy Framework (MPF) represents the practices required by governments for good environmental, social, and economic governance of the mining sector, and the generation and equitable sharing of mining benefits in a manner that will contribute to national development objectives and sustainable development goals. The MPF was first ratified by IGF members in 2010, and in May 2011, at the 19th session of the United Nations Commission on Sustainable Development (CSD 19) in New York, the MPF was tabled as a compendium of good practices for governments to manage the full range of issues inherent in the mining sector. Delegates to CSD19 recognized the MPF as a systemic approach to applying sustainable development principles to all mining operations. Informed by the needs and experiences of IGF members, the MPF was designed as a policy guidance instrument to help governments ensure their mining sectors contribute to sustainable development.

The IGF MPF represents the commitment of all IGF members to ensure that mining activities within their jurisdictions adhere to international standards and practices required for sound environmental, social, and economic governance of the mining sector, and the generation and equitable sharing of benefits in a manner that contributes to national development objectives and sustainable development. In 2023, after extensive consultations with IGF Member Countries, the MPF was revised to reflect current challenges facing the mining sector, especially in the context of the climate crisis and changing global landscape. The MPF is complemented by a Guidance Note, which provides detailed information on implementation for each MPF recommendation and has been implemented in Honduras, Namibia, Suriname, Rwanda, Jamaica, Mexico, Panama, Mongolia, Senegal, Kyrgyzstan, Ecuador, Madagascar, Mauritania, Bhutan, and Uganda.

## The World Bank Mining Sector Diagnostic

The World Bank Mining Sector Diagnostic (MSD) is a country-level diagnostic tool to comprehensively assess how the mining sector is managed. The MSD provides the government with the tools and methodology to foster a mining sector that has contributed to sustainable and inclusive growth. The MSD tool offers a thorough evaluation of a country's legal, policy, and regulatory frameworks governing its mining industry. It highlights the strengths and weaknesses of these frameworks by examining the nature and application of existing rules, as well as the roles and influence of key stakeholders. By analyzing both the written rules (de jure performance) and their practical implementation (de facto performance), the MSD provides insights into the alignment between policy intentions and on-the-ground realities. This tool shifts the focus from adopting 'best practice' standards to identifying solutions that are most suitable for the country's unique context, thereby tailoring reform efforts to meet specific national needs.

MSD is based on the collection of verifiable objective information, through an expert review of the country's existing legal and regulatory framework and interview information from in-country participants. Interviews with government officials, mining industry representatives and civil society organizations provide information on de facto realities. Combining these two data sources provides more reliable data than single-source expert surveys. All questions are designed to be fact-based and independently verifiable, actionable by governments, and comparable across countries.

## 2.2 Tailings management, reduction and avoidance

Tailings management aims to achieve the safe long-term storage of tailings, which are the residual mineral wastes discarded after mineral processing. Management strategies include the construction of tailings storage facilities, continuous monitoring of facility integrity, and emergency preparedness plans to address potential failures. A number of jurisdictions have banned certain types of tailings storage facility structures (e.g. upstream facilities) due to these types of facilities reporting higher rates of failure incidents and given their particular context, including climate and topography. Innovations in filtered and thickened tailings have demonstrated improvements in stability due to dewatering, though risks do remain. Tailings reduction and avoidance refers to efforts to decrease tailings volume and toxicity through approaches such as targeted ore sorting and processing, recycling of process water, and co-production of other ore-minerals (e.g. ore-sand). Such approaches may also remove hazardous minerals or elements (e.g. desulphurisation) to reduce the potential for the generation of acid and metalliferous drainage from residual wastes.[9]

### Knowledge Resources and Tools

- Global Industry Standard on Tailings Management – UNEP, PRI & ICMM
- Online Toolkit and Training for Strengthening Mine Tailings Safety – UNECE
- Safety First: Guidelines for Responsible Mine Tailings Management – Earthworks
- Tailings Management: Leading practice sustainable development program for the mining industry – Australian Government
- Tailings Management: Good Practice Guide – ICMM
- Nose to Tail Mining: a circular solution for sand supply and tailings reduction at scale

### Knowledge Partners and Programmes

- Global Tailings Management Institute
- UN Special Rapporteur on toxics and human rights

9 Hudson-Edwards, K.A., Kemp, D., Torres-Cruz, L.A. et al. Tailings storage facilities, failures and disaster risk. Nature Reviews Earth and Environment 5, 612–630 (2024).

## 2.3 Water accounting

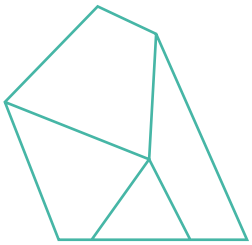
Water accounting involves systematically tracking water inputs, outputs, and recycling rates within mining operations. It typically includes data on surface and groundwater withdrawals, water consumed during processing, and water that is discharged or re-injected into the environment. Through standardized metrics and periodic evaluations, mining companies can identify opportunities to optimize water use, enhance recycling, and reduce potential impacts on local catchments.[10] Water accounting can aid reporting by companies to governments on license conditions and for compliance with various multi-stakeholder standards and public disclosure. It is important to note that according to international human rights law, priority in the allocation of water resources should be given to personal and domestic uses, to uphold human dignity, life and health.

### Knowledge Resources and Tools

- Water reporting good practice guide – International Council on Mining and Metals
- Water Stewardship Maturity Framework – International Council on Mining and Metals.
- Standard 303: Water and Effluents – Global Reporting Initiative
- Water Accounting Framework – Centre for Water in the Minerals Industry
- Impact of mega-projects on the human rights to water and sanitation – Report of the UN Special Rapporteur on the human rights to safe drinking water and sanitation
- Wastewater management in the realization of the rights to water and sanitation – Report of the UN Special Rapporteur on the human rights to safe drinking water and sanitation
- Water and economy nexus: managing water for productive uses from a human rights perspective - Report of the Special Rapporteur on the human rights to safe drinking water and sanitation

### Knowledge Partners and Programmes

- CEO Water Mandate – UN Global Compact
- Centre for Water in the Minerals Industry
- UN Special Rapporteur on the rights to water and sanitation



10 ICMM, 2021. Water Reporting: Good practice guide. 2nd Edition. London.

## 2.4 Participatory water monitoring

Participatory water monitoring is a form of citizen engagement that aims to foster accountability and trust between mining operations and host communities. Participation in water-related decisions is essential, and all rights-holders must have equal access to information on water, services, and the environment. Through community-led sampling, independent lab testing, and results-sharing meetings, stakeholders gain a clear picture of water impacts. This joint process informs adaptive management measures and encourages collaborative problem-solving. Participatory water monitoring may be aligned with broader water resource management efforts led by the government. The right of individuals and groups to participate in decision-making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water. To this end, States, business enterprises, and other entities must ensure full and equal access to information related to water, water services, and the environment for all rights-holders.

### Knowledge Resources and Tools

- Participatory water monitoring: a guide for preventing and managing conflict – International Finance Corporation
- Surface water monitoring for the mining sector: Frameworks for governments – IGF
- Participatory environmental monitoring committees in mining contexts: Lessons from nine case studies in four Latin American countries – UNDP

### Knowledge Partners and Programmes

- UN Special Rapporteur on the rights to water and sanitation
- UN Water Integrated Monitoring Initiative for SDG 6

## 2.5 Catchment and water resource management

Catchment and water resource management planning involves assessing the broader hydrological system and formulating integrated plans to ensure sustainable water usage. It focuses on understanding the availability, quality, and competing demands for water resources within a catchment area. This includes engaging with stakeholders, identifying potential conflicts with local water users, developing strategies to minimise water-related risks, accounting for the cumulative impacts of water use and pollution on ecosystems, downstream users, and local communities, and ensuring compliance with national and international standards.[11] Catchment and water resource management planning is typically led by governments in partnership with other water users and civil society organisations.

### Knowledge Resources and Tools

- A practical guide to catchment-based water management for the mining and metals industry – International Council on Mining and Metals

### Knowledge Partners and Programmes

- UN Special Rapporteur on the rights to water and sanitation
- CEO Water Mandate – UN Global Compact

11 ICMM, 2015. A Practical Guide to Catchment-Based Water Management for the mining and metals industry. London.

## 2.6 Biodiversity action plans

Biodiversity Action Plans (BAPs) provide a framework for identifying, managing, and mitigating biodiversity impacts associated with mining operations while promoting net positive outcomes for nature. They may be required by legislation, membership of an industry association or standard, corporate policy or a condition of finance. BAPs typically include a comprehensive baseline assessment to identify ecosystems, species, and ecological processes, prioritizing areas of high conservation value; identification of clear, measurable goals aligned with global frameworks such as the Kunming-Montreal Global Biodiversity Framework and a human-rights based approach; actions prioritised according to the mitigation hierarchy, focusing on avoiding impacts, minimizing unavoidable harm, restoring degraded ecosystems, and implementing biodiversity offsets when appropriate; engagement with Indigenous Peoples, governments, local communities and conservation organizations to incorporate diverse knowledge, ensure that efforts benefit both people and the environment and align actions with cultural and regional priorities; site-specific conservation measures, including habitat restoration, species protection, and invasive species control; robust monitoring to track progress and refine strategies through adaptive management. The BAP integrates biodiversity into corporate policies, training staff to uphold biodiversity responsibilities. Post-mining plans prioritize long-term ecosystem restoration and sustainable land use, with ongoing stewardship.

### Knowledge Resources and Tools

- Biodiversity Management: Leading Practice Guide – Australian Government
- A guide to developing biodiversity action plans – IPIECA
- Good Practice Guidance for Mining and Biodiversity – ICMM (in collaboration with IUCN)
- Biodiversity Conservation and Sustainable Management of Living Natural Resources Guidance Note – International Finance Corporation
- A Cross-Sector Guide for Implementing the Mitigation Hierarchy – Cross-Sector Biodiversity Initiative
- Incorporating human rights-based approaches to the conservation, restoration and sustainable use of biodiversity: A UN inter-agency and multi-stakeholder discussion – UN Environmental Management Group, Issue Management Group on Biodiversity
- Guidance on integrating human rights in National Biodiversity Strategy and Action Plans – UN Environmental Management Group, Issue Management Group on Biodiversity
- Key Messages on human rights and biodiversity – OHCHR
- Biodiversity Conservation Management Protocol – TSM

### Knowledge Partners and Programmes

- International Union for Conservation of Nature – IUCN
- World Conservation Monitoring Centre – UNEP-WCMC
- The Biodiversity Consultancy
- The Nature Conservancy
- Centre for Mined Land Rehabilitation
- The Taskforce on Nature-related Financial Disclosures

## 2.7 No-go zones

Designating "no-go" areas for mining and exploration is a strategic approach employed by governments (and some companies) to protect regions of high environmental, social, or cultural significance from disturbance and harm. Typically, these locations align with legally protected conservation areas but may also be defined as part of regional or landscape level planning processes.

### Knowledge Resources and Tools

- UNESCO Guidance for the World Heritage 'No-Go' Commitment
- Integrated Biodiversity Assessment Tool – IBAT Alliance
- Decision 37 COM 7 (Part III) adopted at 37th Session of UNESCO - World Heritage Committee
- Temporary Natural Resource Reserves – Colombia

### Knowledge Partners and Programmes

- IBAT Alliance – Birdlife International, Conservation International, IUCN, UNEP
- International Union for Conservation of Nature – IUCN
- World Conservation Monitoring Centre – UNEP-WCMC
- The Biodiversity Consultancy
- The Nature Conservancy
- Centre for Mined Land Rehabilitation

## 2.8 Mine-site closure plans and progressive rehabilitation

Mine-site closure plans outline the strategies for closing mining operations and rehabilitating affected land and managing other natural resources like water to address long-term environmental, social, and economic impacts. Key features include establishing a shared vision for post-mining land use through consultation and engagement; ensuring sites are safe, stable, and non-polluting; and planning for the socio-economic transition of workers and local communities post-closure. Governments can implement effective mine closure policies by developing clear, consistent regulatory frameworks that mandate early and continuous closure planning, enforce compliance through monitoring and reporting requirements, and facilitate collaboration among industry, landholders, Indigenous Peoples and communities. Such policies should also address financial assurance mechanisms to cover closure costs and promote sustainable post-mining land and resource uses that benefit regional development.

### Knowledge Resources and Tools

- Methodological Guide on Mine Closure – ECLAC (in Spanish)
- Methodological Guide for Prioritizing and Evaluating Environmental Remediation Projects – ECLAC
- Guidelines, Incentives, Regulations for the Management of Mining Legacies, Including Mine-Site Closure: Bolivia, Chile, Colombia and Peru – ECLAC (in Spanish)
- Emissions Factors Methodologies: Particulate matter in abandoned tailings facilities – ECLAC (in Spanish)
- Integrating Gender Equality and Mine Closure: Actions for governments – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Integrated Mine Closure: Good Practice Guide – International Council on Mining and Metals
- Mine Closure Guidance: Review and comparative analysis – CRC Time
- Relinquishment of Closed Mine Sites: Policy steps for governments – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- International Principles and Standards for the Ecological Restoration and Recovery of Mine Sites - Society for Ecological Restoration

### Knowledge Partners and Programmes

- Foundations of Mine Closure and Sustainable Transitions – Sustainable Minerals Institute
- Centre for Mined Land Rehabilitation
- UN Special Rapporteur on toxics and human rights

## 2.9 Decarbonisation and energy efficiency

Decarbonisation and energy efficiency involve adopting strategies to reduce greenhouse gas emissions and enhance operational efficiency. Key approaches include: transitioning to renewable energy sources for power needs; electrifying mining, mineral processing, refining and recycling equipment to avoid reliance on fossil fuels; implementing advanced technologies to optimize energy consumption, especially in comminution; developing comprehensive decarbonization roadmaps tailored to specific mining operations; and integrating energy management into business systems, while ensuring that such measures are guided by a just transition, the protection of human rights, the protection of nature populations in vulnerable situations.

### Knowledge Resources and Tools

- Net-zero Roadmap for Copper and Nickel – CCSI
- Decarbonization of the Mining Sector: Scoping study on the role of mining in nationally determined contributions – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Key Messages on a Just Transition and Human Rights – OHCHR and ILO
- Guidelines for a Just Transition to Environmentally Sustainable Economies and Societies for All – ILO

### Knowledge Partners and Programmes

- Columbia Centre for Sustainable Investment
- UN Special Rapporteur on Climate Change
- Resourcing Decarbonisation – Sustainable Minerals Institute

## 2.10 Carbon pricing mechanisms

Carbon pricing mechanisms are policy tools designed to incorporate the external costs of greenhouse gas emissions into market activities, thereby encouraging industries, including mining, to reduce their carbon footprint. A range of different types of mechanisms have been implemented by governments, including: carbon taxes, which directly charge emitters based on the carbon content of fossil fuels; emissions trading systems, which set a cap on total emissions, allowing firms to trade emission allowances, promoting cost-effective reductions; carbon border adjustment mechanisms, which impose carbon costs on imports to prevent carbon leakage and maintain competitiveness for domestic industries; and adjustments to fuel tax credits, which reduce incentives for high-carbon fuels.

### Knowledge Resources and Tools

- United Nations Handbook on Carbon Taxation for Developing Countries – UNDESA
- A Guide to Carbon Pricing and Fossil Fuel Subsidy Reform – UNDP

### Knowledge Partners and Programmes

- Partnership for Market Implementation – World Bank

## 2.11 Environmental bonds and financial assurance

Environmental bonds and other financial assurance mechanisms are policies that require companies to provide upfront financial guarantees to cover the costs of mine-site rehabilitation and environmental restoration such that taxpayers are not left with the financial burden of environmental rehabilitation should a company become insolvent or cease operations. The financial assurance typically takes the form of cash deposits, bank guarantees, or insurance bonds, calculated based on the expected cost of environmental remediation. Regulations often require periodic reviews and adjustments of the bond value to reflect changes in site conditions or rehabilitation requirements.

### Knowledge Resources and Tools

- Global Review: Financial assurance governance for the post-mining transition – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Financial assurance for resource activities – Queensland Government
- Financial concepts for mine closure – ICMM
- Mine Closure: A toolbox for Governments – The World Bank
- Mine closure checklist for governments – Asia Pacific Economic Cooperation
- Methodological Guide for prioritizing and evaluating environmental remediation projects: managing mining legacies – ECLAC
- IRMA Standard - Guidance on Reclamation and Closure: financial assurance – IRMA

### Knowledge Partners and Programmes

- Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- UNEP Financial Initiative

## 2.12 Circular economy initiatives

Governments can promote circular economy approaches for critical energy transition minerals through policies that encourage resource efficiency, waste reduction, and material recovery, including: regulations that mandate safe recycling and use of mining by-products; providing financial incentives, such as tax benefits or grants, to encourage the adoption of circular technologies; investing in R&D to develop new methods for material recovery and waste avoidance and minimisation; facilitating collaborations between government agencies and private sector stakeholders to drive the implementation of circular economy initiatives; and implementing capacity-building and education programmes, promoting technological transfer and capacity building for developing countries. Promotion of circular economy should be accompanied by strong safeguards and prevention mechanisms to ensure human rights, including children's rights, are not put at risk.

### Knowledge Resources and Tools

- Critical Transitions: Circularity, equity, and responsibility in the quest for energy transition minerals - Working Paper (UNEP)
- Nose to Tail Mining: A circular solution for sand supply and tailings reduction at scale
- Circular Economy and Metal Recovery: Electric and electronic waste – ECLAC (in Spanish)
- Circular Economy in Peruvian mining – ECLAC (in Spanish)
- Nairobi Declaration on the Environmentally Sound Management of Electrical and Electronic Waste
- Children and Digital Dumpsites: E-waste exposure and child health - WHO
- Circularity in mineral and renewable energy value chains – CCSI
-

### Knowledge Partners and Programmes

- International Resource Panel
- Critical Minerals and Circular Economy Research Alliance – Queensland Government
- Coalición de Economía Circular – Circular Economy Coalition for Latin America and the Caribbean
- Circular Jobs Initiative – Circle Economy
- African Circular Economy Alliance

**Box 4** **Case study of Principle 2**

## Using life-cycle assessments in policy making, in Sweden and Finland

A life cycle assessment is a tool that can serve decision-making through capturing environmental impacts on a variety of environmental, social, and economic areas of protection throughout the life cycle of products and services that use CETM. This enables decision-makers to avoid and, where necessary, weigh decisions that may result in burden shifting or displacement of impacts across environmental categories, locations, people and communities, and along the life cycle of these products or services. Life cycle assessments (LCAs) continue to develop models to better assess impacts on biodiversity and people.

For example, in Europe, life cycle assessments are currently being used in policy making. The Swedish Environmental Protection Agency (Naturvårdsverket) has been using life cycle assessments to evaluate the environmental impacts of various products and services. For instance, the agency has conducted LCAs to assess the environmental performance of biofuels, construction materials, and consumer products. Finland has also incorporated life cycle assessment into its environmental policies to promote sustainable development. The Finnish Environment Institute (SYKE) has conducted LCAs to evaluate the environmental impacts of different products and services, including building materials, transportation systems, and energy production methods. Finland's government uses the results of these assessments to inform policy decisions and promote environmentally sustainable practices.

**Life-cycle assessments** help avoid impact shifting **across people, places, and ecosystems.**


© Swedish Life Cycle Center

# 3

# Justice and equity must underpin mineral value chains

The urgency of the energy transition must not justify irresponsible practices. All people are entitled to fair treatment, legal redress and the opportunity to actively, freely and meaningfully participate in decision-making processes.

The Guiding Principles highlight the importance of decent work, adequate universal social protection, and opportunities for skills development; the right to freedom of association, the right to collective bargaining, the elimination of forced and child labour, the eradication of workplace discrimination, fair wages and limits on working hours, and the right to a healthy environment; gender equity, including equal job opportunities, pay and benefits; and the transformation of artisanal and small-scale mining into legal, formalized, professional and safe activities.

The urgency of the energy transition **must not justify irresponsible practices.**

## Principle 3 Relevant commitments and standards

UNECE Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters

UN Declaration on Human Rights Defenders

UN Framework Principles on Human Rights and the Environment

Rio Declaration of the United Nations Conference on Environment and Development (Prin. 10)

Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean | Economic Commission for Latin America and the Caribbean

ILO Declaration on Fundamental Principles and Rights at Work

ILO Convention C100 – Equal Remuneration

ILO Convention C111 – Discrimination (Employment and Occupation)

ILO Convention C190 – Violence and harassment in the world of work

ILO Convention C029 – Forced Labour Convention

ILO Convention C182 on Worst Forms of Child Labour

ILO Convention C155 – Occupational Safety and Health Convention

ILO Convention C170 and Recommendation R177 – Chemicals

ILO Recommendation R190 – Worst Forms of Child Labour

ILO Convention C176 and Recommendation R183 – Safety and Health in Mines

Mosi-oa-Tunya Declaration on Artisanal and Small-scale Mining, Quarrying and Development

## 3.1 Meaningful and informed participation

Public participation is a cornerstone of democracy and human rights, ensuring that individuals and communities can engage in decision-making processes that impact them. International environmental law and human rights law mandate meaningful and informed participation including in environmental decision-making. Rio Principle 10 emphasizes that environmental issues are best handled with the participation of concerned citizens. It is considered a key pillar of good environmental governance, because drawing on the diverse interests, needs and expertise of all people offers important insights for inclusive and sustainable environmental action enhancing the quality and implementation of decisions concerning the environment and health.

Ensuring meaning and informed participation entails a shift from perceiving stakeholders as passive actors to rights-holders and active agents in development processes. It involves the active engagement of all individuals and communities potentially affected by development or mining projects, to participate in such projects through to its elaboration, implementation, and evaluation. Meaningful and informed participation must be operationalised by legislation and should be included in corporate policy.

### Knowledge Resources and Tools

- International Covenant on Civil and Political Rights
- Guidelines for States on the effective implementation of the right to participate in public affairs – UN OHCHR
- UN Framework Principles on Human Rights and the Environment
- Declaration on the Right to Development
- Guidelines for the Development of National Legislation on Access to information, Public Participation and Access to Justice in Environmental Matters – UNEP
- Putting Rio Principle 10 into Action: An Implementation Guide for the UNEP Bali Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters – UNEP
- Active, free and meaningful participation in development – OHCHR
- Maastricht Recommendations on Promoting Effective Public Participation in Decision-making in Environmental Matters – UN Economic Commission for Europe, Aarhus Convention
- Women's active, free and meaningful participation in development with emphasis on decision-making – Expert Mechanism on the Right to Development
- Special Rapporteur on the Right to Development - Guidelines and Recommendations on the Practical Implementation of the Right to Development – OHCHR
- Guidance Note for United Nations Resident Coordinators and Country Teams: Supporting governments to better respect, promote and protect environmental human rights defenders

### Knowledge Partners and Programmes

- Environmental Rights Initiative – UNEP
- Environmental Governance Programme for Sustainable Natural Resource Management – UNDP and SEPA

## 3.2 Gender equality plans and diversity and inclusion policies

Gender equality plans and diversity and inclusion policies aim to foster a more inclusive and equitable workplace. They may be a requirement of government legislation or corporate policy and typically begin by securing leadership commitment to drive cultural change and allocate resources. Gaps and areas for improvement can be identified by assessing the organisation's current gender landscape. A tailored strategy is then developed, including accountability measures. Policies supporting gender equality, such as fair recruitment, retention, pay equity, and working conditions, support for unpaid care work, gender-targeted training, anti-harassment measures, gender-specific health, safety and sanitation facilities and measures are established or revised. Training programs are implemented to address inclusive behaviours.

### Knowledge Resources and Tools

- Gender in mining governance: Opportunities for policy-makers – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Gender in mining governance: An annotated bibliography – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- A guide to gender and mining – GIZ
- Gender, equality and inclusion for a just transition in climate action – International Labour Organization
- Gender inequality runs deep in mining – Responsible Mining Foundation
- Equitable, Diverse, and Inclusive Workplaces Protocol – TSM
- Gender Equality and Gender-Based Protections in Large Scale Mining – IRMA

### Knowledge Partners and Programmes

- Gender and mining governance: Massive Open Online Course – UNDP
- Women and the Mine of the Future – IGF

## 3.3 Indigenous Peoples' co-ownership and equity participation

Indigenous Peoples' co-ownership and equity participation in the mining industry refers to arrangements that allow Indigenous Peoples to hold ownership stakes in mining and mineral processing projects, as equal partners and protect their human rights, instead of stakeholders in development projects. Various types of equity arrangements exist, including direct equity ownership, where Indigenous Peoples, through their own governance systems, acquire shares in mining projects; royalty-based equity, which ties financial benefits to production; and partnership or joint venture models, where Indigenous Peoples share management responsibilities and revenues. These arrangements can provide financial returns, decision-making power, and long-term economic opportunities.

### Knowledge Resources and Tools

- Extractive industries and Indigenous Peoples - Report of the Special Rapporteur on the rights of Indigenous Peoples, James Anaya*
- Indigenous co-ownership of mining projects: a preliminary framework for the critical examination of equity participation – Centre for Social Responsibility in Mining

### Knowledge Partners and Programmes

- UN Special Rapporteur on the rights of Indigenous Peoples
- Alberta Indigenous Opportunities Corporation

## 3.4 Fair negotiation of contracts

Power imbalances in contract negotiations between companies and public authorities are common and fairer outcomes can be supported through: building the capacity of negotiation teams; understanding the full economic value of mineral resources; establishing clear legal and regulatory frameworks to provide consistency and transparency during negotiations; engaging relevant public stakeholders to identify needs and objectives; shifting from adversarial negotiation paradigms to collaborative approaches; and encouraging transparency and advocating for the rights and priorities of governments, Indigenous Peoples and other rights holders.

### Knowledge Resources and Tools

- Handbook on Mining Contract Negotiations for Developing Countries – IISD
- CONNEX Guiding Principles towards Sustainable Development
- OECD Guiding Principles for Durable Extractives Contracts
- Principles for Responsible Contracts: Integrating the Management of Human Rights Risks into State-Investor Contract Negotiations – Guidance for Negotiators
- OHCHR Training Modules on the Principles for Responsible Contracts: Integrating the management of human rights risks into State-investor contract negotiations
- Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements

### Knowledge Partners and Programmes

- Contract negotiation support – CONNEX
- Negotiation Support Portal for Host Governments – Columbia Center on Sustainable Investment

## 3.5 Occupational health and safety management

Governments should mandate the implementation of a comprehensive Occupational Health and Safety Management System or equivalent framework, which includes regular audits to assess risk controls, ensure compliance, and drive continuous safety improvements. These measures aim to uphold high safety standards, minimize operational risks, and protect worker health across the mining sector. In addition, companies may be required to perform regular reviews and audits of occupational, health and safety risks and incidents. Incident audits in the mining industry involve the systematic evaluation of safety management systems and practices following an incident to prevent recurrence. The process typically includes a thorough investigation to identify root causes, analyse contributing factors and propose corrective actions. Some jurisdictions also require mandatory OHS competencies for mine managers and workers. These policies require managers to hold relevant qualifications, demonstrate substantial industry experience, and possess specialized competencies in areas such as risk management, operations oversight, and hazardous activities like blasting. Workers must also complete safety training relevant to their roles.

### Knowledge Resources and Tools

- Occupational health and safety management systems – ISO 45001:2018
- Code of practice on safety and health in opencast mines – International Labour Organisation
- Safe, Healthy, and Respectful Workplaces Protocol – TSM

### Knowledge Partners and Programmes

- Minerals Industry Safety and Health Centre

## 3.6 Cultural heritage management plans

A Cultural Heritage Management Plan is a strategic tool to identify, preserve, and manage tangible and intangible cultural heritage affected by mining operations. It outlines mitigation measures, stakeholder engagement strategies, and emergency procedures to avoid or minimize adverse impacts. Plans consider human rights Impact assessments and are typically integrated into broader environmental and social management systems. They may be required by legislation, corporate policy, international standards or the standards of providers of finance. These plans are best prepared and implemented using participatory approaches, particularly with the effective participation of Indigenous Peoples and other cultural rights holders.

### Knowledge Resources and Tools

- Development and cultural rights: the principles – UN Special Rapporteur on Cultural Rights
- Cultural Heritage Standard - IFC
- Cultural Heritage, Social Way Toolkit – Anglo American

### Knowledge Partners and Programmes

- UN Special Rapporteur on Cultural Rights
- Indigenous Cultural Heritage Management in the Australian Resources Sector Training Programme – Centre for Social Responsibility in Mining

## 3.7 Formalization of ASM

ASM can be associated with unsafe work practices, significant environmental impacts, conflict, illicit financial flows, and human rights risks. These challenges are in part attributable to the lack of oversight and the informality of the sector, whereby miners often face prohibitive barriers to formal licensing procedures and business practices. Regulatory improvements, coupled with capacity-building programs, have been promoted as a means to encourage formalisation to improve responsibility. However, policies to transform and/or formalise ASM have too often been designed and implemented without the involvement of artisanal and small-scale miners or their representative associations. As ASM is a largely poverty driven activity, compliance and enforcement approaches alone have rarely led to improvements in environmental and social outcomes and can escalate impoverishment risks. Alternatively, participatory engagement with miners can assist to transform their circumstances and practices, including through the establishment of ASM support units and extension services.

### Knowledge Resources and Tools

- Handbook on Developing National ASGM Formalization Strategies within National Action Plans – UN Environment, Global Mercury Partnership and UNITAR
- Guidance for Governments: Managing artisanal and small-scale mining – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Achieving Sustainable and Inclusive Artisanal and Small-Scale Mining (ASM): A Renewed Framework for World Bank Engagement – The World Bank

### Knowledge Partners and Programmes

- Delve Exchange and The ASM Academy – The World Bank and Global Centre for Mineral Security
- International Council for Artisanal and Small-scale Mining
- Alliance for Responsible Mining (ARM)
- Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- ACP-EU Development Minerals Programme – UNDP
- PlanetGold – UNEP implemented in partnership with UNIDO, UNDP and Conservation International


# 4

## Development must be fostered through **benefit sharing, value addition and economic diversification**

All countries, in particular developing countries, should have an equitable opportunity to participate in, and benefit from, mineral value chains. Overcoming dependence on mineral exports through value addition and beneficiation can spur industrialization.

The Guiding Principles emphasise fair sharing of sector revenues that are effectively managed; enhanced local content and the development of small and medium sized enterprises; the economic development of industries that use processed mineral commodities as inputs and manufacture products; enhanced government capacities to implement industrial policy; equitable benefit-sharing; fair taxation and royalties utilized for the public good; stable legal frameworks, access to justice, respect for the rule of law, and anti-corruption and anti-bribery frameworks; and multilateral cooperation to support technology transfer, infrastructure provision, regional coordination, scientific research and development, as well as skills and knowledge transfer. Under international biodiversity and human rights law, fair and equitable benefit-sharing is in fact an international obligation.[12]

**All countries, in particular developing countries,** should have an equal opportunity **in mineral value chains.**

12 Morgera, E. Fair and equitable benefit-sharing in international law (OUP, 2024).


## Principle 4 Relevant commitments and standards

UN Declaration on the Right to Development

Convention on Biological Diversity

Africa Mining Vision

Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development Mining Policy Framework

African Mineral and Energy Resources Classification and Management System (AMREC)

Pan African Resource Reporting Code (PARC)

ILO Tripartite Declaration of Principles for Multinational Enterprises and Social Policy (MNE Declaration)

ILO Convention C140 – Paid Education Leave

ILO Convention C142 – Human Resources Development

ILO Recommendation R195 – Human Resources Development

ILO Recommendation R208 – Quality Apprenticeships

## 4.1 Local content and employment policies

Local content and employment policies refer to measures set by governments to encourage or require companies to utilize domestic resources—such as labour, services, and supplies—to spur local enterprise development and value addition and maximize benefits for host communities and national economies. Specific measures include: establishing clear objectives for local procurement, integrating supportive measures into legal frameworks, and setting realistic targets for sourcing goods and services from domestic suppliers; creating or improving supplier databases, incentivizing partnerships with local businesses, and strengthening infrastructure and financing options for small enterprises; promoting workforce development programs that equip citizens with relevant technical skills; and introducing regulation to require or incentivize companies to hire and train local workers, with robust monitoring and evaluation to ensure targets are met.[13]

### Knowledge Resources and Tools

- Guidance for Governments: Local content policies – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Towards the Development of a Local Content Policy Framework for Ethiopia's Mining Sector – African Natural Resources Centre, African Development Bank.

### Knowledge Partners and Programmes

- Mining Local Procurement Reporting Mechanism – Mining Shared Value Programme, Engineers Without Borders Canada and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

13 Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2018). IGF Guidance for Governments: Local content policies. Winnipeg: IISD.

**Box 5** **Case study of Principle 4**

## ILO's Tripartite Declaration of Principles for Multinational Enterprises and Social Policy

Policies promoting local content are increasingly being implemented, with 17 African countries* having already adopted similar frameworks.[14] Recent amendments, as seen in the case of Angola (2020) and Tanzania (2022)[15], have further widened the scope, bringing every entity, whether contractor or indirect supplier in the mining supply chain, under the framework's purview. While this indicates the growing recognition of harnessing positive spillover effects in mining supply chains, the adoption of a policy or framework itself does not guarantee the desired positive impact; instead, empirical data has shown that there may be adverse distortionary effects at the global and national levels in the absence of a conducive business ecosystem.

Resource-dependent countries should, therefore, focus on creating and strengthening an enabling environment for the extractive industries to foster domestic linkages and generate more and better jobs in their supply chains. Based on an evidence-based approach, governments can streamline regulations, create a supplier database, support access to finance, and address skill shortages to realise long-term sustainable development. Countries and relevant stakeholders should generally strive to align their practices with international standards and principles. In this regard, ILO's Tripartite Declaration of Principles for Multinational Enterprises and Social Policy (MNE Declaration) is an instrument that provides specific recommendations to governments, enterprises, and organizations of employers and workers to maximise the positive contribution that multinationals can make to economic and social progress and to minimize and resolve the difficulties their various operations may cause.

14 United Nations Conference on Trade and Development. Economic Development in Africa Report 2023. Economic Development in Africa Report, 2023.

15 Sipemba, 'Amendments to the Local Content Regulations'

*** 17 African countries:**

Angola, Botswana, Burkina Faso, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Ghana, Guinea, Mali, Mozambique, Namibia, the Niger, Sierra Leone, South Africa, the United Republic of Tanzania, Zambia and Zimbabwe

## 4.2 Community Development Agreements

Community Development Agreements (CDA) are formal, negotiated instruments between mining companies and affected communities that set out commitments on local development, revenue sharing and other forms of benefit-sharing, as well as the mitigation of negative impacts. They typically address governance structures, roles, responsibilities, and dispute resolution procedures to ensure that communities benefit from mining projects.[16] CDAs should be informed by human rights and environmental impact assessments. They are similar to but distinct from Impact and Benefit Agreements, which are negotiated between resource developers and Indigenous Peoples.

### Knowledge Resources and Tools

- Mining Community Development Agreements Source Book – World Bank
- Community development agreement: model regulations and example guidelines – World Bank
- Community Development Agreement Library
- Why agreements matter – Rio Tinto

### Knowledge Partners and Programmes

- Centre for Social Responsibility in Mining
- Columbia Centre for Sustainable Investment

16 World Bank, 2012. Mining Community Development Agreements Source Book. March.

**Box 6** **Case study of Principle 4**

## The Oyu Tolgoi Cooperation Agreement

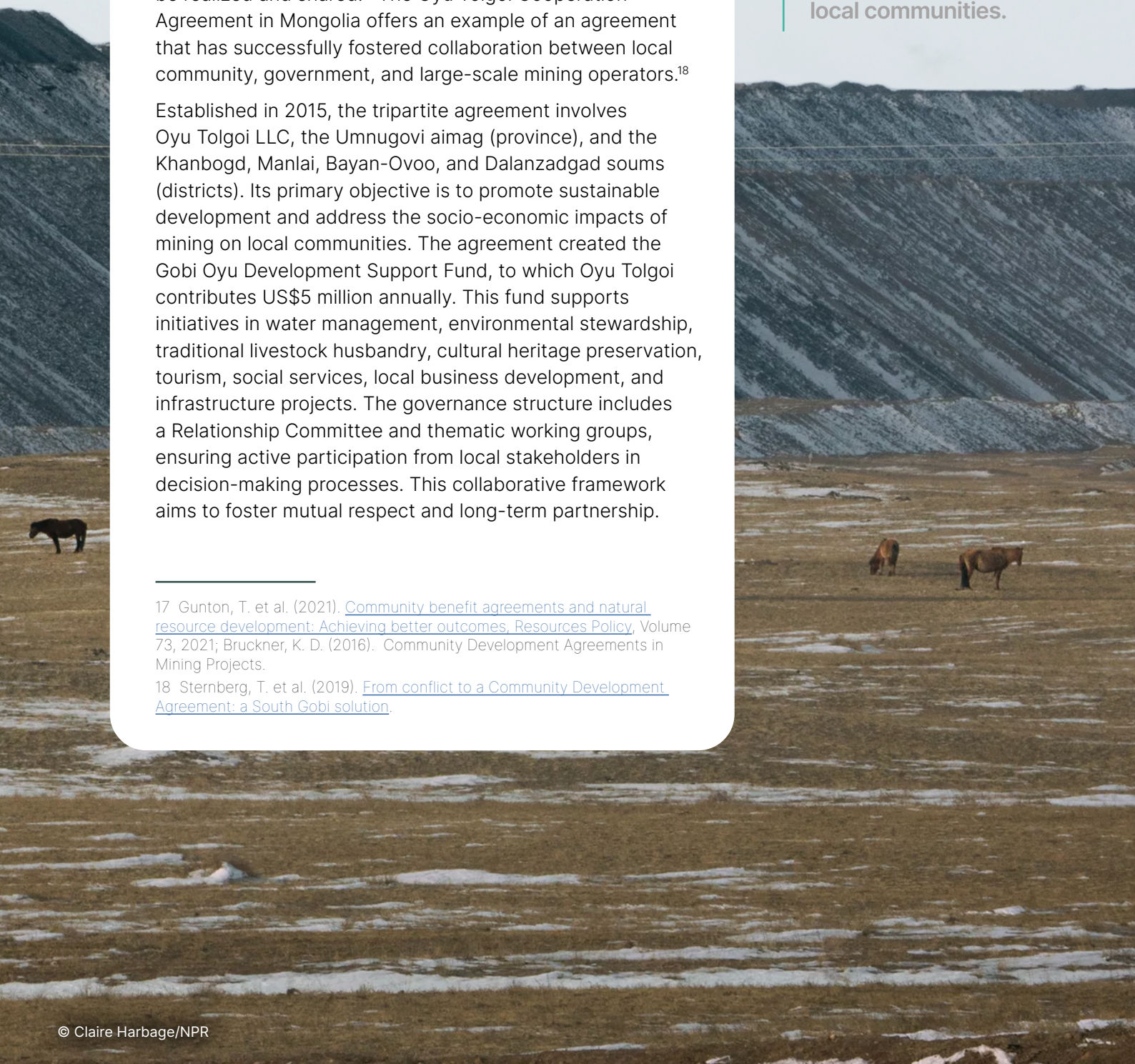
Community development agreements (CDAs) are legally binding mechanisms that establish the terms for mineral resources development and management, including how adverse impacts will be mitigated and how benefits will be realized and shared.[17] The Oyu Tolgoi Cooperation Agreement in Mongolia offers an example of an agreement that has successfully fostered collaboration between local community, government, and large-scale mining operators.[18]

Established in 2015, the tripartite agreement involves Oyu Tolgoi LLC, the Umnugovi aimag (province), and the Khanbogd, Manlai, Bayan-Ovoo, and Dalanzadgad soums (districts). Its primary objective is to promote sustainable development and address the socio-economic impacts of mining on local communities. The agreement created the Gobi Oyu Development Support Fund, to which Oyu Tolgoi contributes US$5 million annually. This fund supports initiatives in water management, environmental stewardship, traditional livestock husbandry, cultural heritage preservation, tourism, social services, local business development, and infrastructure projects. The governance structure includes a Relationship Committee and thematic working groups, ensuring active participation from local stakeholders in decision-making processes. This collaborative framework aims to foster mutual respect and long-term partnership.

**CDAs address** the socio-economic impacts of mining on **local communities.**

17 Gunton, T. et al. (2021). Community benefit agreements and natural resource development: Achieving better outcomes, Resources Policy, Volume 73, 2021; Bruckner, K. D. (2016). Community Development Agreements in Mining Projects.

18 Sternberg, T. et al. (2019). From conflict to a Community Development Agreement: a South Gobi solution.



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## 4.3 Indigenous Land Use Agreements / Impact and Benefit Agreements

The outcomes of an FPIC process, including relevant findings from environmental assessments, HRIAs, and fair and equitable benefit-sharing negotiations, are usually enshrined in a contract or legally binding agreement between Indigenous Peoples and a mining company.

An Indigenous Land Use Agreement (ILUA) is a legally binding agreement used in Australia for the use and management of land or waters negotiated between Indigenous Peoples recognised as native title holders and other stakeholders—often mining companies. ILUAs can address access arrangements, compensation, environmental safeguards, cultural heritage protection, and consent for mining activities on Indigenous lands.

An Impact and Benefit Agreement (IBA) is a negotiated contract used in Canada between one or more Indigenous communities and a mining proponent. It sets out how the potential adverse impacts will be prevented or mitigated, and describes the social and economic benefits (e.g., employment, training, revenue sharing) that will accrue to beneficiaries. It also often contains provisions on governance, monitoring, and dispute resolution.[19]

Both ILUAs and IBAs serve as examples for the negotiation of Indigenous agreements in other jurisdictions even while they are specific to the legislative circumstances of Australia and Canada.

### Knowledge Resources and Tools

- Indigenous Land Use Agreements – National Native Title Tribunal, Australian Government
- Impact and Benefit Agreement Community Toolkit – Walter & Duncan Gordon Foundation
- Indigenous Peoples and Mining Good Practice Guide – International Council on Mining and Metals
- Community Development Agreement Library

### Knowledge Partners and Programmes

- Centre of Expertise on Impact and Benefit Agreements (CEIBA)
- Indigenous Peoples and Mining Resources Hub - Centre for Social Responsibility in Mining
- Securing Indigenous Peoples' Rights in the Green Economy (SIRGE) Coalition (in collaboration with Cultural Survival and First Peoples Worldwide

19 Gibson, G. and O'Faircheallaigh, C., 2010. IBA Community toolkit. Negotiation and Implantation of Impact and Benefit Agreements. Walter & Duncan Gordon Foundation, Toronto.

## 4.4 Industrial policies to promote value addition

Industrial ~~policies~~ that aim to enhance value addition and foster domestic processing and beneficiation include: imposing export restrictions on unprocessed minerals, to encourage local processing industries; providing fiscal incentives, such as tax breaks or subsidies, to attract investment in mineral processing facilities and promote downstream industries; establishing industrial parks dedicated to mineral processing to create economies of scale and attract businesses; supporting technology transfer and workforce development to equip local industries; and developing clear national strategies aligned with economic feasibility and an analysis f the costs and benefits.

### Knowledge Resources and Tools

- Technical note on critical minerals: Supply chains, trade flows and value addition – UNCTAD
- Six Keys to Unlocking Equitable Value Addition in Mining – Natural Resource Governance Institute
- How industrial policies can complement future sustainable resource extraction in Africa – International Growth Centre
- Technical note on critical minerals – UNCTAD

### Knowledge Partners and Programmes

- UNCTAD – Commodities Branch
- Global Alliance for Responsible and Green Minerals – UNIDO

**Box 7** **Case study of Principle 4**

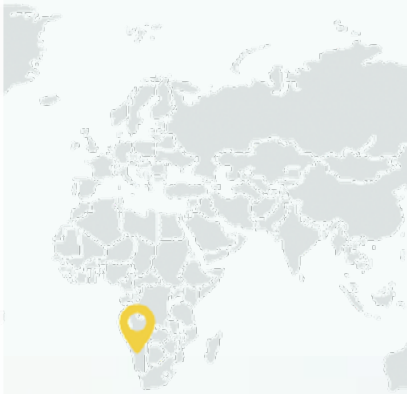
## The Mineral Beneficiation Strategy for Namibia

Aligning industrial policies with strategies for enhancing value addition in critical energy transition minerals value chains can support diversification and broader economic development. To this end, it is important to integrate industrial policies across various sectors, including education, finance, and environment to ensure a coherent and sustainable approach to economic planning.

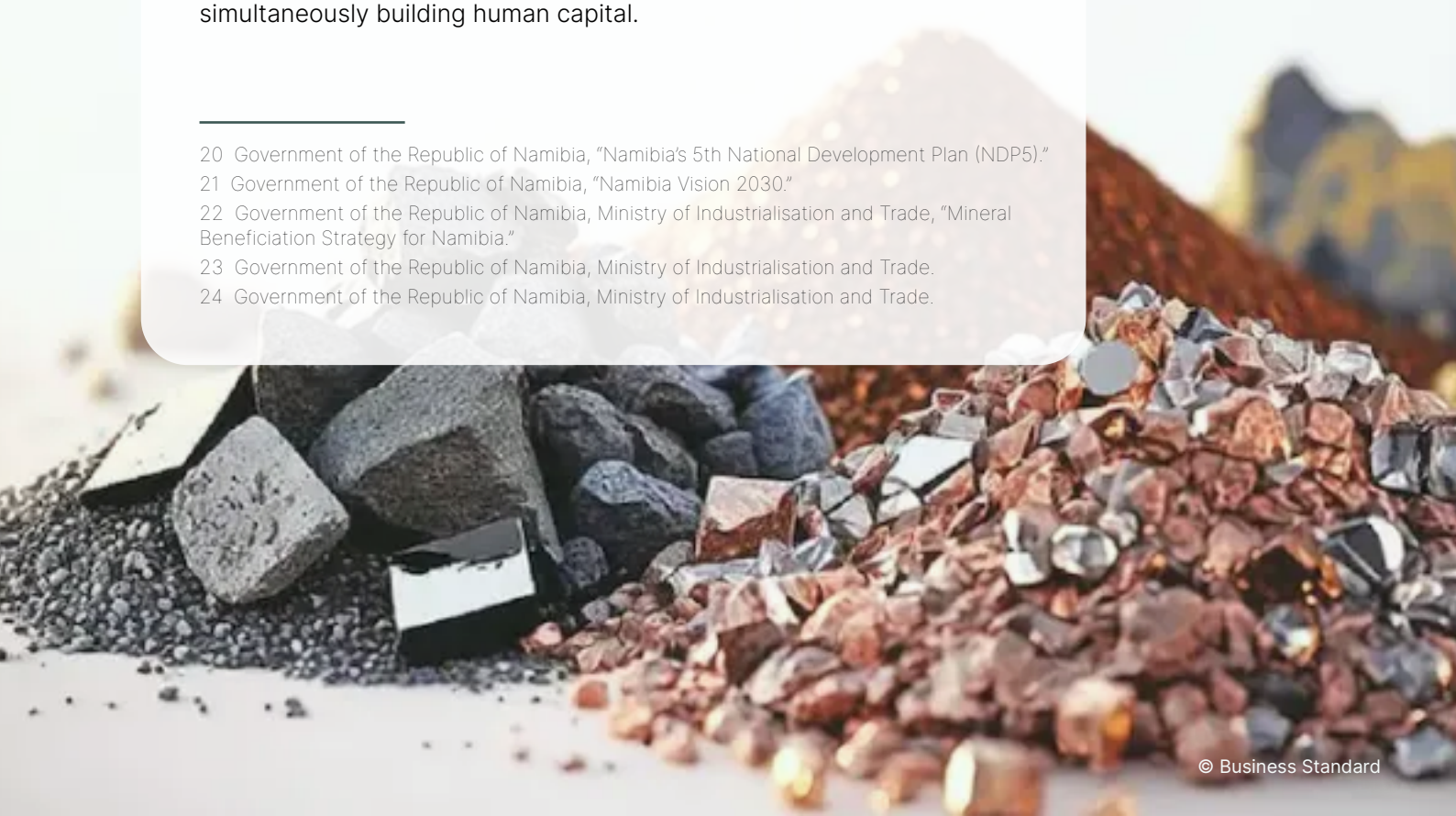
Namibia serves as an example of policy coherence to drive mining value addition and diversification, detailed in their National Development Plan 5,[20] Vision 2030,[21] and other key strategic documents, including the Mineral Beneficiation Strategy for Namibia 2021.[22] The latter provides a roadmap for value addition and diversification, covering elements such as mineral governance improvements, local beneficiation and manufacturing, skills development, investment promotion, technology access, and support for the commercialization of beneficiated products. Each area is supported by corresponding activities, including adjustments in the regulatory framework, stakeholder engagement, improved infrastructure, and local capacity building.[23]

Efforts for local capacity building, for instance, involve aligning industrial and education policies, including assessments to identify skills needed for diversification goals, training programmes, and the establishment of training centres, and dedicated research and development institutions for mining and mineral processing and manufacturing.[24] This is an important area for synergy that would serve diversification efforts while simultaneously building human capital.

**Integrating industrial policies** across sectors is key to enhancing value addition.



20 Government of the Republic of Namibia, "Namibia's 5th National Development Plan (NDP5)."
21 Government of the Republic of Namibia, "Namibia Vision 2030."
22 Government of the Republic of Namibia, Ministry of Industrialisation and Trade, "Mineral Beneficiation Strategy for Namibia."
23 Government of the Republic of Namibia, Ministry of Industrialisation and Trade.
24 Government of the Republic of Namibia, Ministry of Industrialisation and Trade.



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**Box 8** **Case study of Principle 4**

## African Mineral Resources Classification and Management System - Pan-African Resource Reporting Code (AMREC-PARC)

The African Union's African Mineral Resources Classification and Management System (AMREC) and Pan-African Resource Reporting Code (PARC), developed under the African Minerals Development Centre (AMDC), is a regionally tailored system for sustainable resource classification and reporting. Rooted in the UN Framework Classification and aligned with UN Resource Management System principles, PARC equips African countries with a harmonized, transparent and regionally owned system to manage mineral resources, enhance value addition, and ensure environmental and social safeguards. Its application facilitates responsible investment, improves data integrity and supports regional cooperation, aligning with the Africa Mining Vision. By fostering regional standards, PARC advances equitable resource governance and strengthens Africa's strategic voice in global minerals value chains.

**PARC equips African countries with**

**a harmonized, transparent and regionally owned system**

to manage mineral resources, enhance value addition, and ensure environmental and social safeguards.

© African Mineral and Energy Resources Classification and Management System (AMREC)

## 4.5 Regional and country mining visions

Developing a regional, continental or country mining vision involves creating a strategic framework that can guide the sustainable development of mineral resources to foster broad-based economic growth and social development. Adopted by African Union Heads of State in 2009, the Africa Mining Vision is a continental framework aimed at ensuring the transparent, equitable, and optimal exploitation of Africa's mineral resources. Its goal is to underpin sustainable growth and socio-economic development across the continent, encourage policy alignment, share lessons, and improve standards and outcomes across the continent. It is accompanied by country-level mining visions that serve as a tool to domesticate the principles of the AMV at the national level. This includes a multi-stakeholder consultative process to formulate a shared vision on how mineral resources can promote broad-based development and structural transformation within a specific country. ASEAN is currently developing an ASEAN Minerals Development Vision.

### Knowledge Resources and Tools

- Africa Mining Vision – African Union
- Managing Mining for Sustainable Development – UNDP and UNEP
- Capturing Mineral Revenues in Zambia: Past Trends and Future Prospects – UNDP, EU-UN Global Partnership on Land, Natural Resources and Conflict
- Country mining vision guidebook – UN Economic Commission for Africa
- Strengthening ASEAN Cooperation in Minerals: Development Prospects of ASEAN Minerals Cooperation – ASEAN
- African Mineral and Energy Resources Classification and Management System (AMREC)
- Pan African Resource Reporting Code (PARC)
- The 2050 Mining Strategy of Chile (in Spanish)
- The National Development Plan for the Mining Sector (2020-2030) of Peru (in Spanish)

### Knowledge Partners and Programmes

- African Minerals Development Centre
- ASEAN Minerals Cooperation

**Box 9** **Case study of Principle 4**

## The National Strategy of Lithium, Chile

Achieving value addition and diversification in commodity-dependent developing countries demands a comprehensive policy framework built on broad-based stakeholder engagement and a long-term vision. Strengthening industries' capacity to add value frequently requires coordinated action and strategic plans. These efforts can be integrated into a broader national strategy that reflects a shared consensus and high-level commitment at the national level.

The National Strategy of Lithium in Chile, promotes increased State participation across the lithium value chain, from exploration to manufacturing, through the creation of a National Lithium Company.[25] Additionally, it includes the establishment of a Public Technological and Research Institute of Lithium and Salt Flats, which will focus on capacity building and research to improve the extraction, production, and value-addition processes of lithium.

Policy coordination is set to be delegated by a dedicated committee, presided over by the Ministry of Mining, and involving relevant ministries, including the Ministry of Economy, Development, Tourism, the Ministry of Finance, the Ministry of Foreign Affairs, the Ministry of Environment, and the Ministry of Science, Technology, Knowledge, and Innovation.[26] The Production Development Corporation[27] (CORFO), a State-owned enterprise, is central to the aims of the policy, fostering partnerships with the private sector that prioritise domestic value addition.

Beyond the public sector, the strategy seeks to actively engage other stakeholders to ensure responsible development, particularly in light of environmental and social concerns. Since lithium extraction occurs in salt flats rich in biodiversity in or near Indigenous territories, adherence to environmental, social, and governance (ESG) standards is of the utmost importance. Thus, the strategy envisages consultation between the government, mining companies, local communities, Indigenous Peoples, academia, and scientific institutions, among others, to incorporate their interests and perspectives into the decision-making process.

**A comprehensive policy and a long-term vision** are demanded for value addition in **commodity-dependent developing countries.**

25 This National Lithium Company is envisioned to be established through lithium-dedicated subsidiaries of state-owned mining companies Codelco and Enami.

26 Government of Chile, Ministry of Economy, Development and Tourism, "Consejo Corfo Aprueba Creación de Comité Del Litio y Salares."

27 CORFO is the Chilean Economic Development Agency that promotes economic development, investment, innovation, and entrepreneurship in the country.

## 4.6 Progressive fiscal regimes

Progressive fiscal regimes are designed to collect more revenue from mining projects during favourable market conditions, or when projects are more profitable. These schemes are designed to respond to market fluctuations while maintaining fairness and economic efficiency, and as such may lead to more equitable resource wealth return to the state and help maintain project viability during the low points of mineral price cycles. Instruments may include price-based sliding-scale royalty schemes, or profit-based and resource rent taxes, which are progressively activated at higher profit levels. They aim to balance revenue timing, investment risk, and profitability, and promote neutrality to attract investment. Hybrid schemes that include minimum taxation arrangements can place a lower floor on state revenue return. Careful attention needs to be paid to issues such as transfer pricing, trade misinvoicing, illicit financial flows, thin capitalisation and gold plating.[28]

### Knowledge Resources and Tools

- Primer: Fiscal Regime Design – Natural Resources Governance Institute
- The Future of Resource Taxation: 10 policy ideas to mobilize mining revenues – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Toolkit for Transfer Pricing Risk Assessment in the African Mining Industry – GIZ and African Tax Administration Forum
- Mineral royalties and other mining- specific taxes – International Mining for Development Centre
- Natural Resource Revenue Sharing – UNDP and NRGI
- Conflict Prevention in Resource-Rich Economies (macroeconomic and fiscal) – EU and UN

### Knowledge Partners and Programmes

- Global Mining Tax Initiative – Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- Taxation and revenue management – Natural Resource Governance Institute

28 NRGI, 2015. Fiscal Regime Design. March.

## 4.7 Resource mapping

Developing a resource mapping program involves comprehensive geological surveying, advanced remote sensing, the establishment of robust geological information databases, and capacity-building to exchange knowledge and develop skills. Such initiatives aim to enhance knowledge of mineral endowments, promote sustainable resource management, and facilitate informed decision-making. State resource mapping is typically complemented by investment in research and capacity building and partnerships between universities, geological surveys and the private sector.

### Knowledge Resources and Tools

- Management of Public Geoscience Data – International Mining for Development Centre

### Knowledge Partners and Programmes

- Pan-African Support to the EuroGeoSurveys – Organisation of African Geological Surveys (EGS-OAGS) Partnership (PanAfGeo)
- West African Exploration Initiative (WAXI) and South American Exploration Initiative (SAXI)
- Critical Minerals Mapping Initiative (CMMI) – Geoscience Australia, United States Geological Survey, Geological Survey of Canada

## 4.8 Sovereign wealth funds

Sovereign wealth funds (SWFs) are state-owned investment entities designed to manage revenues from natural resources. SWFs can help to stabilize economies against commodity price volatility, save wealth for future generations, and diversify national economies. They may invest funds into the mining sector, related infrastructure, or global markets to ensure sustainable returns and mitigate adverse domestic economic effects from commodity revenues. Examples include Botswana's Pula Fund and Chile's Economic and Social Stabilization Fund.

### Knowledge Resources and Tools

» Sovereign Wealth Funds: Generally accepted principles and practices ('Santiago Principles') – International Forum of Sovereign Wealth Funds

### Knowledge Partners and Programmes

» International Forum of Sovereign Wealth Funds

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# 5

# Investments, finance and trade must be responsible and fair

Responsible investment, access to finance, and fair trade are vital enablers of economic diversification and inclusive development in mineral-producing economies but are currently not accessible. Access to finance is currently limited and targeted efforts are required to enhance financial inclusion, promote fair trade and responsible investment that support sustainable development. The Guiding Principles call for access to finance on inclusive and affordable terms, including through development finance, low-interest loans, project finance, blended finance, grants and credit guarantees; responsible investment frameworks that include environmental, social and governance protections; clear and relevant regulation and policy predictability from governments to support stable investment environments; and support for a rules-based and non- discriminatory multilateral trading system.

**All countries** should have an equal opportunity **in mineral value chains.**

## Principle 5 Relevant commitments and standards

Addis Ababa Action Agenda of the Third International Conference on Financing for Development

UN Principles for Responsible Investment (PRI)

Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework

## 5.1 Access to finance for ASM

Governments can improve access to finance for responsible artisanal and small-scale miners and SMEs by adopting a range of targeted financial mechanisms and supportive policies: formalizing the ASM sector through clear legal and regulatory frameworks, with meaningful participation of artisanal and small-scale miners, enhances its legitimacy and sustainability, thereby improving its ability to attract investment, including from financial institutions; capacity-building programs that provide financial literacy and business management training equip miners with the skills needed to navigate the transition to the formal sector and formal financial systems effectively, and sensitise financial institutions to the sector; specific financial mechanisms such as credit guarantee schemes can reduce lending risks for banks, encouraging them to extend credit to ASM and SMEs; establishing dedicated financial institutions or funds tailored to the needs of these groups can provide products suited to their unique requirements; and linking finance with conformance to sustainability standards can provide additional incentives for responsible business practices.

### Knowledge Resources and Tools

- Improving Access to Formal Finance in Artisanal and Small-scale Gold Mining – Planet Gold
- Achieving Sustainable and Inclusive Artisanal and Small-Scale Mining (ASM): A Renewed Framework for World Bank Engagement – The World Bank
- Access to Finance for Artisanal and Small-scale Miners: Imagining alternatives and creating opportunities

### Knowledge Partners and Programmes

- Delve Exchange and The ASM Academy – The World Bank
- Alliance for Responsible Mining (ARM)

## 5.2 Development-focused investment funds

Development-focussed investment funds such as the Green Climate Fund, Climate Investment Funds and the Adaptation Fund have financed projects in developing countries to support climate action and the renewable energy transition. Investment funds blend grants, concessional loans, and guarantees, lowering financial risks for investors, and making climate-positive projects more viable and scalable. There is potential for development-focussed investment funds to be established to support responsible critical energy transition mineral value chains.

### Knowledge Resources and Tools

- Blended finance funds and facilities – OECD
- Corporate Governance in Latin America and the Caribbean: Use of ESG debt instruments to finance sustainable investments – ECLAC (Spanish)

### Knowledge Partners and Programmes

- Multi-Stakeholder Platform on IIA Reform – UNCTAD Investment Policy Hub
- Investment Policy Framework for Sustainable Development – UNCTAD

**Box 10** **Case study II of Principle 5**

## The Lobito Corridor, Zambia to Angola

Appropriate physical infrastructure around mining sites is essential to maximise economic and social benefits while minimizing negative environmental externalities. This includes robust transport infrastructures such as roads, ports and airports, which is particularly important for landlocked countries that rely on neighbouring countries' infrastructure. Regional integration can help ensure trade connectivity with global markets through transit countries. Infrastructure projects should facilitate the participation of affected communities in development and ensure the fair and equitable sharing of the benefits of development to those around physical infrastructure including along corridor developments.

The Lobito Corridor serves as an illustrative example. The Lobito Corridor project seeks to modernize the railway corridor from Zambia's Copperbelt to Angola's port city of Lobito, providing a crucial trade route for transporting goods, including critical energy transition minerals. The project involves Angola, the Democratic Republic of the Congo, and Zambia, a land-locked country. It is backed by the United States and the European Commission, reflected by a MoU between the five parties to initiate the project.[29] The African Development Bank has committed to raising $1.6 billion in financing, with an additional $500 million contribution.[30]

The revamped Lobito rail corridor is expected to facilitate the trade of critical energy transition minerals and other commodities from Southern and Central Africa, reducing transit times and contributing to the region's economic development. The project is a strategic move to capitalize on the booming demand for critical energy transition minerals needed for the world's transition to clean energy.[31]

29 United States Department of State, "Signing of the Memorandum of Understanding on the Development of the Lobito Corridor and the Zambia-Lobito Rail Line."

30 Bloomberg, "The US and EU Plan $1 Billion-Plus Africa Rail Link for Key Minerals."

31 Sanchez, "Angola Bets on Critical Minerals and the Lobito Corridor."

## 5.3 Government mineral buying programs

Government domestic mineral purchase programs are designed to promote domestic production and value addition, formalize the mining sector, enhance national reserves, and encourage responsible practices. These programs typically involve central banks or government agencies purchasing or procuring directly from producers, providing a reliable and formal market that may offer better prices for miners compared to informal channels. By doing so, they encourage the formalization of the sector, helping miners integrate into the official economy and comply with regulatory frameworks. Many programs include incentives, such as reduced royalties or tax exemptions, to attract participation.

### Knowledge Resources and Tools

- Central Bank Domestic ASGM Purchase Programmes – World Gold Council
- London Principles on Central Bank Artisanal Small-scale Gold Mining Domestic Purchase Programmes – World Gold Council

### Knowledge Partners and Programmes

- London Principles Signatories
- Conseil Congolais de la Batterie (CCB)

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# 6

# Transparency, accountability and anti-corruption measures are necessary to ensure good governance

Transparency, public access to information and accountability are fundamental to good governance and responsible decision-making. The Guiding Principles call for better oversight to detect, avoid and address criminal activities, including organized crime and corruption, illicit financial flows, illegal mining and conflicts of interest; traceability mechanisms and clear regulation; performance standards that are harmonised and interoperable, and that include independent third-party audits, performance-based metrics, equitable distribution of the costs of compliance, and multi-stakeholder design and implementation; and the disclosure of transparent and accessible information, including on environmental and social impacts, mineral prices, production, contracts, licences, permits, revenue, taxes, royalties, payments, beneficial ownership of corporate entities, trade in commodities and resource-backed loans, mapping of geological deposits, as well as decision-making processes.

**Public acess to information** is essential to **responsible decision-making.**

## Principle 6 Relevant commitments and standards

United Nations Convention against Corruption

United Nations Convention against Transnational Organized Crime

Extractive Industries Transparency Initiative Standard

Guidelines for Social Responsibility in Outbound Mining Investments

Addis Ababa Action Agenda for Financing for Development

## Box 11 Case studies of Principle 6

### WTO-ADB Trade in Critical Minerals Database

The WTO, in collaboration with the Asian Development Bank (ADB), hashave launched a Trade in Critical Minerals Database to 'enhance transparency for sustainable, inclusive, and resilient critical minerals trade and supply chains for the clean energy transition'. It aims to help inform decision making by putting data on trade, tariffs and policies into the public domain.

The database is useful in providing transparent and accessible information on availability and trade in mineral commodities and help in tracking where minerals are sourced and what tariffs are applicable.

### Incorporation of the UN Framework Classification for Resources into the European Union Critical Raw Materials Act

The EU Critical Raw Materials Act (CRMA), adopted in 2024, mandates the use of the UN Framework Classification for Resources (UNFC) as the official reporting system for mineral projects within the EU. This legally binding requirement underscores the importance of transparent, consistent, and credible resource estimates to support investment and regulatory decisions.

By embedding UNFC into the CRMA, the EU reinforces best practices in project evaluation, encourages sustainable mining, and enhances investor confidence. This aligns with the Guiding Principles by ensuring fair and transparent governance, particularly through open-access cadastres and traceability mechanisms. It also sets a precedent for international harmonization of resource reporting practices.

### The United Nations Transparency Protocol (UNTP)

The United Nations Transparency Protocol (UNTP) is a traceability mechanism developed by the United Nations Economic Commission for Europe to enhance supply chain transparency and facilitate sustainability reporting. Through its interoperability toolkit, businesses can share verifiable sustainability information globally to help countries and industry combat greenwashing, meet increasing regulatory requirements and manage the complex landscape of ESG standards. In January 2025, the UNTP launched a pilot on Critical Raw Materials, aiming at interoperability for traceability systems in upstream mining and refining.

A systems-based approach to resource governance is being promoted by several UN entities. This includes frameworks that link economic, environmental, social, and technical dimensions to enable long-term resource planning and sustainability. Several countries and regions are adapting these to their national contexts.

## 6.1 Contract and revenue transparency

Legislation requiring the public disclosure of mining contracts, licenses, and agreements, as well as the revenue flows from companies to governments, such as taxes, royalties, and bonuses aims to promote accountability, inform public debate, reduce corruption, and ensure that the extraction of natural resources benefit citizens.

### Knowledge Resources and Tools

- Guide to implementing the EITI standard – Extractive Industries Transparency Initiative
- Contract Transparency: Creating conditions to improve contract quality – Natural Resources Governance Institute

### Knowledge Partners and Programmes

- Accountable Mining – Transparency International
- Extractive Industries Transparency Initiative

## 6.2 Independent anti-corruption agencies

Independent anti-corruption agencies (ACAs) are autonomous public bodies established to combat corruption through preventive and enforcement measures. ACAs play a crucial role in enforcement, prevention, and investigation of corruption, and their effectiveness is enhanced when they operate independently from government, with sufficient resources and empowerment to investigate allegations.[32]

### Knowledge Resources and Tools

- Practitioners Guide: Capacity assessment of anti-corruption agencies – UNDP
- Mining awards corruption risk assessment tool – Transparency International
- Diagnosing Corruption in the Extractive Sector: A Tool for Research and Action – Natural Resources Governance Institute
- Strengthening Anti-Corruption Agencies in Asia Pacific: Regional Synthesis Report – Transparency International
- A Practitioner's Guide for Corruption Risk Mitigation in Extractive Industries
- Corruption Risk Assessment in Mining Sector of Mongolia

### Knowledge Partners and Programmes

- Accountable Mining – Transparency International

32 Ezeigbo, C.E., 2022. Investigating benefits and risks of interactions between civil society and government anti-corruption initiatives in the extractives sector: a case study from Nigeria.

## 6.3 Open-access digital cadastres

Open-access digital cadastres are publicly accessible, Geographic Information Systems that record and manage information on mineral rights and land use, enhancing transparency and efficiency in the allocation and administration of titles. Transparent access of information on concessions ensures that all stakeholders, including government agencies, have access to up-to-date information, thereby promoting accountability and reducing opportunities for corruption.

### Knowledge Resources and Tools

- JAMinCAD – UNDP supported digital platform in Jamaica
- Mineral Rights Cadastre: Promoting Transparent Access to Mineral Resources – The World Bank

### Knowledge Partners and Programmes

- United Nations Framework Classification for Resources (UNFC)
- Office of Cadastre and Land Regime - International Federation of Surveyors

## 6.4 Traceability mechanisms

Traceability mechanisms are designed to monitor and document the journey of minerals from the site of extraction through to final use in products. A large number of schemes have emerged in recent years ranging from those using bag and tag methods, through to those using forensic geology and technologies such as blockchain. Traceability mechanisms aim to improve transparency, ethical sourcing, and compliance with standards throughout the supply chain, however, have the potential to exacerbate existing inequalities if not carefully designed. Responsibly sourced minerals have the potential to attract so-called 'green-premiums' from consumers willing to purchase them at a higher market price.

### Knowledge Resources and Tools

- The Role of Traceability in Critical Mineral Supply Chains – IEA and OECD
- OECD Handbook on Environmental Due Diligence in Mineral Supply Chains
- OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
- Responsible Sourcing Handbook – LME
- Policy on Responsible Sourcing – LME
- IRMA Chain of Custody Standard for Responsibly Mined Materials

### Knowledge Partners and Programmes

- International Tin Supply Chain Initiative (ITSCI)
- OECD Centre for Responsible Business Conduct
- European Partnership for Responsible Minerals (EPRM)
- Responsible Minerals Initiative (RMI)
- Alliance for Responsible Mining (ARM)
- Global Battery Alliance – Battery Passport
- Coalition for Responsible Sand and Silicates

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# 7

# Multilateral and international cooperation

## must underpin global action and promote peace and security

International and regional cooperation are important to build trust between nations and the role of minerals should be better reflected in cooperative efforts to address climate change, energy security, poverty reduction and sustainable development, including through official development assistance and trade. The Guiding Principles encourage greater investment in knowledge sharing, access to professional education, science for the public good, and technology transfer.

In the last decade, there have been a growing number of efforts seeking greater international collaboration on critical energy transition minerals. An internal mapping completed in 2025 by the UN Secretary General's Working Group on Transforming the Extractive Industries for Sustainable Development revealed some 150 global and/or regional initiatives, partnerships or alliances on critical energy transition minerals are currently active, 80 of which led by UN entities. While these initiatives and partnerships cover some of the principles and recommendations from the SG's Panel on Critical Energy Transition Minerals, there is no global fora to promote global dialogues and cooperation between countries and relevant stakeholders across the critical energy transition minerals value chain.

**150 global and regional initiatives on energy transition minerals were found active,** according to the 2025 internal mapping.

## 7.1 Technology and Knowledge Transfer

Cooperation is essential to support developing countries with transfer and co-development of technology as well as transfer of expertise needed for responsible mineral extraction and processing practices. This is part of fair and equitable benefit-sharing. Cooperation may take the form of joint initiatives for research and development; scholarship schemes to support education and higher degree research; pilot schemes and technology parks; institutional strengthening and investment in geological surveys, research institutes and vocational training centres; cooperative technology and infrastructure investment initiatives for example by regional development banks; and policy and legal frameworks that encourage technology licensing and knowledge sharing, amongst others.

### Knowledge Resources and Tools

- Technology transfer handbook – The World Bank
- Technology Transfer and Innovation for Low-Carbon Development – The World Bank

### Knowledge Partners and Programmes

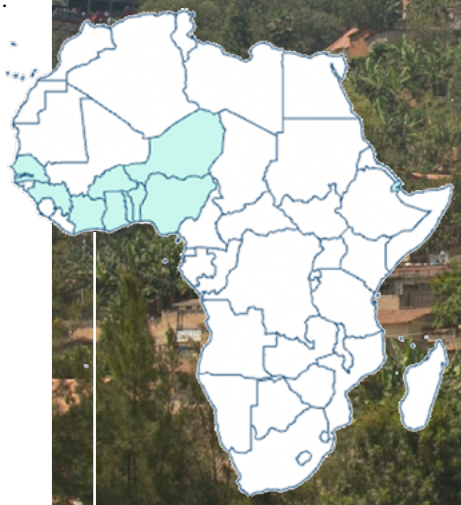
- Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
- International Centres of Excellence on Sustainable Resource Management

**Box 12** **Case studies of Principle 7**

## Africa Higher Education Centers of Excellence Project

Capacity building is a fundamental component of addressing skills gaps. Developing training modules for skill development in mineral resource management, mining, processing, and other life cycle stages is essential. Furthermore, establishing innovation labs and technology hubs focused on critical energy transition minerals can encourage experimentation and the development of breakthrough technologies within the mining sector. These initiatives are pivotal in ensuring that the workforce is equipped with the necessary skills to adapt to the evolving demands of the dynamic mineral industry, fostering long-term opportunities for sustainable development. In addition, gender mainstreaming in aligning educational and industrial policies should be included to increase balanced participation.

The Africa Higher Education Centers of Excellence (ACE) Project is a good example of an education initiative that supports higher education institutions in STEM, value addition, extractives, and mining, among other areas in the region.[33] One of the institutions under this project is the Copperbelt University Africa Centre of Excellence in Sustainable Mining, which seeks to build capacity surrounding sustainable mining in Eastern and Southern Africa. The centre focuses on occupational health, risks to communities in mining areas, restoration of mined environments, waste management, energy use, process and mining design, livelihoods, entrepreneurship, corporate social responsibility, and monitoring biodiversity and ecosystem impacts.[34]



**ACEs Impact Participating Countries**

## International Centres of Excellence on Sustainable Resource Management (ICE-SRMs)

The International Centres of Excellence on Sustainable Resource Management (ICE-SRMs), spearheaded by UNECE and established in multiple regions, serve as key platforms for multilateral cooperation. These Centres provide applied research, policy advice, capacity-building, and country-specific implementation support on sustainable resource management. They act as regional hubs for promoting global standards, fostering South-South cooperation, and facilitating technology transfer. ICE-SRMs focus on practical deployment of UN tools, enabling governments and stakeholders to build integrated governance frameworks for critical minerals across regions. By convening academia, industry, government, and civil society, ICE-SRMs foster trust, enhance policy coherence, and strengthen institutional capacity for long-term sustainable management of mining.

ICE SRM International Center of Excellence on Sustainable Resource Management

33 ACE, "About ACE Impact – ACE – Africa Higher Education Centres of Excellence"; ACE II, "Industry."

34 CBU-ACESM, "Copperbelt University Africa Centre of Excellence in Sustainable Mining (CBU-ACESM)."

## 7.2 Regional Supply Chain Development

Industrialization and economic integration can be promoted through the development of regional supply chains. Key strategies include: Special Purpose Vehicles to facilitate joint ventures and financing for large-scale projects, enhancing resource sharing and collective bargaining power; scaling up infrastructure investments around Special Economic Zones; local content policies to stimulate domestic industries and create employment by prioritizing local goods and services; promoting research and development centres, for example, in battery technology, to boost skills and enhance technological capabilities; and enhancing regional trade agreements to integrate supply chains and improve market access.

### Knowledge Resources and Tools

» Approach Paper towards preparation of an African Green Minerals Strategy – AfDB

### Knowledge Partners and Programmes

» African Green Minerals Observatory

**Box 13** **Case study of Principle 7**

## The African Green Minerals Strategy

Regional and international cooperation to achieve shared objectives related to the value addition of critical energy transition minerals provides numerous mutual advantages. Firstly, it fosters the exchange of knowledge and technology, enabling participating countries to jointly develop advanced processing methods, research capabilities, and innovative uses for these minerals. The potential of South-South cooperation and knowledge sharing to promote domestic value addition in critical energy transition minerals will help to promote more equitable and sustainable global development. Secondly, consolidating resources and expertise can result in more efficient and sustainable extraction practices, thereby minimizing environmental impact and advocating responsible resource management. Third, such collaboration can bolster the resilience of supply chains, ensuring a steady and diversified global supply of critical energy transition minerals.

The African Green Minerals Strategy (AGMS)[35] is a policy framework designed to assist African nations in effectively harnessing their green mineral resources to drive industrialization. This strategy is structured around four key pillars: advancing mineral development, investing in human capital and technological capabilities, establishing robust value chains, and advocating for responsible resource management. The AGMS represents a deliberate effort to complement existing mineral development policies by emphasizing the exceptional prospects arising from the green transition and the digital era, positioning Africa to seize the opportunities presented by these transformative trends.[36]

35 This strategy is the result of collaboration among five key organizations, including the African Natural Resources Management and Investment Centre (ANRC) within the African Development Bank, the African Minerals Development Centre (AMDC), the African Legal Support Facility (ALSF), the United Nations Economic Commission for Africa (UNECA), and the United Nations Development Programme (UNDP).

36 Africa Natural Resources Management and Investment Center (ANRC). 2022. Approach Paper to Guide Preparation of an African Green Minerals Strategy. African Development Bank. Abidjan, Côte d'Ivoire

**The African Green Minerals Strategy (AGMS)** is a policy framework designed to assist African nations in **effectively harnessing their green mineral resources .**

© The African Green Minerals Strategy

**Box 14** **Case study of Principle 7**

## Special economic zones for battery manufacturing, Democratic Republic of the Congo and Zambia

Cobalt is an important ingredient in the production of cathodes for rechargeable batteries.[37] The Democratic Republic of the Congo holds the largest cobalt reserves in the world and accounted for about 87 per cent[38] of global cobalt ore exports in 2022.

In 2022, the cobalt ore market was valued at 191 million, while cobalt hydroxide and cobalt-based cathode materials (the second and third subsequent stages in the value chain) reached $9.3 billion and $9.8 billion, respectively. In the Democratic Republic of the Congo, cobalt ores and concentrates exports were estimated at US$ 167 million.[39] The country is also a significant player in the next stage of the value chain as the primary exporter of cobalt hydroxide, amounting to a staggering US$ 6 billion and contributing to 64 per cent of global exports.

Despite the Democratic Republic of the Congo's involvement in cobalt hydroxide exports, there is no significant participation in further value-added activities such as manufacturing cathodes,[40] battery cells or battery packs. Conversely, despite not being a cobalt producer, China commands a substantial share (49 per cent) of the cathode export market and the battery pack market (46 per cent).[41]

Partnerships with private sector entities, multilateral organizations, and donor countries are mobilizing additional resources, expertise, and technology transfer. For example, the 2022 collaboration between Zambia and the Democratic Republic of the Congo to develop electric battery manufacturing capacity jointly and bolster their standing in the critical mineral value chain. The Africa Export-Import Bank (Afreximbank) and the Economic Commission for Africa have a central facilitating role, acting as the project's financial and technical partners, respectively. This partnership aims to establish special economic zones to produce battery-electric vehicles and related services.[42]

37 Slack, Kimball, and Shedd, "Cobalt."

38 UNCTAD calculations based on COMTRADE 2022 data.

39 Based on UN Comtrade 2022 data.

40 Lithium-ion batteries use various types of cathodes, with the most predominant being the nickel-manganese-cobalt (NMC) cathode. To produce the cathode, the selected precursor materials (in this case nickel, manganese and cobalt) are mixed together and combined with lithium. This is heated and further treated to produce the cathode.

41 UNCTAD calculations based on COMTRADE 2022 data.

42 https://www.un.org/africarenewal/magazine/april-2023/afreximbank-and-uneca-sign-agreement-establish-special-economic-zones-production

## 7.3 Cooperation on Just Transitions

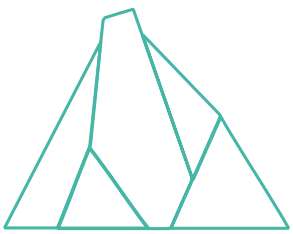
International cooperation on just transitions in the mining sector may include the following strategies: establishing multilateral just transition assistance funds to pool resources for economic diversification, worker retraining, and community support in affected regions; sharing resources and methods to conduct dialogue and public engagement, implement social assistance programs, and policies focusing on industrialization and environmental rehabilitation; and participation in international cooperation frameworks and agreements.

### Knowledge Resources and Tools

- Key Messages on a Just Transition and Human Rights – OHCHR and ILO
- Guidelines for a just transition towards environmentally sustainable economies and societies for all – International Labour Organization
- Resolution Concerning a Just Transition Towards Environmentally Sustainable Economies and Societies for All – International Labour Organization
- Managing Coal Mine Closure: Achieving a Just Transition for All – The Word Bank

### Knowledge Partners and Programmes

- UN Special Rapporteur on Climate Change and Human Rights
- Council for Critical Minerals Development in the Global South



# CONCLUSION

**The equitable and sustainable governance of critical energy transition minerals is essential to achieving a just, inclusive, and rights-based transition to renewable energy.**

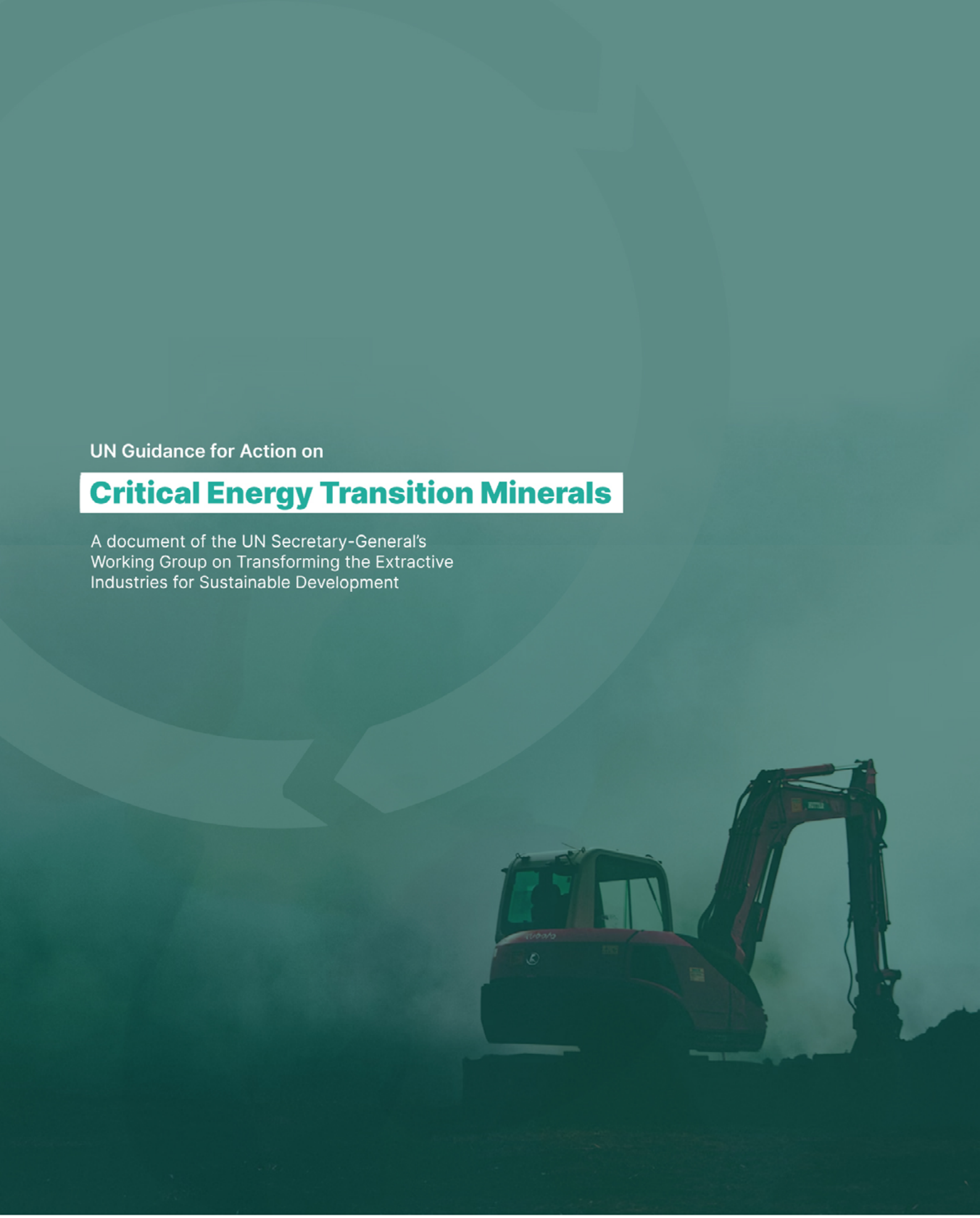
This Guidance for Action provided a suite of enabling policies, practices, and knowledge resources and partners to support the implementation of the Panel's Guiding Principles and Actionable Recommendations.It is not exhaustive nor prescriptive but intended as a living resource that will evolve with experience, innovation, and inclusive dialogue.

Through coordinated and context-sensitive implementation, Member States, companies, communities, Indigenous Peoples and civil society can help ensure that the energy transition benefits all people, safeguards the environment, and promotes peace, justice, and prosperity for future generations.

UN Guidance for Action on

# Critical Energy Transition Minerals

A document of the UN Secretary-General's Working Group on Transforming the Extractive Industries for Sustainable Development



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