

About this report

The report identifies the largest European Union (EU) financiers (banks and investors) of the biggest producers of critical minerals and assesses the sustainability policies relevant for the mining sector of eight of the largest EU financiers identified. In addition, the report analyses the relevant European Union regulatory frameworks impacting EU financial flows towards critical mining activities, and makes a critical analysis of gaps with regard to environmental and social safeguards.



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Fair Finance International (FFI) is an international civil society network of over 150 CSO partners and allies, coordinated by Oxfam Novib, that seeks to strengthen the commitment of banks and other financial institutions to social, environmental and human rights standards.

About Oxfam

Oxfam is a global movement of people who are fighting injustice for a more equal world. We are working across regions in over 70 countries, with thousands of partners and allies, supporting communities to build better lives for themselves, grow resilience and protect lives and livelihoods also in times of crisis.

About 11.11.11

11.11.11 is the Flemish umbrella organization for international solidarity. It brings together the strengths of Belgian organizations and NGO's, volunteers, and partners around the world working towards global justice and sustainable development.

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Front cover photo: Sigma Lithium mine in the Jequitinhonha Valley, Brazil. Credit: Douglas Magno/Agence France -Presse.

Page 89: Cristina Choque Castillo, 64, gathers her cows from the contaminated fields near the Glencore-owned copper mine in Espinar, Peru. Credit: Jacob Balzani Lööv.

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Summary

SUMMARY

As the world seeks to transition towards cleaner forms of energy in response to climate change, the pressure to extract more critical minerals such as cobalt, copper, lithium, nickel and graphite has surged.

Critical minerals are essential for today's technologies, economies, societies and national security, as they are used across a wide range of vital sectors such as (clean) energy, digital technology, healthcare, defence and space. Of the 50 critical minerals defined by the International Energy Agency, three-quarters are essential to the energy transition. At the same time, the supply chains for these minerals are complex and vulnerable to disruption from geopolitical or economic instability. Production is concentrated primarily within in a small number of developing and emerging economies, leaving the European Union (EU) heavily dependent on imports of certain raw materials. The EU is primarily seeking to reduce its dependency on imports of critical raw materials from countries like China and Russia. To achieve this, it is focusing on diversifying its supply sources and increasing the extraction and processing of these materials both within Europe and through partnerships beyond its borders.

The projected demand growth for critical minerals will put even more pressure on the environment and society, as severe negative impacts associated with mining are not sufficiently addressed. Air and water pollution, waste disposal, violations of human and workers' rights, and lack of meaningful dialogue with and participation of affected communities are among the most pressing concerns being reported. Indigenous Peoples' rights to Free, Prior and Informed consent are often disregarded, and mining remains the most dangerous sector for human rights defenders who raise concerns about business practices.

Companies that produce or rely on critical minerals in their value chains play a vital role in the transition to a low-carbon economy. While this transition should be accelerated, it is crucial to ensure that these companies protect the environment and respect human rights, and avoid exacerbating existing inequalities or creating new ones, thereby contributing to a truly just energy transition.

This research highlights the serious environmental and social issues associated with critical mineral production. It aims to raise awareness among EU-based financiers of critical mineral producers and policymakers of the urgent need for stricter requirements and accountability for mining companies and their suppliers. The report focuses on five critical minerals – cobalt, copper, graphite, lithium and nickel – which have been selected for their strategic importance to the global energy transition, particularly in the production of batteries, electric vehicles and renewable energy technologies. The analysis also considers the EU's overall regulatory approach to the entire critical and strategic raw materials (CRM and SRM) market and proposes improvements for regulatory and policy solutions moving forward.

Critical minerals and clean technology: a misaligned narrative?

Clean technology demand for the five selected minerals – cobalt, copper, graphite, lithium and nickel – is expected to grow strongly in the coming years until 2040. Nickel and graphite are expected to have the strongest growth rates over the period 2024–2040, at 147% and 63%

respectively. However, a large part of current mineral demand is still driven by other sectors, including defence, construction, metallurgy, electronics, transport and the medical sector. Current clean technology accounts for around a third of total demand for the selected minerals, except for nickel, where clean technology demand accounts for 17%, and lithium, where clean technology accounts for 62% of total lithium demand. 10%

Persistent human rights and environmental abuses associated with mining operations

While future demand projections could have great potential for some of the world's economies, serious negative environmental and social issues linked with mining activities have not been resolved despite ample research highlighting such harms. Mining often involves human rights abuse and exploitation, and can have devastating impacts on the environment, biodiversity, water bodies, forests and the rights of surrounding communities. Many of these adverse impacts are interlinked and mutually reinforce each other.

The country case studies in this report illustrate this. Glencore's copper mine in Peru has been accused of polluting water and air, impacting local communities and Indigenous Peoples for the last 20 years. Controversies about pollution and inadequate consultation of communities has resulted in court cases, social conflicts and blockades of the mine. Similarly, in Mozambique, communities who lost their land due to graphite mining blocked access to the mine for months, demanding proper compensation for their lost livelihoods. In the Democratic Republic of the Congo (DRC), a copper mine company is accused of polluting waterways and not properly compensating displaced communities. In Brazil, a lithium mine has resulted in pollution, dust, noise and loss of access to clean water. In all four cases, European banks and/or investors are involved in financing the mining companies, namely Glencore (Peru), Sigma Lithium (Brazil), Syrah Resources (Mozambique) and Kamoa Copper (DRC).

Such controversies undermine the social licence of these mines and can result in disruptions to operations, creating financial risks for banks and investors. They increasingly result in court cases, further reducing the companies' profitability. Projects plagued by environmental and human rights impacts risk delays or stoppage as a result of social conflict and litigation, threatening the stability of supply chains.

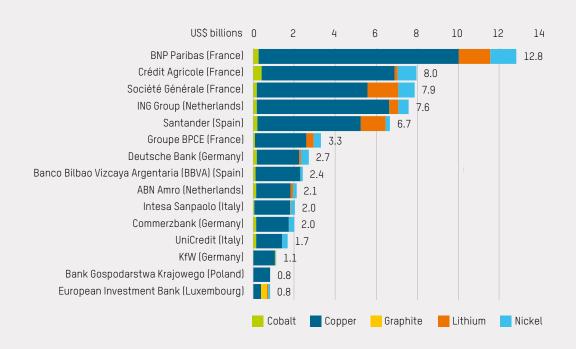
EU-based banks are the third-largest global financiers of critical minerals

This research tracked financial flows to 93 global companies engaged in the extraction and processing of five critical minerals – cobalt, copper, graphite, lithium and nickel. Companies were selected based on the size of their reserves and production capacity.

In the period 2016-2024, EU-based banks provided US\$69bn in loans and underwriting services attributable to critical minerals. EU banks were the third-largest financiers of the selected critical mineral companies. The majority of credit flows to critical minerals from EU-based financial institutions was attributable to copper (78%, at US\$53.9bn). This was followed by nickel (US\$6.4bn) and lithium (US\$5.6bn).

French banks were the largest EU providers of loans and underwriting services to critical minerals in the period 2016-2024. The largest among them was BNP Paribas (US\$12.8bn), followed by Crédit Agricole (US\$8.0bn) and Société Générale (US\$7.9bn).

FIGURE 1: TOP 15 EU LOANS & UNDERWRITING SERVICE PROVIDERS TO CRITICAL MINERAL PRODUCERS PER BANK AND MINERAL (2016–2024, US\$ BILLIONS)



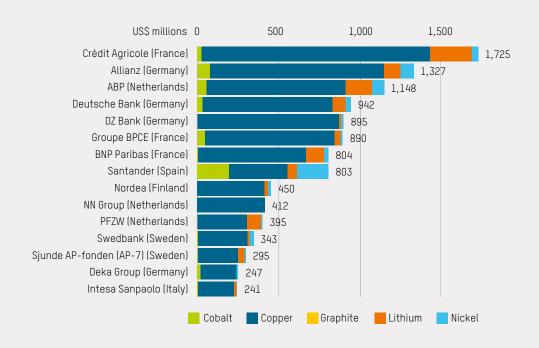
Source: Mining & Money²

French, German and Dutch financial institutions are the top EU investors in critical minerals

In November 2024, EU-based financial institutions held investments in bonds and shares issued by the selected companies attributable to critical minerals worth US\$16bn. EU financial institutions were the fifth-largest investors in the 93 selected mining companies. Similar to the EU credit flows to critical minerals, the majority of investments in bonds and shares from EU-based financial institutions were attributable to copper (81%, US\$13bn), followed by lithium (US\$1.7bn) and nickel (US\$783m).

The top EU investors in critical minerals were a mix of French, German and Dutch financial institutions. Crédit Agricole was the largest, with US\$1.7bn in critical mineral attributable investments in the bonds and shares of the selected companies. It was followed by Allianz (US\$1.3bn) and Dutch pension fund ABP (US\$1.1bn).

FIGURE 2. TOP 15 EU INVESTORS IN BONDS AND SHARES IN CRITICAL MINERAL PRODUCERS PER FINANCIAL INSTITUTION AND MINERAL (2024 NOVEMBER, US\$ MILLIONS)



Source: Mining & Money

Financial institutions fail to tackle the environmental and social impacts of mineral development

This report analyses the public policies of eight of the largest EU-based financiers of critical minerals to understand how the banks and investors financing critical minerals use their influence to prevent and mitigate adverse social and environmental impacts (see Table 1).

TABLE 1: SELECTED EU FINANCIERS

| Name | Туре | Loans and underwriting (October, US\$m 2016-2024) | Bond- and shareholding (November, US\$m 2024) | Country |
|-----------------|----------|--|--|---------|
| ABP | Investor | | 1,148 | NL |
| Allianz | Investor | | 1,327 | DE |
| BBVA | Bank | 2,371 | 98 | ES |
| BNP Paribas | Bank | 12,520 | 804 | FR |
| Crédit Agricole | Bank | 7,669 | 1,724 | FR |
| Deutsche Bank | Bank | 2,643 | 941 | DE |
| ING Group | Bank | 7,575 | 42 | NL |
| Santander | Bank | 6,364 | 803 | ES |

Source: Mining & Money

The policies of these financial institutions were assessed using a methodology based on international sustainability standards and structured in three pillars: environment, social and governance. The methodology was developed in collaboration with the Mining & Money initiative, which is part of the larger Forests & Finance initiative, a coalition of campaign and research organizations that seek to prevent financial institutions from facilitating environmental and social abuses common in forest risk commodities.

All of the financial institutions were invited to comment on the draft policy assessment results. Five provided feedback: Crédit Agricole, BNP, Allianz, Santander and Deutsche Bank.

Current due diligence practices by financial institutions fail to capture the full extent of environmental and social risks tied to critical mineral producers and their supply chains

This research finds that the policies of the eight assessed financial institutions fall short in addressing the full range of environmental, social, and governance (ESG) issues associated with their business relationships with mining companies. In the EU, there is a widely promoted narrative that the surge in demand for critical minerals presents an opportunity to reduce inequalities and to generate positive outcomes for local communities and workers. Contrary to this narrative, the findings reveal a lack of robust environmental and social safeguards in the expectations these institutions set for their clients and investees.

The consolidated ESG scores of financial institutions range from 2.6 to 4.0 out of a maximum of 10 (Figure 3), evidencing the absence of a *frontrunner* among the selection. The highest score is achieved by the Dutch pension fund ABP, which falls into the category of *followers*, while all the other financial institutions fall into the category of *laggards*. Three financial institutions – Crédit Agricole (the largest EU investor), Allianz (the second largest EU investor) and BBVA – score below 3 out of 10. On average, the financial institutions perform better on governance topics, while achieving lower scores on environmental and social indicators (Figure 4).

FIGURE 3. CONSOLIDATED POLICY ASSESSMENT SCORES (/10)

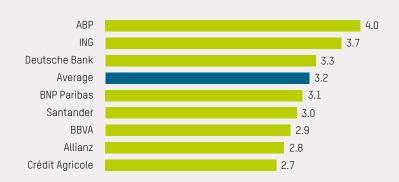
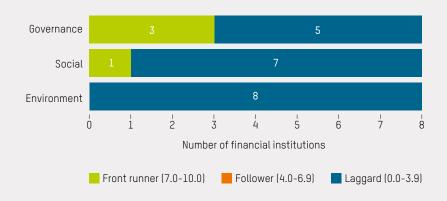


FIGURE 4. CATEGORIZATION OF THE EIGHT ASSESSED FINANCIAL INSTITUTIONS



When examining policies on environmental issues, the findings indicate that financial institutions are not sufficiently addressing the adverse environmental impacts associated with the mining sector's activities. Scores for this pillar range from 2.1 for Allianz to 3.1 for BBVA, with an average score of 2.8 out of 10. While financiers tackle the protection of biodiversity and natural landscapes to some extent, glaring gaps are found regarding policies on mine reclamation and closure plans, as well as prevention of air pollution.

Scores on social issues are also low, ranging from 1.9 for Allianz to 4 out of 10 for ABP. The main gaps relate to a lack of robust policies to respect the rights of Indigenous Peoples and local communities with customary land rights, as well as insufficient measures to protect human rights defenders. This is particularly concerning given that, over the past decade, the mining sector has consistently been the most dangerous for human rights defenders, raising concerns about business practices. In addition, while most financial institutions require companies to uphold the International Labour Organization (ILO) Fundamental Principles and Rights at Work, these requirements often do not extend to companies' supply chains. Several work-related issues remain completely unaddressed, such as gender-based violence and the payment of a living wage to workers in the mining sector.

Among the three ESG pillars, the financial institutions performed better in governance, although none qualified as a frontrunner. There is a clear difference in the scores for criteria covering the governance of financial institutions themselves and the governance of financed companies, with higher scores for the former. Financial institutions have integrated ESG considerations into their governance structures and are transparent about the measures they have deployed to implement their ESG policies, including regularly screening companies, and responsible voting or engagement. However, granular reporting on engagement initiatives conducted with mining companies, such as detailed information on the names of companies engaged and the nature, progress or results of those engagements is scarce, especially regarding lending activities.

Diluted EU regulations jeopardize a truly just transition

Critical minerals are essential for developing renewable energy technologies, including safe energy storage. The EU has been working on legislation to ensure that these minerals' value chains, whether within the EU or sourced internationally, remain secure, sustainable, transparent and diversified, supporting uninterrupted supply and high environmental and social standards. Key pieces of legislation designed to that end include the Critical Raw Materials Act (CRMA) and the Batteries Regulation. The CRMA introduces 'strategic projects', a tool to boost and secure the supply of critical minerals via regulatory and financial incentives. The Batteries Regulation sets circularity targets and envisages human rights due diligence covering social issues such as occupational health and safety, child labour, forced labour, discrimination, trade union freedoms, community life, and the rights of Indigenous Peoples. In addition to these sector-specific regulations, many large companies along the critical minerals supply chains are expected to comply with more general sustainability legislation, including the Corporate Sustainability Due Diligence Directive (CSDDD). Banks and investors involved in financing such value chains are also required to comply with the EU Taxonomy and Sustainable Finance Disclosures Regulation (SFDR), requiring disclosures of their green asset ratio (GAR) in taxonomy-eligible and taxonomy-aligned activities.

However, what has been designed as a comprehensive regulatory framework with ambitious sustainability standards is currently being diluted and partially dismantled by the EU 'Omnibus' package – a legislative proposal intended to 'boost EU competitiveness by cutting "red tape" for companies', but effectively weakening the progress on sustainability attained in EU legislation so far. The package envisages the exclusion of upstream value chains from due diligence obligations, making them mandatory only when 'plausible information' is available regarding potential environmental and human rights violations, and (indirectly, yet effectively) shifting monitoring responsibility from corporations to civil society. For critical minerals mining sites, which are often

many tiers removed from EU consumers, this weakening creates considerable sustainability risks, particularly in the Global South where local regulations may be weaker or insufficiently enforced. The Omnibus package also amends reporting obligations for financiers, making the sustainability of their portfolios less transparent by introducing 'partial' taxonomy alignment and changing the GAR methodology.

Although the Omnibus package doesn't directly impact the Batteries Regulation, in reality it is also affected, as the development of the implementation guidelines – essential for Batteries Regulation enforcement – has been stalled awaiting the results of the Omnibus discussion, and the implementation timeline has been postponed.

The changes proposed by the Omnibus package jeopardize the sustainability of the critical minerals value chains by shifting many of the environmental and social risks to the production countries outside of the EU. Meanwhile, the European Union continues to benefit from clean energy technologies which, via their long value chains, can cause environmental degradation and human rights abuses in developing and emerging economies. This is hardly in line with the EU-backed concept of a just transition, where no one is left behind as humanity transitions to a sustainable future.

Based on the findings of this research project, Oxfam, Fair Finance International and 11.11.11 have formulated the following recommendations for financial institutions, mining companies and EU policymakers.

Recommendations

Recommendations to banks and investors

1. Enhance transparency significantly

Transparency increases accountability of both financial institutions and companies in their lending/investment portfolio towards their stakeholders and society. Financial institutions could improve transparency by systematically publishing the details of each engagement activity with mining companies producing critical minerals, including the names of companies engaged, engagement goals, milestones achieved, and escalation steps taken in case of insufficient progress. In addition, financial institutions can use their leverage to foster greater transparency by companies, by requiring their corporate clients and investees to:

- Provide proof of the legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operations;
- Develop and ensure compliance with ESG policies for their suppliers;
- Disclose their supply chain, ensuring full traceability to their suppliers' operations;
- Publish a sustainability report that is set up in accordance with recognized sustainability reporting frameworks;
- Agree to mentioning the name of the company in financial institutions' reporting on loans and investments;
- Require mining companies to disclose publicly: i) beneficial ownership information for the project; ii) the principal contract with the host government that sets out the key terms and conditions under which a resource will be exploited (including any riders, addendums and amendments); iii material project payments to the host government (such as royalties, taxes, and profit sharing); and iv) public country-by-country tax reporting.

2. Develop measures that enable effective remedy for affected stakeholders

- If financial institutions have business relationships with companies involved in human rights violations, they have a responsibility to enable remediation for affected stakeholders. To do so, financial institutions must:
- Establish a transparent and gender-responsive grievance mechanism, aligned with the UN Guiding Principles on Business and Human Rights, that allows rights holders (individuals, Indigenous Peoples, local communities or CSOs representing them) to raise concerns and seek remedies;
- Require that companies they finance or invest in establish similar operational-level grievance mechanisms;
- Include clauses in loan documentation addressing how financed companies are responsible for remediating any adverse impacts that they may cause or contribute to;
- Include access to remedy as an important topic of engagement within their broader stewardship policies.

Financial institutions may establish their own grievance mechanisms or opt to join an external grievance mechanism platform. This mechanism must operate independently of management oversight and influence, be run by qualified professionals and supported by a framework that clearly outlines the entire process. To build public confidence, financial institutions and businesses must monitor their operational-level grievance mechanisms and report transparently on their effectiveness and progress.

3. Strengthen their environmental and social expectations for mining companies

The extractive industry, particularly the critical minerals segment, has the potential to generate economic benefits for local communities. However, this is hinged on the adoption of strong environmental and social safeguards that can avoid or mitigate adverse impacts. To that end, financial institutions must strengthen their ESG policies and formulate clear expectations for mining companies to:

- Conduct and disclose gender-responsive environmental, social and human rights impact assessments;
- Develop and implement air and water quality management plans to avoid and/or minimize adverse impacts, and share monitoring data with local stakeholders;
- Require the Free, Prior and Informed Consent (FPIC) of affected Indigenous Peoples and communities with customary land rights if any planned operations may affect them;
- Reduce overall extractive waste, and manage and process waste responsibly by adequately tracking, reviewing and improving tailings risk management;
- Prepare mine reclamation plans that are compatible with the protection of human health and the environment;
- Ensure workers receive a living wage that allows them to satisfy their basic needs and lead a dignified life;
- Adopt a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination and violence.

4. Expand the scope of their sustainability policies to include companies' suppliers

Financial institutions should formulate expectations for companies to conduct human rights and environmental due diligence throughout their supply chain in line with:

- The UN Guiding Principles on Business and Human Rights;
- The OECD Guidelines for Multinational Enterprises on Responsible Business Conduct;
- The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas;
- The OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector.

Supply chain due diligence should prioritize high-risk areas identified based on operating and geographical context, sector issues, and the company's track record on human rights and environmental issues. In situations of armed conflict or heightened risk of serious human rights abuses, companies should be required to conduct enhanced due diligence.

5. Recognize the critical role of human rights defenders and protect their rights

Financial institutions should publicly acknowledge, in their policies, the critical role played by human rights defenders who speak out against the harmful impacts of corporate activities, and the heightened risks they face in the course of their work, such as arbitrary arrest, threats, harassment and intimidation.

In this context, financial institutions should:

- Consider human rights defenders as a key source of information when conducting human rights and environmental due diligence on critical minerals projects or mining companies;
- Assess the civic space conditions in countries where the companies or projects they finance operate, and require additional safeguards to protect human rights defenders in high-risk contexts;
- Require that the companies they finance or invest in adopt, disclose and enforce a zero tolerance policy towards threats, violence and the criminalization of land, environmental and human rights defenders;
- Encourage companies to use their leverage and speak out in defence of human rights defenders, and against legal reforms aimed at restricting civil society space.

6. Develop a sustainable critical minerals strategy

Financial institutions should develop a sustainable critical minerals strategy that:

- Prioritizes engagement on ESG issues with both producers and users of critical minerals to ensure that the global rush for critical minerals benefits workers and local communities in producing countries:
- · Identifies and prioritizes the financing of sectors and end uses that contribute to a just transition;
- Acknowledges the need for reduced consumption of critical minerals in the Global North to ensure that enough critical minerals are available for the Global South.

7. Publicly raise concerns about the current rollback of environmental and social regulatory ambition in the EU, and advocate for ambitious sustainability regulations

Financial institutions should influence regulators and voice their concerns about the increasing erosion of the EU's sustainability agenda, marked by repeated delays, weakened ambitions and the narrowing of regulatory scope. Organizations such as the Principles for Responsible Investment (PRI), the Institutional Investors Group on Climate Change and the Investor Alliance for Human Rights have already issued several statements to this effect. Financial institutions should clearly state to regulators that mandatory disclosure requirements should apply to all companies with more

than 250 employees – not just large corporations. More transparency and comparable data are essential to enable investors to reallocate capital towards companies and projects that advance a just energy transition, ensuring workers and communities are supported. Financial institutions can also advocate for the development and adoption of sector-specific standards under the European Sustainability Reporting Standards (ESRS) — including for high-impact sectors such as mining — especially as the European Commission has proposed to eliminate them from the Corporate Sustainability Reporting Directive (CSRD) in its recent Omnibus package.

Recommendations to mining companies

- 1. Conduct environmental and human rights due diligence across their value chain in line with the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and its Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. They should also report publicly on their due diligence efforts.
- **2. Reduce extractive waste and manage it responsibly** by implementing robust systems to track, review and continuously improve their tailings risk management. They should also adopt a zero-failure objective for tailings storage facilities.
- **3. Develop and implement air and water quality management plans** to avoid and/or minimize adverse impacts and share monitoring data with local stakeholders.
- **4. Develop and enforce policies and internal systems** to systematically ensure inclusive and gender-responsive community consultation and meaningful participation for all affected local communities, and Free, Prior and Informed Consent processes for Indigenous Peoples and communities with customary land rights that are at risk of being affected by their operations.
- **5. Establish a gender-responsive grievance mechanism** and ensure that information about it is disseminated in local languages to key stakeholders, including workers, affected local communities, Indigenous Peoples, minorities and human rights defenders. Adopt and disclose a zero tolerance policy towards retaliation and reprisals. Companies should ensure that the identity of individuals raising concerns is protected at all times.
- **6.** Recognize and commit to protecting the rights and legitimacy of human rights defenders by adopting and disclosing a policy to protect their rights, and by using their influence to speak out against legal reforms aimed at restricting civil society space.
- **7. Publicly disclose:** i) beneficial ownership information for the project; ii) the principal contract with the host government that sets out the key terms and conditions under which a resource will be exploited (including any riders, addendums and amendments); iii) material project payments to the host government (such as royalties, taxes, and profit sharing); and iv) public country-by-country tax reporting.

Recommendations to the European Union

Robust regulations mandatory for all market actors and encompassing the upstream and downstream value chains for raw materials are essential for ensuring their sustainable production, processing and recycling. To ensure that adequate regulatory frameworks are in place and properly enforced, EU authorities should:

- 1. Retain all due diligence obligations under the Batteries Regulation regardless of the outcomes of the Omnibus discussion on the Corporate Sustainability Due Diligence Directive (CSDDD). If CSDDD simplification and lower thresholds for the in-scope companies are approved, develop a list of exception sectors with high upstream environmental and social risks, including CRM and SRM mining and processing.
- 2. Ensure that the review clause with respect to the provision of financial services and investment activities is reinstalled in the CSDDD. Financial institutions' downstream activities, corresponding to their core activities of providing financial services, should fall within the scope of CSDDD and Omnibus regulation.
- **3.** Engage with mining companies and critical mineral purchasers to promote sustainable mineral consumption that contributes to a just energy transition and recognizes the need for reduced consumption in the Global North.
- **4. Do not postpone the implementation of the Batteries Regulation** and instead keep the original deadline; urgently develop the guidelines on the application of battery due diligence requirements.
- **5.** Increase the target share of recycled content under the Batteries Regulation to make it more attractive for companies to use recycled content rather than (currently) cheaper virgin materials.
- **6. Expand the environmental and social criteria that are currently mandatory** for the strategic projects recognized under the CRMA; make them mandatory for all companies along the critical minerals value chains, not only for projects that seek to obtain recognition.
- **7. Make mining sustainability requirements for the CRMA strategic projects more stringent**. In particular, ensure that post-operative restoration and rehabilitation is mandatory in full, not only in as much as it is 'economically feasible'.
- **8.** Introduce the concept of Free, Prior, and Informed Consent (FPIC) into both the Batteries Regulation and the CRMA, and make it mandatory to obtain FPIC prior to any mining operations concerning critical and strategic raw materials.
- **9.** Ensure that strict environmental and social criteria for the production, processing and trade in CRMs and SRMs are included in all EU trade agreements, including those currently being negotiated (Indonesia, India, Australia, Thailand, Tajikistan, the Philippines, Thailand) and those already in force. Taking into account the high risk of mining operations, such requirements should go above and beyond the standard Trade and Sustainable Development (TSD) provisions.
- 10. Ensure that the concept of just transition is integrated in all the relevant legislation. As critical minerals are essential for climate transition and as they contribute to modern technologies and cleaner energy production and storage largely in the Global North, while most of the environmental and social externalities affect workers and local communities in the Global South the concept of just transition should be integrated in all the relevant legislation. Currently, only the CRMA has a passing reference to it, envisaging that EU-based strategic projects can benefit from the Just Transition Fund established by Regulation (EU) 2021/1056, provided such projects contribute to reducing the social and economic costs brought by the green transition. This fund should be accompanied by a Fund for Just Transition for Global South countries.

- 11. Stop the dilution and postponement of CSDDD, CSRD, SFDR, EU Taxonomy and other relevant due diligence and reporting legislation, and retain their original scope, thresholds and implementation timelines.
- 12. The European Commission's opaque selection of strategic projects raises serious concerns about accountability, human rights, Indigenous rights, and public participation. The EU should ensure that the selected projects are subject to robust human rights and environmental due diligence, with full transparency and meaningful participation of affected communities, including Indigenous Peoples, in line with international standards and the principle of Free, Prior and Informed Consent.



ABBREVIATIONS

ABBREVIATIONS

ABP Stichting Pensioenfonds ABP
BBVA Banco Bilbao Vizcaya Argentaria
BNDES Brazilian Development Bank
CRMs Critical Raw Materials

CRMA Critical Raw Materials Act

CSDDD Corporate Sustainability Due Diligence Directive

CSO Civil Society Organization
DNSH Do No Significant Harm

DRC Democratic Republic of the Congo

EBRD European Bank for Reconstruction and Development

ESS Environmental and Social EIB European Investment Bank

ESG Environmental, Social, and Governance
ESRS European Sustainability Reporting Standards

EU European Union EV Electric Vehicle

FFI Fair Finance International
FPIC Free, Prior and Informed Consent

GAR Green Asset Ratio **GHG** Greenhouse Gas

GRI Global Reporting Initiative

Gt Gigaton

HCS High Carbon Stock

ICMM International Council on Mining and Metals

IEA International Energy AgencyIFC International Finance CorporationILO International Labour Organization

IRMA Initiative for Responsible Mining Assurance IUCN International Union for Conservation of Nature

M&M Mining & Money mt (Metric) Tons

NGO Non-Governmental Organization
NATO North Atlantic Treaty Organization

OECD Organisation for Cooperation and Development

OEFA Agency for Environmental Assessment and Enforcement (Peru)

PRI Principles for Responsible Investment

PV Photovoltaic

REES Rare Earth Elements

SMEs Small and Medium Enterprises

SFDR Sustainable Finance Disclosures Regulation

SRMs Strategic Raw Materials

TCFD Task Force on Climate-Related Financial Disclosures

TSC Technical Screening Criteria

UNEP United Nations Environment Programme

UNGPs United Nations Guiding Principles on Business and Human Rights

USGS United States Geological Survey

Introduction

INTRODUCTION

As the world seeks to transition towards cleaner forms of energy in response to climate change, the pressure to extract more critical minerals has surged.

Besides the demand created by the rapid growth of clean energy, demand is also escalating because critical minerals are crucial for artificial intelligence (AI) tools, information and communication technologies, electric vehicles, laptops, mobile phones and defence.

Companies that produce or rely on critical minerals in their value chains play a vital role in the transition to a low-carbon economy. While this transition should be accelerated, it is crucial to ensure that these companies respect human rights and avoid exacerbating existing inequalities or creating new ones, thereby contributing to a truly just energy transition.

The Business & Human Rights Resource Centre's Transition Minerals Tracker – a tool that monitors a broad range of human rights violations associated with the extraction of seven key minerals (bauxite, cobalt, copper, manganese, nickel, lithium and zinc) – recorded 630 allegations of such violations between 2010 and 2023, with one in four related to labour rights abuses.³

This report by Oxfam, 11.11.11 and <u>Fair Finance International</u> aims to draw the attention of EU-based financial institutions and policymakers to the urgent need for stricter expectations and requirements for mining companies and companies in the supply chain of critical minerals.

Chapter 1 examines the key sustainability issues related to critical minerals operations, illustrated with four case studies from Brazil, the Democratic Republic of the Congo (DRC), Mozambique and Peru. Chapter 2 presents a financial flow analysis of the largest EU-based creditors of and investors in five critical minerals selected for their strategic importance to the global energy transition: cobalt, copper, lithium, nickel and graphite. Chapter 3 looks at the current EU-level approach to defining and regulating the critical minerals markets and provides an analysis of potential gaps in environmental and social safeguards. Chapter 4 assesses the sustainability policies of the eight largest EU-based financiers identified in Chapter 2. Finally, Chapter 5 formulates recommendations for financial institutions, mining companies and EU policymakers.

Appendix 1 provides an insight into which sectors are the current and future key end users of the five selected critical minerals essential for the energy transition. Appendix 2 provides the methodology used for assessing the sustainability policies of banks and investors.

A summary of the research findings can be found at the beginning of this report.

1. Critical minerals in a global context: environmental and social implications

CRITICAL MINERALS IN A GLOBAL CONTEXT: ENVIRONMENTAL AND SOCIAL IMPLICATIONS

Critical minerals are vital to the world economy and society, but their supply chains are often vulnerable to disruption. Increased demand, largely driven by the energy transition, could intensify the mining sector's negative social and environmental impacts. This chapter describes the global context of transition minerals, highlights key environmental and social issues, and examines case studies from Brazil, the DRC, Mozambique and Peru.

1.1 Introduction

Critical minerals are essential for today's technologies, economies, societies and national security, as they are used across a wide range of vital sectors such as (clean) energy, digital technology, healthcare, defence and space. At the same time, the supply chains of these minerals are complex and vulnerable to disruption from geopolitical or economic instability. In many cases, critical minerals are located in a limited number of countries. For example, China has the largest reserves of rare earth elements (REEs), Indonesia has most of the world's nickel and the DRC has most of the cobalt. As such, disruption of the supply chain in one country could cut off the overall supply of that critical mineral, with serious consequences for the global economy and society. Today, critical minerals are at the heart of geopolitical tensions, fuelled by their growing strategic importance for the energy transition but also for military objectives. Growing geopolitical competition and increasing pressure on global value chains put serious pressure on critical minerals supply security.

1.2 What are critical minerals?

There is no universally accepted list of critical minerals. Defining critical minerals is complex, and the 'criticality' of a mineral is subjective and location-specific. Countries have come up with their own lists of critical minerals. This report uses the list published by the International Energy Agency (IEA) in 2022, which is based on data from the US Geological Survey and updated every three years (see Table 2). It includes 50 minerals that the US government considers crucial for their role in national security or economic development. The list changes over time depending on geopolitical dynamics, changes in supply and demand dynamics, and the development of new technologies. Chapter 3 explains in more detail the EU-level approach to defining critical minerals and regulating their markets.

The minerals marked in bold are considered important to the energy transition, according to a 2023 report by the United Nations Environment Programme (UNEP).⁷ It should be noted that the UNEP report also considers boron, cadmium, copper, gold, lead, molybdenum, several other REEs, silicon and silver as critical to the energy transition.⁸ The list in Table 2 does not include copper, but the IEA does include copper among its list of key energy transition minerals in its *Global Critical Minerals Outlook 2024*.⁹

TABLE 2. LIST OF CRITICAL MINERALS (2022 VERSION)

| Aluminium | Dysprosium* | Indium | Palladium | Terbium* |
|-----------|-------------|------------|---------------|------------|
| Antimony | Erbium* | Iridium | Platinum | Thulium* |
| Arsenic | Europium* | Lanthanum* | Praseodymium* | Tin |
| Barite | Fluorspar | Lithium | Rhodium | Titanium |
| Beryllium | Gadolinium* | Lutetium* | Rubidium | Tungsten |
| Bismuth | Gallium | Magnesium | Ruthenium | Vanadium |
| Cerium* | Germanium | Manganese | Samarium* | Ytterbium* |
| Cesium | Graphite | Neodymium* | Scandium* | Yttrium* |
| Chromium | Hafnium | Nickel | Tantalum | Zinc |
| Cobalt | Holmium* | Niobium | Tellurium | Zirconium |

Source: International Energy Agency (2025, April 25), 'Final List of Critical Minerals 2022', https://www.iea.org/policies/15271-final-list-of-critical-minerals-2022, accessed June 2025. *These minerals are sometimes also grouped into the Rare Earth Elements (REEs), which also include promethium and scandium (not mentioned in the IEA list).

1.2.1 Critical minerals for the energy transition

Almost three-quarters of the critical minerals listed above are considered key to the energy transition. For example, lithium, nickel, cobalt, manganese and graphite are important for batteries. REEs are essential for magnets used in wind turbines and electric vehicle (EV) motors, and electricity networks rely on aluminium and copper.¹⁰

Some of these new clean technologies require large amounts of the critical minerals, in some cases much more than their conventional alternatives. For example, an average electric car uses 200 kg more energy transition minerals (primarily copper, lithium, nickel, manganese, cobalt, graphite and zinc) than a conventional car. An onshore wind plant needs nine times more minerals and metals per unit of energy produced than a gas-fired power plant (an offshore wind plant requires even more).¹¹

As a result, demand for these minerals has surged in recent years. For example, lithium demand tripled between 2017 and 2022, nickel demand increased by 40% and cobalt demand increased by 70%. For the world to become net zero, a roughly sixfold increase in production of these minerals from 2022 levels is expected by 2040, with a market value of over US\$400bn by then. 12

1.2.2 Other uses of critical minerals

Critical minerals are also used in other important sectors, including consumer electronics, traditional energy generation and transmission, and transport. Appendix 1 gives detailed insights into the key end uses of the five critical minerals selected for study.

For years, concerns over concentrated global supply chains for critical minerals were primarily in relation to demand from the clean technology sector. But in recent years, defence considerations have emerged as the dominant force shaping efforts to secure these resources. The defence sector is expected to drive critical mineral demand further as the world prepares for a new era of militarization. Many of those minerals play key roles in the production of advanced military

equipment, including fighter aircraft, missiles, tanks and artillery. ¹³ In December 2024, NATO published a list of 12 defence-critical raw materials essential for the defence industry. These include aluminium, beryllium, cobalt, gallium, germanium, graphite, lithium, manganese, platinum, REEs, titanium and tungsten. ¹⁴

1.3 Key environmental and social issues

While future demand projections could have great potential for some of the countries with large mineral resources, serious concerns about the negative environmental and social impacts of mining have been raised over the years. Mining often involves human rights abuses and exploitation, and can have devastating impacts on the environment, biodiversity, water bodies, forests and the rights of people in surrounding communities. Many of these adverse impacts are interlinked and mutually reinforce each other. Impacts can be direct, indirect and cumulative, and appear throughout the mining value chain from extraction to waste disposal. In

1.3.1 Impact on nature, biodiversity and air quality

Mining can pose significant threats to biodiversity through increased toxicity, air and water pollution, pollution due to waste disposal, and rising greenhouse gas emissions, severely impacting exposed local communities. Huge amounts of solid and liquid waste are created by mining and are often disposed of in landfills and water bodies. The Grades (concentration of the mineral per ore) vary per mineral, but can result in huge amounts of waste; for example, copper ores contain only roughly 0.6% of elemental copper. But the copper of the mineral per ore contain only roughly 0.6% of elemental copper.

1.3.2 Contamination of water bodies

Mining can lead to water scarcity and contamination, as the extraction and/or production of a mineral can require huge amounts of water, and waste water is disposed of in local water bodies. For example, 2 million litres of water are needed to extract one ton of lithium, and half of lithium production is concentrated in areas with water scarcity. Water scarcity can be a source of conflict. The case of Kamoa Copper in the DRC (see section 1.5.3) illustrates how mining operations can contaminate water sources, with serious consequences for drinking water and agricultural use.

1.3.3 Health impacts

Exposure to dust, dangerous chemicals, pollutants and other particles via air and/or water can seriously affect the health of mine workers and people in surrounding communities. Evidence of skin and respiratory diseases, infectious diseases, reproductive health issues and other conditions has been linked to mining activities. ²² Risks of severe hazards and occupational health issues have been continuously identified as a major concern in the sector in the Business & Human Rights Resource Centre's Transition Minerals Tracker. ²³ The case studies below on Glencore in Peru (see section 1.7) and Sigma Lithium in Brazil (section 1.4) illustrate the adverse impacts that mining projects can have on water and air quality, and consequently on the health of local communities.

1.3.4 Lack of consultation

As shown in the Sigma Lithium case study (see section 1.4.2), governments and mining companies often fail to consult local communities impacted by mining projects in a meaningful, inclusive and timely manner, and fail to respect Indigenous Peoples' right to Free, Prior and Informed Consent (FPIC).²⁴ FPIC is a specific right for Indigenous Peoples, as recognized in the United Nations Declaration on the Rights of Indigenous Peoples. This right should enable them to negotiate the conditions under which a project will be designed and implemented.

1.3.5 Social disruption

Mining can contribute to demographic changes and conflict because of, for example, the influx of migrant workers attracted by the mining activities, forced displacement or resettlement, increased corruption, unequal distribution of mining gains, and land disputes between mining companies and local communities.²⁵ The case study on the Balama graphite mine in Mozambique (see section 1.6) illustrates how disputes over land acquisition and inadequate compensation can remain contentious for many years.

1.3.6 Labour rights violations

Many reports have been published about unhealthy and dangerous working conditions in mining areas, violating labour rights in various aspects. These conditions pertain to occupational safety and health, wages and income inequality, working hours, job insecurity, gender-based violence and discrimination, the undermining of trade unions, and child labour.²⁶ In addition, a 2022 study found that more than half (54%) of the 5,000 mining projects identified (where about 30 clean energy minerals are being mined) are located on or near Indigenous Peoples' lands, making these communities vulnerable to exploitation.²⁷

1.3.7 Impacts on gender inequalities and gender-based violence

Mining can contribute to gender inequalities, as women are particularly vulnerable to the above-mentioned threats and impacts; at the same time, women benefit less from mining as they participate less than men due to discrimination, cultural biases and other barriers.²⁸ Women face systemic discrimination and exclusion in all phases of a mining project and along the entire mining value chain. This is partly due to gender-blind policies and practices in consultation and decision-making processes at the community level.²⁹ Furthermore, the establishment of new mining projects often leads to increased gender-based violence in surrounding communities.³⁰

1.3.8 Attacks on human rights defenders

The mining sector has consistently been the most dangerous for human rights defenders, with nearly 1,700 attacks documented over the past ten years. More than a third of human rights defenders who were murdered in the past decade were raising concerns about mining projects, and almost 40% of them were Indigenous.³¹

COUNTRY CASE STUDIES

1.4 Case study 1: Sigma Lithium mine in the Jequitinhonha Valley, Brazil

1.4.1 Introduction to the company and mine

The Canadian mining company Sigma Lithium was founded in 2012, and ten years later began constructing a mine for lithium exploration in the Minas Gerais district of northeast Brazil. The mining area covers approximately 185 square kilometres in the Jequitinhonha Valley, between the municipalities of Araçuaí and Itinga. Sigma Lithium established itself in the region with its proposal to produce what it called 'green lithium', in line with the Minas Gerais state government's promotion internationally of the 'Lithium Valley'. The company consists of two main entities: Sigma Lithium, headquartered in Canada and the owner of the holding company; and Sigma Mineração SA or Sigma Brazil, a wholly owned subsidiary of the holding company, holder of mining titles and responsible for controlling all Brazilian operations. 33

In 2024, the Brazilian Development Bank (BNDES) granted financing of approximately US\$90m to the company's Brazilian subsidiary to install an ore processing plant in the region where the complex operates.³⁴ This funding came from the Climate Fund, which is linked to the Ministry of the Environment and aimed at mitigating climate change.

1.4.2 ESG issues around the mine

Since initiating its operations in the Jequitinhonha Valley, Sigma Lithium has been the subject of serious and consistent complaints from Afro-Brazilian Quilombola, Indigenous and affected communities and allied social movements. While the company publicly promotes its commitment to sustainability and 'green lithium' production, reports from affected populations reveal a pattern of disregard for basic rights, environmental safeguards and community wellbeing.

One of the most pressing issues is the systematic violation of the right to Free, Prior and Informed Consent (FPIC), as guaranteed under Convention 169 of the International Labour Organization (ILO), an international instrument incorporated into Brazilian law. Quilombola and Indigenous communities have reported that mining-related activities were carried out in their territories without any consultation. Roads were opened, boundary fences were destroyed, drilling was conducted and river water diverted – all without prior communication or approval. The company also altered the main road connecting the community to nearby towns, further isolating the population and disrupting daily life.³⁵

Independent research institutions have raised concerns about the legality and transparency of the licensing process. A report by researchers from the Federal University of Minas Gerais (UFMG), Unimontes, Federal University of the Jequitinhonha and Mucuri, and London South Bank University concludes that Sigma Lithium submitted multiple licensing requests for what is in fact a single integrated project, thereby fragmenting the licensing process. According to the report, this tactic simplifies and accelerates approval by avoiding a holistic analysis of cumulative impacts. The report also states that the required socio-environmental studies were conducted without community participation and relied primarily on secondary data and company-supplied information. The licensing process, the researchers argue, failed to comply with the obligation to conduct FPIC. 37

These findings are reinforced by previous denunciations and opposition by the Movement of People Affected by Dams, which led to the Public Prosecutor's Office in Minas Gerais formally recommending annulment of the decision that had authorized Sigma Lithium's mineral research activities in the Lagoão Environmental Protection Area. This recommendation was based on evidence that no prior, free, informed and good faith consent had been carried out with the Quilombola communities, in direct violation of ILO Convention 169.³⁸

Beyond these procedural violations, the presence of Sigma Lithium has contributed to growing water insecurity. The region, known as the 'water tank' of Araçuaí due to its more than 130 documented springs, is home to over 300 families and is critical to the hydrological security of surrounding communities.³⁹ The only local water source, a stream that supplied the communities of Piauí and Poço de Dantas, has become a focal point of concern. Sigma Lithium instructed residents to stop using water from the river without providing any explanation, water quality data, risk assessment or transparency. The company then began monthly distributions of water to families – a gesture that only deepened local fears about contamination and lack of long-term access to safe water.⁴⁰

The physical integrity of community homes has also been compromised. Communities say that repeated blasting near residential areas has caused cracks in the walls of houses, with residents reporting tremors that begin in the early hours of the morning and prevent them from sleeping. Some have expressed fear that their homes may collapse entirely.⁴³

1.4.3 Response by the company and recent developments

After contacting Sigma Lithium in April 2025, Fair Finance Brazil received an extrajudicial notification threatening legal action for defamation if the study was published. However, BNDES bank agreed to a meeting with Fair Finance Brazil and sent a letter with responses to the study; Sigma then resumed contact in June, saying that it had made a mistake in sending the intimidating letter and was willing to talk. The bank's response was incorporated into the study, and Fair Finance Brazil shared the updated report with Sigma in August 2025.

According to Sigma's representative, the company is assessing the case study internally within its environmental and social teams. Sigma stated that: (i) a review of Brazilian Unified Health System data, local hospital records and internal reports found no correlation between operations and registered respiratory diseases; (ii) the company website⁴⁴ and institutional communications are being reworked in Portuguese, while formal complaints should follow official channels with the Public Prosecutor's Office; (iii) an independent 0800 phone grievance line is available; (iv) environmental measures are in place to mitigate dust dispersion and manage waste; and (v) engagement follows legal requirements and a voluntary protocol for communities, aligned with a state-validated schedule.

Since these exchanges, press reports indicate that Sigma Lithium has faced significant obstacles in accessing the US\$90m credit line previously announced with BNDES, due to difficulties in securing a bank guarantee. This development suggests that external scrutiny and the broader public debate around the company's environmental and social practices may have contributed to greater caution on the part of financial institutions and market actors. 45

1.4.4 Recommendations to the company and other stakeholders

To Sigma Lithium:

Consultation and consent: ensure meaningful consultation processes and the free, prior and informed consent of Indigenous peoples and Quilombolas.

Operational transparency: publish detailed and audited reports in Portuguese and English on its environmental impacts (emissions, water/air quality) and social investment results.

Protection and redress: review policies to prohibit retaliation, provide independent legal advice to communities, and fully redress any proven damages.

To BNDES:

Expand due diligence: consider public complaints in its risk analyses and conduct field visits to engage directly with affected communities.

Effective monitoring: require detailed sustainability reports in Portuguese, with auditable data and responses to community demands, and strengthen its ombudsman's office to make it accessible and effective.

To the state of Minas Gerais:

Inspection and action: conduct independent technical inspections to verify environmental and social damage and, if proven, legally demand full compensation from the company.

Territorial protection and environmental monitoring: ensure the protection of traditional territories and develop a state plan for air quality monitoring and a toxicological study in the region.

To investors and buyers:

Contractual conditions: demand transparency and include clauses in contracts for continuous environmental and social monitoring, with independent verification and community participation.

This is a summary of an extended case study, which can be found <u>here</u>.

1.4.5 Links with European financial institutions

Norges Bank Investment Management (NBIM), a subsidiary of Norges Bank that manages the Norwegian Government Pension Fund Global, owns approximately 2.24% of Sigma's shares. Other examples of European shareholders in Sigma are BNP Paribas (US\$13m), Legal & General (US\$8m), Konwave (US\$1.7m), Rothschild Group (US\$2.6m) and Crédit Mutuel (US\$1.6m).

These investors are advised to engage with Sigma Lithium and ask them to implement the above recommendations.

1.5 Case study 2: Kamoa Copper mine in the DRC

1.5.1 Introduction to the company and mine

Kamoa Copper SA (KAMCO S.A.) is a mining company, established in 2015, 47 which specializes in the prospecting, exploration, exploitation, processing and marketing of copper and cobalt.

The company is operated through the Kamoa-Kakula Copper joint venture, which comprises four partners: Ivanhoe Mines, a Canadian company (39.6%); Zijin Mining Group, a Chinese corporation (39.6%); Crystal River Global Limited (British Virgin Islands, 0.8%); and the Government of the DRC (20%).⁴⁸

Kamoa Copper has been developing the massive Kamoa-Kakula copper complex in the DRC. This includes three operational underground mines: Kansoko, Kamoa and Kakula. Production of copper concentrate began at the Kakula mine in May 2021 and commercial production started in July the same year. 49 In 2024, Kamoa ranked as the world's fourth-largest copper producer on and, according to Ivanhoe Mines, is the fastest-growing copper mine globally. 51 Kamoa-Kakula has set its 2025 production guidance at between 520,000 and 580,000 tons, positioning the complex to become the largest copper mine on the African continent. 52

Ivanhoe reported US\$3.11bn annual revenues in 2024 for the Kamoa-Kakula project. The copper concentrate produced at the site is processed locally and further refined in China; China is the primary destination and buyer of Kamoa-Kakula's copper exports through offtake agreements, mainly involving Zijin Mining and affiliated Chinese smelters.⁵³

1.5.2 Community impact and mapping

Kamoa's mining operations affect numerous rural communities within the Mwilu and Musokantanda groupings. Around 40 villages are impacted, including Muvunda, Kaponda 1 and 2, Israel and Mundjendje, which are recognized as the most affected due to their proximity to mining infrastructure. The village of Muvunda is especially affected as it hosts a major part of the Kakula mine. The Kaponda villages serve as resettlement sites for people who were displaced from the village of Tshimbuji due to mining activities. Israel lies adjacent to the Kamoa underground mine entrance, and Mundjendje is located on the traditional land of Chief Muvunda.

The relocation of villages in the vicinity of the Kamoa-Kakula mine is a consequence of the expansion of the mining project and the associated infrastructure. Although the project formally falls within a certain perimeter, experience shows that the impact zone is wider, with infrastructure extending beyond the licensed concessions.⁵⁸

1.5.3 ESG issues around the mine

Right to participation and information

Although Kamoa Copper established dialogue mechanisms such as Displacement Committees, these platforms are largely non-functional. Traditional chiefs and state representatives often mediate issues, sidelining the broader community. As a result, many villagers feel abandoned and lack clear channels to voice grievances. Reports from local residents highlight the ineffectiveness of the company's complaint systems and the absence of transparent communication.⁵⁹

Access to clean water and environmental concerns

Water quality and availability are serious concerns. Before mining began, communities relied on river water. Since Kamoa's activities commenced, including drilling and mining operations, reports indicate significant water pollution. Residents accuse the company of discharging polluted water into local rivers, rendering the water unfit for human consumption and agricultural use. Communities say the discharges have altered water quality and pose risks to human health and the survival of both terrestrial and aquatic ecosystems. ⁶⁰

Research conducted by the University of Lubumbashi in Oct 2025 confirms significant metal contamination of surface water and sediments, particularly for cobalt (Co), copper (Cu), iron (Fe), manganese (Mn) and lead (Pb), with concentrations that far exceed the World Health Organisation's guidelines for drinking water⁶¹.

The study also observed a partial or total drying up of several watercourses, with an alarming situation of the Kambuluku River and a marked decrease in the flow of the Mulungwishi River⁶². The progressive depletion of water resources by the mine heightens the socioeconomic vulnerability of rural households and could have longer-term environmental consequences if no mitigation measures are implemented.

In response, Kamoa Copper drilled water wells and installed tanks in affected villages. However, these facilities have proven insufficient. In Muvunda, although three boreholes were initially installed, only one remains functional, failing to meet the needs of the 45 relocated households and host communities. Water distribution is further restricted to afternoon hours, causing long queues and social tensions⁶³.

Resettlement and compensation

The livelihoods of impacted communities, which largely depend on agriculture, have suffered due to the relocations. Villagers often experience abrupt displacements that do not align with agricultural cycles, disrupting income sources and food security.

Replacement farmland provided to relocated populations was often of poor quality due to inadequate soil preparation. These unproductive lands were eventually abandoned, further compromising communities' ability to restore their livelihoods. Compensation and agricultural inputs provided by Kamoa Copper were deemed insufficient and poorly adapted to communities' needs.

In the DRC, land tenure is largely governed by a dual system combining statutory law and customary tenure, with rural land often held communally under customary rights administered by traditional authorities ('chefferies'). This complexity complicates formal compensation and land replacement efforts.⁶⁴

In late 2024, the company announced plans to relocate ten additional villages. The eviction process, which is being carried out by the company under the supervision of the Provincial Relocation Commission, has been characterized by delays and a lack of transparency. On 22 April 2025, villagers held a peaceful protest calling for the company to respect their right to fair compensation and resettlement.

The authorities arbitrarily arrested 72 of the protestors; two of them were seriously injured during the arrests, with one shot in the leg, the other in the neck. After paying 'substantial

sums' demanded by the judicial authorities, 45 of the protestors were released, while 27 were held in Dilala central prison and faced legal action initiated by Kamoa Copper. ⁶⁵ They were later convicted of belonging to a criminal organization, but subsequently acquitted of this charge on appeal on 3 September. They were, however, sentenced to two months for 'damages during the demonstration', a period that roughly matched their time in custody, leading to their subsequent release. ⁶⁶

Governance and stakeholder engagement

At the start of its operations, Kamoa Copper established Resettlement Committees as mechanisms for dialogue and communication with key stakeholders. These structures initially enabled open communication and engagement with affected communities, aiming to address both current and emerging issues related to forced displacement. Local communities confirmed that prior to large-scale relocation, Kamoa Copper had sufficiently consulted them in a manner that respected principles of inclusion, participation and dignity.

However, meaningful stakeholder engagement has significantly declined. While Kamoa Copper claims to engage with communities and local authorities, evidence suggests limited and often symbolic participation. Critical aspects of engagement such as agenda-setting, representation, and frequency of consultations are not clearly defined or consistently implemented. Communities report that state authorities often act in favour of the company, undermining fair negotiation and transparency.

Local leaders also point out that Kamoa leverages political influence to achieve its objectives. For instance, the company has appointed specific civil society actors to accompany the communities as 'experts', even though these individuals are on the company's payroll. As such, these actors hold a dual function, acting both as consultants for Kamoa and guides for the communities.⁶⁷

Communities now report a complete lack of operational dialogue mechanisms. As one woman from Muvunda put it: 'No dialogue frameworks exist anymore; we've been abandoned. We're starving and don't know who to turn to with our complaints.'

1.5.4 Response by the company

Kamoa Copper claimed to have a complaint management mechanism, supported by a digital data system called Isometrix. The company also stated that it had shared contact details of its community relations staff with affected populations to allow direct communication. Despite these claims, the research team of local NGO IBGDH could not confirm the effectiveness of Kamoa Copper's engagement. Information-sharing and grievance-handling mechanisms appear inefficient and inaccessible.⁶⁸

The authors also shared a draft of this case study with Ivanhoe Mines and Zijin Mining, but did not receive a response.

1.5.5 Recommendations to the company

Kamoa Copper should publicly commit to never again initiate legal actions against community members for peaceful assembly and protest. All victims of the arbitrary arrests and detentions should receive adequate reparations for the physical and moral damages suffered.

On Environmental Management and Access to Clean Water

- Strengthen environmental monitoring, including systematic sampling of water, sediments, and soils, in collaboration with local communities and authorities.
- Conduct regular health risk assessments for populations exposed to potentially contaminated water sources.
- Ensure transparency on water quality, publishing test results in accessible formats and local languages.
- Reduce or pre-treat all industrial discharges before release into the environment.
- Establish ecological buffer zones to limit the dispersion of pollutants and restore affected ecosystems.
- Evaluate and rehabilitate boreholes or develop new ones to improve access to clean water and ease social tensions.
- Support community capacity building for local water management and environmental stewardship.
- Implement targeted corrective actions to reduce the discharge of metallic pollutants into aquatic ecosystems and to ensure the sustainable and equitable management of water resources.

On relocation and livelihoods

- Build on procedural safeguards: while Amnesty International and IBGDH recognize that procedural guarantees were largely respected during the Kakula relocation, Kamoa Copper must now focus on ensuring that relocation sites meet international standards for adequate housing and living conditions (UN Covenant on Economic, Social and Cultural Rights, General Comment No. 4).
- Address adequacy gaps:
 - Guarantee access to safe drinking water, sanitation, healthcare and education in relocation sites;
 - Develop a time-bound plan for electricity access in partnership with the state and donors, rather than using infrastructural deficits as a permanent justification for noncompliance;
 - Ensure housing provides durability, safety, sufficient space and cultural adequacy.
- Benchmark relocation planning against International Finance Corporation (IFC)
 Performance Standard 5 (Land Acquisition and Involuntary Resettlement) and include independent verification.
- Ensure livelihood continuity: beyond housing, replacement land must be of equal or better quality with secure tenure, and communities must receive multi-year agricultural and income restoration support until livelihoods are demonstrably re-established.
- Community monitoring: establish community relocation committees with the power to inspect relocation sites, flag gaps (e.g. lack of water/electricity) and demand corrective action before relocations are finalized.

On community engagement and grievance mechanisms

- To ensure a fair and effective process, Kamoa Copper must immediately organize an inclusive, multi-stakeholder session to evaluate the 2024-2025 relocation process.
- Hold regular, publicly announced community meetings in local languages, at times and places agreed with residents.

- Ensure inclusive participation, with proportional representation of women, youth and vulnerable groups so that their views are heard and taken into account.
- Allow community-led agenda-setting instead of company-only agendas.
- Strengthen grievance mechanisms by:
 - Offering multiple entry points (local offices, free hotlines, suggestion boxes, mobile platforms);
 - Reporting back systematically on complaints received and actions taken;
 - Establishing independent oversight of the grievance process.

On transparency and information-sharing

As environmental and social impact assessments are already public, ensure they are usable and comprehensible:

- Produce summaries in French and local languages (Swahili, Lunda, Tshiluba) using non-technical language;
- Disseminate findings via community radio, illustrated brochures, posters and village forums;
- Provide quarterly, plain-language bulletins on environmental and social monitoring (e.g. water quality, land use, resettlement impacts);
- Establish a digital repository for all environmental and social reports, with mobile-friendly access for local NGOs, journalists and community leaders.

On independent monitoring and accountability

- Set up multi-stakeholder monitoring committees with community representatives, local NGOs and technical experts, empowered to inspect sites and verify data;
- Fund independent environmental and social audits, chosen in consultation with affected communities, and make results public;
- Guarantee unrestricted access for oversight bodies and civil society to grievance data, resettlement progress reports and monitoring results.

On reparations and compensation

- Develop a transparent compensation framework, co-designed with communities;
- Offer reparations packages combining financial and non-financial elements (e.g. scholarships, healthcare, infrastructure projects);
- Embed guarantees of non-repetition in legally binding community agreements, and publish annual progress reports.

On human rights and international standards

- Integrate the UN Guiding Principles on Business and Human Rights and IFC Performance Standards into corporate policy, with measurable benchmarks;
- Provide mandatory training on human rights and community relations for all managers and field staff:
- Appoint an independent ombudsman to handle rights-related complaints and oversee compliance with human rights and environmental standards.

1.5.6 Links with European financial institutions

European investors in Ivanhoe Mines are Rothschild Group (US\$78m), Allianz (US\$25m), Crédit Agricole (US\$8.7m), Crédit Mutuel (US\$1.6m), Svenska Handelsbanken (US\$3.2m),

Skandinaviska Enskilda Banken (US\$1m), Groupe BPCE (US\$1.4m), Danske Bank (US\$1.2m), Intesa Sanpaolo (US\$0.7m), Nordea (US\$0.7m), BNP Paribas (US\$0.16m), Deka Group (US\$0.49m), Government Pension Fund Global (GPFG Norway) (US\$111m), Storebrand (US\$8m), ABP (US\$7m), Swedish Pension fund AP7 (US\$7.8m) and Folksam/KPA (US\$9.6m).

European investors in Zijin Mining Group are Dutch pension fund ABP (US\$92m), Allianz (US\$194m), Deutsche Bank (US\$7m), Crédit Agricole (US\$2.2m) and Skandinaviska Enskilda Banken (US\$4.4m).⁶⁹

These investors are advised to engage with Ivanhoe Mines and Zijin Mining Group and ask them to implement these recommendations.

1.6 Case study 3: Syrah Resources Balama graphite mine in Mozambique

1.6.1 Introduction to the company and mine

Australian mining company Syrah Resources began production at the Balama graphite operation in northern Mozambique in 2018. In October 2024, with protesters blocking access to the mine, Syrah declared 'force majeure' – a common legal clause when unforeseen events prevent a party from fulfilling its contractual obligations – and suspended operations. The total cost of the shutdown has not been fully disclosed, but Syrah has invested at least US\$3m per month in fixed standby costs to maintain the operation during this period.

Cathode materials – lithium, manganese, nickel and cobalt – vary by battery type, enabling manufacturers to navigate around mineral chokeholds and sanctions. But graphite is in virtually every EV battery as the anode or the negative electrode, helping EVs store energy and enabling long driving ranges and quick charging. The reliance of EVs (and other strategic technologies) on graphite has contributed to the mineral being a growing source of geopolitical tension and leverage, with both the US and China imposing trade restrictions on its production, export and import. Page 1974

Balama is the largest graphite operation in Africa and one of the most promising graphite mines in the world, both in terms of graphite quality and size of the deposit. ⁷⁵ It holds an estimated 107 million tons of graphite reserves, with a projected mine life of 50 years. ⁷⁶ In 2023, Balama accounted for approximately 10% of global graphite production and 45% of production outside China. ⁷⁷

In time, up to 70% of graphite from the operation is planned to be exported to a processing facility in Vidalia in the US state of Louisiana, operated by a separate Syrah subsidiary. Global North companies, including Tesla and Lucid, have entered into offtake agreements with Syrah, committing to purchase materials from the processing facility. Global North committing to purchase materials from the processing facility.

Syrah resumed operations at Balama in June 2025. However, as recently as March 2025, 0xfam interviews with 43 community members and local stakeholders revealed that many of the affected communities' grievances remain unresolved.

1.6.2 ESG issues around the mine

Contentious land acquisition process

The Balama mine is in the Cabo Delgado region, one of Mozambique's poorest provinces. It is roughly 1,400 miles by road from the capital, Maputo. Nearly 80% of households in the area rely on subsistence agriculture.⁸⁰

Syrah was granted a 25-year mining concession in 2013.81 The project involved the acquisition of 5,800 hectares (about the size of Manhattan) of land which was previously held by communities under customary tenure, a common form of land ownership and management in rural Mozambique.82

Oxfam published a case study on the mine in 2023, outlining the government-mandated process Syrah followed to acquire land and highlighting communities' ongoing grievances. At the time, stakeholders expressed concerns over unfinished restitution for lost lands and the lack of publicly available and accessible documentation around scope and outcomes of community-company negotiations. A key finding was that while affected farmers were entitled to replacement land and resettlement support, many felt excluded from meaningful decision-making. In addition, community members shared that initial consultations relied heavily on only a handful of community leaders, limiting broader participation and leaving many residents unclear about their rights and the terms of compensation. B4

Protests erupt

In September 2024 protests broke out, largely driven by over 200 families who had ceded their land to the project between 2014 and 2016 and wished to express dissatisfaction with the land acquisition process. In a briefing to investors just before the 2024 shutdown of the mine, Syrah described the protests as 'linked to a small contingent of farmers with historical farmland resettlement grievances, conflated with unrelated issues'. B

By December 2024, local militias known as the 'Naparamas' were reported to have been providing protection to the protesters. According to residents of the Balama and Montepuez districts, clashes between Naparamas and state security forces occurred several times in December 2024 and January 2025. During this same period, post-election protests were held across Mozambique. Local stakeholders reported that members of the Balama community were inspired by these protests. In its statement to investors, Syrah noted that this broader unrest was limiting the government's responsiveness to the situation at Balama.⁸⁷

Communities' grievances persist

To better understand community perspectives in the wake of the 2024 protests and mine closure, Oxfam conducted interviews with 43 local stakeholders between January and March 2025, including community members, government officials, civil society representatives, journalists, public health workers and company employees. Although Syrah Resources has a human rights policy and maintains a grievance mechanism, many community members requested anonymity, citing fear of retaliation from the government or the mining company.

A key finding from the interviews was that dissatisfaction with the land acquisition process persists. Local officials and community leaders said that the company had not finished compensation payments to farmers for some land currently used for mining. In cases where the company had fully compensated farmers, farmers appeared to struggle to develop

sustainable sources of income. Interviewees alleged that the original resettlement process failed to provide the basic conditions farmers needed to rebuild their lives, with many reporting ongoing food insecurity due to a lack of access to farmland.

'The compensation money came once and that's it, but the fields are still there for the mining company to use it for decades.' Farmer (anonymity requested)

'I received my money almost ten years ago and I finished it within a year, building a house on a much smaller area of land compared to my old farm that I gave to [Syrah].' Farmer (anonymity requested)

'I would rather die than agree to give any more community land to the project. We are also considering taking our land back. They are cheating us by paying us less than we deserve. Our land has the graphite they need to make a lot of money. It's only fair that we should be given fair compensation in exchange for our fields.' Community leader, Mualia village

Another widespread perception among the interviewees was that they had been abandoned by the state to resolve these issues with the mining company on their own.

In addition to grievances over land, residents of one village informed Oxfam that they believed graphite mining had reduced water levels and quality in rivers and streams that thousands of villagers depend on for drinking, cooking and washing. They also reported that the land expropriation process and construction of mining infrastructure had significantly prevented the community from accessing traditional water sources. Environmental experts said that the limited access to water could be related to mining, but that Mozambique is also facing climate-related events that may be disrupting water supply. Syrah Resources has refuted claims that water quality and water levels have dropped because of its operation, and asserts that these are monitored and reported to the Mozambican regulator.

The Balama mine recently underwent an independent audit by the Initiative for Responsible Mining Assurance (IRMA).⁸⁸ In December 2024, IRMA released the audit results, which confirmed that Syrah shares water monitoring information with ARA Norte (the government entity overseeing water management) but has not engaged communities to participate in water monitoring. The audit recommended that the company conduct a comprehensive water scoping study to evaluate water quantity and quality and related risks to water users around the mine.⁸⁹ The absence of readily and publicly available data regarding the impact of mining on water makes it difficult to verify communities' claims.

Residents also raised concerns about the amount of dust produced when the mines are active; in some areas they described dust collecting on plants, cars and rooftops. Researchers observed large quantities of dust blowing from the mine site to people's homes during their visit to the area in February 2025 when the mine was inactive – although the source of this particular dust cloud was unclear. Prolonged exposure to high levels of graphite dust can cause health issues, including chest pain, lung disease, and eye and skin irritation.⁹⁰

Where things stand today

Syrah told Oxfam that the company has established a Tripartite Working Group with government and community representatives to review historical resettlement claims.

In May 2025, Syrah reported that it was restarting operations at Balama following an agreement between the company, local farmers and government officials. While most protesters withdrew, some remained near the site. Local reports allege that police used force – including tear gas and gunfire – to disperse remaining protesters. Several individuals were reportedly arrested.⁹¹

The situation at Balama remains fluid. While recent agreements have allowed operations to resume, the preceding events and allegations of harms highlight the importance of sustained community engagement and transparency. Securing a social licence to operate is not a one-time achievement but a continuous process that must be maintained throughout the life of the mine, especially in areas marked by past conflict and controversies.

1.6.3 Recommendations to the company

- Publish and translate into local languages environmental and social impact assessments, environmental and social management plans, and periodic environmental monitoring reports.
- Develop a transparent compensation framework co-designed with communities, including the Local Development Committee, and offer compensation combining financial and non-financial payments. Ensure that women can actively participate in decisions about compensation and benefit equally from it.
- Strengthen the existing complaints and grievance mechanism by making it more accessible, and systematically report back on complaints received and actions taken.
- Ensure a stronger social licence to operate by paving local access roads to adjacent communities; utilize and construct public notice boards in communities to publicize information on mine development, air safety and water quality; and offer public information sessions on mine standards, road safety and other relevant topics.
- Regularly publish company air monitoring results in a clear and accessible format, validate findings with community members, and publicly explain potential public health exposures.
- Conduct a longitudinal analysis pre-mine to the present to determine whether and how air quality has changed over time because of mine operations.
- In coordination with the Mozambican health ministry, assess whether adequate health services are in place to address the health impacts of reduced air quality, especially for children and pregnant people, older adults and other high-risk populations.
- Conduct a comprehensive water study to evaluate water quantity and quality and related risks to nearby communities. This analysis should be publicly shared in an accessible format, and the findings should be validated with community members.
- The company should use its voice and leverage to engage the Mozambican government when human rights defenders including environmental and land activists, journalists, trade unions and whistleblowers are being threatened, attacked or facing prosecution due to their work around the company's operation.

1.6.4 Links with European financial institutions

Syrah Resources has various European investors, including Fonds de Compensation de la Sécurité Sociale (US\$0.037m), Niche Asset Management Limited (US\$0.67m) and UBS

(US\$362m).⁹² The Balama graphite operation has also received financial backing from the United States International Development Finance Corporation.⁹³

These investors are advised to engage with Syrah Resources and ask them to implement the above recommendations.

1.7 Case study 4: Glencore Antapaccay copper mine in Peru

1.7.1 Introduction to the company and mine

Glencore plc is an Anglo-Swiss multinational commodity trading and mining company with headquarters in Switzerland.

Glencore has several production facilities all around the world and supplies metals, minerals, crude oil, oil products, coal, natural gas and agricultural products to international customers in the automotive, power generation, steel production and food processing industries. Glencore is among the world's largest companies.

The company has been involved in numerous controversies and investigations related to environmental damage and corrupt practices. It has pleaded guilty to multiple instances of bribery and corrupt practices as part of investigations in the USA and the UK.⁹⁴

In Peru, Glencore has significant investments in the mining companies Antamina and Antapaccay. This case study focuses on Antapaccay SA, which operates a major copper mining unit in the province of Espinar, Cusco region, which is an ancestral territory of the Quechua-speaking K'ana Indigenous Peoples.

The mining unit is an open-pit operation. Initially it covered an area called Tintaya, which from 1985 was operated by a state-owned company. In 1994 it was privatized, with the first expansion into the Antapaccay area taking place in 2012. In 2013 Glencore became the new owner, and expansion into the Coroccohuayco area is currently underway.

1.7.2 ESG issues around the mine

Pollution in Espinar is an established fact, as proven in numerous independent and official studies. 95 Women have been disproportionally affected and face heightened health risks; these include high rates of anaemia, particularly in the Yauri community. Environmental damages have also impacted local agriculture, leading to loss of income and economic difficulties for residents. 96

The discussion isn't about whether there is pollution, but rather its origin. While Glencore claims that the heavy metals found in the water are naturally occurring, six environmental assessment studies produced by the Agency for Environmental Assessment and Enforcement (OEFA) between 2022 and 2023⁹⁷ link the pollution to the company's Antapaccay operations.

According to OEFA, the sources of contamination are to be found in the Tintaya tailings deposit, which leak into the groundwater, as well as in several dumps and tailings deposits that are part of the extensive Tintaya-Antapaccay mining complex. Based on analysis of water, sediment, air, soil, flora and fauna samples, OEFA identified leakages that are contaminating groundwater sources which feed into two major rivers – resources that are

essential for livestock, agriculture, and human consumption. Furthermore, the studies found that waste dumps and leach pads from the company were generating leakages containing arsenic, copper, manganese, sulphate, mercury, molybdenum and lead, contaminating surface water, groundwater, soil and pastureland.

Although these causality studies do not include analyses of human health impacts – since this falls outside the scope of OEFA's mandate – they do contain assessments of impacts on domestic and wild animals, which suggests potential implications for human health. In addition, they provide evidence of air pollution from dust raised during blasting in the mine, and a lowering of the groundwater table that has caused sinkholes to emerge and the disappearance of springs.

Over three decades, the mining unit has grown larger and larger, and there have been constant changes to its environmental permits, ⁹⁹ making it difficult to gain a full picture of the project and its impacts. These expansions have also led to the reduction and fragmentation of Indigenous communities' territories – negatively impacting pastureland, ancestral trails and areas of significant cultural and religious value, ¹⁰⁰ as well as generating social unrest.

The current expansion process to Coroccohuayco is characterized by a lack of transparency, with the company providing incomplete and piecemeal information to communities, and contradictions regarding the amount of land it needs to acquire. This has made it impossible for communities to negotiate in an informed way. The company has also pursued one-off negotiations with individuals rather than respecting the community's traditional collective decision-making practices, thereby promoting a breakdown in the social fabric.¹⁰¹

1.7.3 Response by the company

In response to the findings on pollution, Glencore questioned the methodology of the OEFA studies and claimed that reports by two universities support its view. Glencore responded by email to Oxfam's request to share these reports, stating: 'As both reports are highly technical, we are not able to share them'.102

With regard to consultation, Glencore stated that 'in accordance with Peruvian environmental and social regulations for mining activities and the UN Guiding Principles for Business and Human Rights, Antapaccay has carried out public consultations in communities surrounding the Coroccohuayco project as part of its environmental impact assessment'. However, as shown above, prior consultation of Indigenous Peoples is being carried out in an irregular manner, with insufficient information shared with communities. 104

1.7.4 Recommendations to the company

Glencore must take urgent action to address the immediate causes of pollution and their consequences. It must undertake a comprehensive review of its policies and practices to correct this serious situation; and it must comply with the relevant authorities concerning liability for the pollution and ensure that reparations and compensation are made.

In relation to the land negotiation process, all land negotiations must be paused until the new environmental impact assessment has been reviewed, together with objective and independent studies that provide adequate information for communities to reach a decision.

The company must act in a transparent manner and provide accurate information about its land acquisition needs and the consequences for communities, complying with IFC standards and international law (ILO Convention 169 and the UN Declaration on the Rights of Indigenous Peoples) to ensure the continued existence and wellbeing of Indigenous communities.

In relation to consultation and consent, in line with the recommendations of the Peru Ombudsman's Office and the jurisprudence of the Inter-American Court of Human Rights, Glencore should demand that the state ensure that the prior consultation is carried out in a manner consistent with the UN Declaration on the Rights of Indigenous Peoples, where the opinions of Indigenous communities actually have the potential to influence substantive aspects of the project, in particular the environmental assessments.

1.7.5 Links with European financial institutions

Over the last eight years Glencore has secured over US\$6.3bn in loans and bond issuances from five European banks: Deutsche Bank, ING, BNP Paribas, Société Generale and Banco Santander. BNP Paribas alone provided US\$1,701m in loans and underwriting to Glencore. BNP Paribas sent a written response, see footnote¹⁰⁵.

Since January 2024, nine European banks have participated in 12 bonds totalling US\$8bn issued on behalf of the mining company, with the most recent in April 2025. This includes Barclays, BBVA, Commerzbank, Deutsche Bank, HSBC, ING, Santander, Standard Chartered and UBS.¹06 The biggest European investors in Glencore are Groupe BPCE, Allianz, Deutsche Bank, Deka Group and Intesa Sanpaolo, for a total of €733m. Swedish Pension fund AP7 holds shares in Glencore of US\$56m.¹07

These banks and investors are advised to engage with Glencore and pressure them to implement the above recommendations.

According to the Financial Exclusions Tracker, there are 315 observations of exclusions of Glencore and subsidiaries (no. of subsidiaries multiplied by motivations for exclusion), with 54 banks and investors excluding Glencore and its subsidiaries for reasons related to climate change and human rights violations. ¹⁰⁸

2. Who are the EU financiers of critical minerals?

WHO ARE THE EU FINANCIERS OF CRITICAL MINERALS?

This chapter presents an analysis of the largest EU-based creditors of and investors in five critical minerals selected for their strategic importance to the global energy transition: cobalt, copper, graphite, lithium and nickel.

2.1 Research methodology

The research is based on financial flows data available in Mining & Money. ¹⁰⁹ This section further details the research methodology used in Mining & Money.

2.1.1 Company selection

Mining & Money focuses on 130 companies. Among these, 93 companies are active in the five critical minerals selected for this study – cobalt, copper, graphite, lithium and nickel. For each of the selected minerals, the research identified the largest producers and companies holding the largest reserves. The study used industry reports (e.g. Fitch Quarterly Reports), U.S. Geological Survey (USGS) data, trade journals and other relevant sources to identify the main companies engaged in the exploration and extraction of each mineral. Company publications, presentations and other disclosures, as well as media archives and alternative industry reports and trade journals, were used to complete, as far as possible, an overview of current production and/or reserves data.

2.1.2 Financial flows data sources

Creditor data – i.e. data on loans and underwriting services provided to the selected companies – was retrieved from financial databases Dealogic and FactSet, project finance database IJGlobal, company publications, company registries and media archives.

Investor data – i.e. data on the investors in bonds and shares issued by the selected companies – was retrieved from financial databases Dealogic and FactSet, as well as pension fund portfolio disclosures tracked and compiled by Profundo.

2.1.3 Segment and geographic adjusters

Many mining companies have diversified portfolios, including different minerals. The Mining & Money research therefore identified the proportion of business activities that can reasonably be attributed to the upstream extraction and midstream processing of the selected minerals. The proportion of business activities related to the focus metals was calculated for all identified borrowers/issuers for each year that a financial relationship was identified. These proportions are known as 'segment adjusters', since their application to identified financing 'adjusts' the original value to reflect the 'segment' value more accurately.

Segment adjusters were developed using the segment reporting in company annual reports to the fullest extent possible, complemented by additional information from other company publications and websites, and estimations where necessary. The following financial indicators were used in order of preference: segment capital expenditures/additions to non-current assets, segment liabilities, segment assets, segment revenues, and segment profit/loss.

Where financing was identified at the subsidiary level, this research identified the segment activities using company publications. Where financing was identified for a financing vehicle, the group-level adjuster was applied.

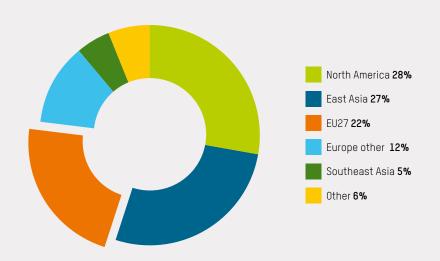
A similar methodology was applied to calculate 'geographic adjusters', as several companies included in the study are active in multiple countries.

The figures reported below, therefore, are both segment and geographic adjusted. In other words, the values are attributable to the specific minerals and countries in question, e.g. the value of financing attributable to cobalt in the DRC, or to nickel in Indonesia.

2.2 Credit flows from the EU to critical minerals

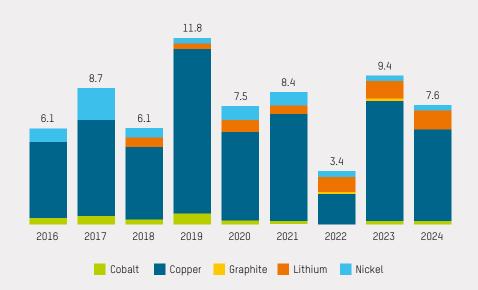
In the period 2016-2024, EU-based financial institutions provided US\$69bn in loans and underwriting services attributable to critical minerals. EU financial institutions were the third-largest financiers of the 93 selected critical mineral-producing companies active globally.

FIGURE 5. LOANS AND UNDERWRITING TO CRITICAL MINERAL PRODUCERS PER FINANCIER REGION (2016-2024)



Source: Mining & Money. 'EU27' refers to the current 27 European Union member states.

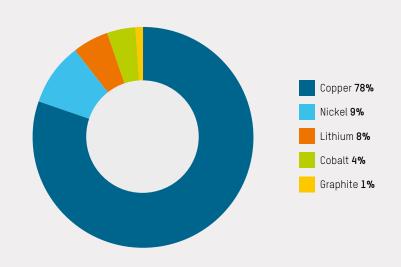
FIGURE 6. LOANS AND UNDERWRITING BY EU BANKS TO CRITICAL MINERAL PRODUCERS PER YEAR AND MINERAL (2016-2024, US\$ BILLIONS)



Source: Mining & Money

As the annual trends chart indicates, the majority of credit flows to critical minerals from EU-based financial institutions were attributable to copper, accounting for 78% of loans and underwriting services (US\$53.9bn). This was followed by nickel (US\$6.4bn) and lithium (US\$5.6bn).

FIGURE 7. LOANS AND UNDERWRITING BY EU BANKS TO CRITICAL MINERAL PRODUCERS PER MINERAL (2016-2024)



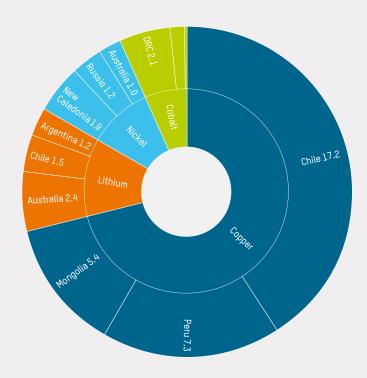
Source: Mining & Money

TABLE 3. LOANS AND UNDERWRITING BY EU BANKS TO CRITICAL MINERAL PRODUCERS PER MINERAL AND MINERAL REGION (2016-2024, US\$ MILLIONS)

| Mineral region | Cobalt | Copper | Graphite | Lithium | Nickel | Total |
|--------------------|--------|--------|----------|---------|--------|--------|
| South America | 2 | 25,287 | | 2,720 | 346 | 28,354 |
| Sub-Saharan Africa | 2,185 | 5,640 | 42 | | 722 | 8,589 |
| Central Asia | | 6,409 | | | | 6,409 |
| Central America | 13 | 5,571 | | | | 5,584 |
| Oceania | 16 | 1,876 | 0 | 2,369 | 1,039 | 5,299 |
| EU27 | 0 | 4,271 | 304 | 309 | 93 | 4,977 |
| Southeast Asia | 79 | 1,254 | | | 2,654 | 3,987 |
| North America | 408 | 2,141 | | 135 | 288 | 2,972 |
| Europe other | 5 | 1,343 | | | 1,233 | 2,581 |
| East Asia | | 50 | | 84 | 35 | 169 |
| Middle East | 0 | 36 | | | 1 | 37 |
| South Asia | | 0 | | | | 0 |
| Total | 2,707 | 53,877 | 347 | 5,616 | 6,411 | 68,957 |

Source: Mining & Money

FIGURE 8. LOANS AND UNDERWRITING BY EU BANKS TO CRITICAL MINERAL PRODUCERS PER MINERAL AND TOP THREE MINERAL COUNTRIES (2016–2024, US\$ BILLIONS)



Source: Mining & Money

The majority of financing for copper went to Chile (US\$17.2bn), Peru (US\$7.3bn) and Mongolia (US\$5.4bn). These three countries accounted for 56% of all EU loans and underwriting services attributable to copper.

Most of the financing for lithium from the EU went to Australia (US\$2.4bn), Chile (US\$1.5bn) and Argentina (US\$1.2bn). More than 90% of all lithium financing from the EU went to these three countries.

65% of the EU loans and underwriting for nickel went to New Caledonia (US\$1.9bn), Russia (US\$1.2bn) and Australia (US\$1.0bn).

Almost all financing for cobalt from the EU went to the DRC (US\$2.1bn). The remainder went to Canada (US\$408m), Madagascar (US\$122m), and in much smaller values to other countries.

Currently, there have not been high values of financing for graphite. The majority of the US\$347m in loans and underwriting services attributable to graphite from EU-based financial institutions went to Sweden (US\$300m), followed by Tanzania (US\$40m) and Malawi (US\$2m).

French financial institutions were the largest EU providers of loans and underwriting services to critical minerals in the period 2016-2024. The largest among them was BNP Paribas (US\$12.8bn), followed by Crédit Agricole (US\$ 8.0bn) and Société Générale (US\$7.9bn).

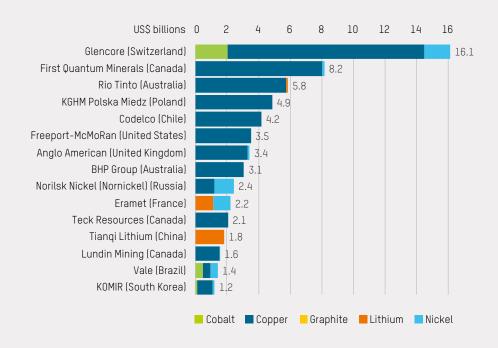
The mining company group that received the largest value of EU loans and underwriting services in the period 2016-2024 was Glencore (US\$16.1bn). It was followed by First Quantum (US\$8.2bn) and Rio Tinto (US\$5.8bn).

FIGURE 9. TOP 15 EU LOANS AND UNDERWRITING SERVICE PROVIDERS TO CRITICAL MINERAL PRODUCERS PER FINANCIAL INSTITUTION AND MINERAL (2016–2024, US\$ BILLIONS)



Source: Mining & Money

FIGURE 10. TOP 15 RECIPIENTS OF EU LOANS AND UNDERWRITING SERVICE PROVIDERS TO CRITICAL MINERAL PRODUCERS PER COMPANY GROUP AND MINERAL (2016-2024, US\$ BILLIONS)



Source: Mining & Money

2.3 Investments from the EU in critical minerals

In November 2024, EU-based financial institutions held investments in bonds and shares issued by the selected companies attributable to critical minerals worth US\$16bn. EU financial institutions were the fifth-largest investors in the selected critical mineral companies.

Similar to the EU credit flows to critical minerals, the vast majority of investments in critical minerals from EU-based financial institutions were attributable to copper, accounting for 81% of the bond and shareholdings (US\$13bn). This was followed by lithium (US\$1.7bn) and nickel (US\$783m).

FIGURE 11 BOND HOLDINGS AND SHAREHOLDINGS IN CRITICAL MINERAL PRODUCERS PER FINANCIER REGION (2024 NOVEMBER)

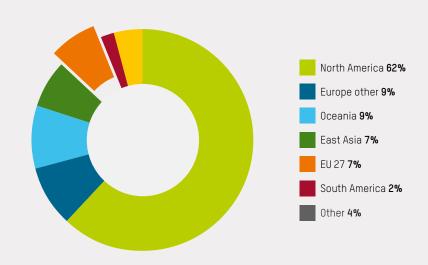
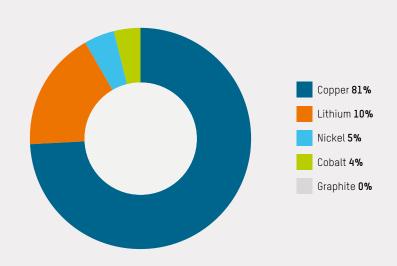


FIGURE 12. BOND HOLDINGS AND SHAREHOLDINGS BY EU INVESTORS IN CRITICAL MINERAL PRODUCERS PER MINERAL (2024 NOVEMBER)



Sources: Mining & Money

TABLE 4. BOND HOLDINGS AND SHAREHOLDINGS BY EU INVESTORS IN CRITICAL MINERAL PRODUCERS PER MINERAL AND MINERAL REGION (2024 NOVEMBER, US\$ MILLIONS)

| Mineral region | Cobalt | Copper | Graphite | Lithium | Nickel | Total |
|--------------------|--------|--------|----------|---------|--------|--------|
| South America | 0.0 | 6,069 | | 656 | 305 | 7,030 |
| North America | 433 | 1,798 | 0.4 | 138 | 177 | 2,547 |
| EU27 | 0.0 | 1,458 | 2 | | 164 | 1,624 |
| Southeast Asia | 2 | 1,230 | | | 44 | 1,276 |
| Oceania | 0.4 | 351 | | 834 | 28 | 1,214 |
| Central Asia | | 948 | | | | 948 |
| Central America | 0.4 | 617 | | 6 | | 623 |
| Sub-Saharan Africa | 113 | 400 | 0.5 | 5 | 49 | 569 |
| East Asia | | 162 | | 10 | 0.0 | 172 |
| Europe other | | 21 | | | 16 | 37 |
| Middle East | 0.0 | 1 | | | 0.0 | 1 |
| South Asia | | 0 | | | | 0.0 |
| Total | 549 | 13,055 | 3 | 1,650 | 783 | 16,040 |

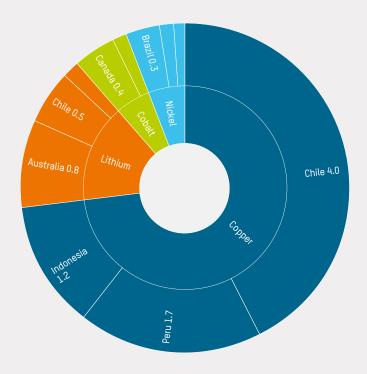
Source: Mining & Money

More than half of the copper-attributable investments were in three countries. Chile received the most investments in copper from EU financial institutions, with US\$4.0bn. Peru accounted for US\$1.7bn worth of investments in bonds and shares in copper, and a further US\$1.2bn were attributable to Indonesia.

The majority of financing for lithium – approximately 90% – went to Australia, Chile and Argentina. Australia attracted US\$834m in investments in bonds and shares attributable to lithium from financial institutions based in the EU. It was followed by Chile (US\$505m) and Argentina (US\$152m).

Companies active in nickel in Brazil attracted US\$272m in investments in bonds and shares from EU financial institutions. They were followed by companies active in Canada (US\$148m) and Sweden (US\$89m). These three countries accounted for 65% of the lithium-attributable investments from EU financial institutions.

FIGURE 13. BOND HOLDINGS AND SHAREHOLDINGS BY EU INVESTORS IN CRITICAL MINERAL PRODUCERS PER MINERAL AND TOP THREE MINERAL COUNTRIES (2024 NOVEMBER, US\$ BILLIONS)



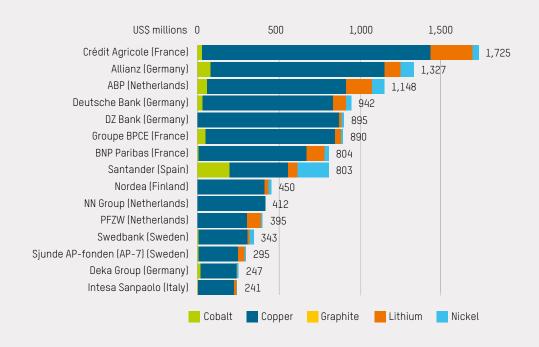
Source: Mining & Money

Almost all investments in cobalt were attributable to Canada (US\$433m), the DRC (US\$112m) and Indonesia (US\$2m).

There were still very limited investments attributable to graphite. US\$1.9m went to Sweden, with US\$0.3m each to Canada and Malawi.

The top EU investors in critical minerals were a mix of French, German and Dutch financial institutions. Among them, Crédit Agricole was the largest, with US\$1.7bn in critical mineral attributable investments in bonds and shares of the selected companies. It was followed by Allianz (US\$1.3bn) and Dutch pension fund ABP (US\$1.1bn).

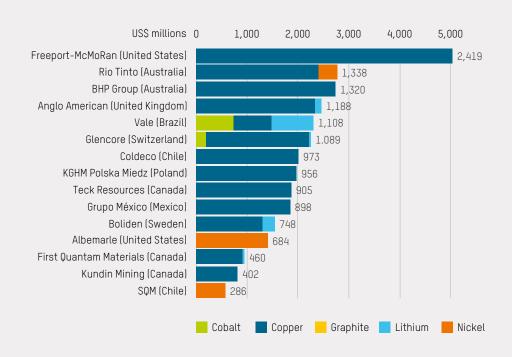
FIGURE 14. EU INVESTORS IN BONDS AND SHARES OF CRITICAL MINERAL PRODUCERS PER FINANCIAL INSTITUTION AND MINERAL (2024 NOVEMBER, US\$ MILLIONS)



Source: Mining & Money

Freeport-McMoRan attracted the highest value of critical mineral attributable investments from EU financial institutions, with US\$2.4bn. It was followed by Rio Tinto (US\$1.3bn) and BHP Group (US\$1.3bn).

TOP 15 RECIPIENTS OF EU INVESTMENTS IN BONDS AND SHARES OF CRITICAL MINERAL PRODUCERS PER COMPANY GROUP AND MINERAL (2024 NOVEMBER, US\$ BILLIONS)



Source: Mining & Money

3. Regulating critical minerals

REGULATING CRITICAL MINERALS

This chapter describes the current EU-level approach to defining and regulating the critical minerals markets, and provides a critical analysis of potential gaps with regard to environmental and social safeguards. It looks at the distinctions between how critical raw materials, strategic raw materials and transition minerals are treated by EU legislation. The key legislation analysed includes the Critical Raw Materials Act, the EU Batteries Regulation, the EU Taxonomy, the Sustainable Finance Disclosures Regulation, and the Corporate Sustainability Due Diligence Directive.

3.1 Approaches to defining critical minerals

There is no universal approach to defining and delineating critical minerals. In a broader sense, the term often refers to mineral resources that are critical for economic development and national security. In a narrower sense, more characteristic of the sustainability agenda, critical minerals are defined as those essential for the energy transition. To understand how these minerals are treated by EU legislation, it is important to take the EU definitions, as well as EU-developed lists of such minerals, into account.

Currently, the EU Critical Raw Materials Act (CRMA) differentiates between strategic raw materials (SRMs) and critical raw materials (CRMs). CRMs are materials that are essential for the EU's economy but face significant supply risks due to limited sources, geopolitical factors or other vulnerabilities in the supply chain. SRMs are considered especially crucial for strategic sectors such as defence, space and green technology (e.g. batteries, wind turbines and semiconductors). The CRMA allows two SRMs that do not meet the 'critical' threshold, namely copper and nickel, to be included on the CRM list. 110

The lists of CRMs and SRMs are regularly updated.

TABLE 5. CRMS AND SRMS UNDER EU REGULATIONS

| | Material | Both CRM and SRM | CRM only | SRM only |
|----|-------------------|------------------|----------|----------|
| 1 | Aluminium/bauxite | | 1 | |
| 2 | Antimony | | 1 | |
| 3 | Arsenic | | 1 | |
| 4 | Baryte | | 1 | |
| 5 | Beryllium | | 1 | |
| 6 | Bismuth | ✓ | | |
| 7 | Boron | ✓ | | |
| 8 | Cobalt | ✓ | | |
| 9 | Coking coal | | 1 | |
| 10 | Copper | | | / |
| 11 | Feldspar | | ✓ | |

| 12 | Fluorspar | | ✓ | |
|----|---------------------------|---|---|---|
| 13 | Gallium | ✓ | | |
| 14 | Germanium | ✓ | | |
| 15 | Hafnium | | ✓ | |
| 16 | Heavy rare earth elements | | ✓ | |
| 17 | Helium | | ✓ | |
| 18 | Light rare earth elements | | ✓ | |
| 19 | Lithium | ✓ | | |
| 20 | Magnesium metal | ✓ | | |
| 21 | Manganese | ✓ | | |
| 22 | Natural graphite | ✓ | | |
| 23 | Nickel | | | ✓ |
| 24 | Niobium | | ✓ | |
| 25 | Phosphate rock | | ✓ | |
| 26 | Phosphorus | | ✓ | |
| 27 | Platinum group metals | ✓ | | |
| 28 | Scandium | | ✓ | |
| 29 | Silicon metal | ✓ | | |
| 30 | Strontium | | 1 | |
| 31 | Tantalum | | ✓ | |
| 32 | Titanium metal | ✓ | | |
| 33 | Tungsten | ✓ | | |
| 34 | Vanadium | | 1 | |

Source: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (European Commission) (2023), Study on the Critical Raw Materials for the EU 2023, Luxembourg: Publications Office of the European Union, p. 3

3.2 EU Critical Raw Materials Act (CRMA)

The EU Critical Raw Materials Act (CRMA) is a framework legislation that intends to ensure an uninterrupted, responsible and circular supply of critical raw materials that are crucial for the EU economy and its green and digital transition plans. It sets goals for domestic extraction (10%), processing (40%) and recycling (25%), while incorporating environmental and social safeguards to promote ethical sourcing (both within the EU and from third countries), reduce reliance on non-EU suppliers, and align with broader sustainability regulations like the CSDDD.

The CRMA entered into force on 23 May 2024. As a regulation, it doesn't have to be transposed into national legislation and is applicable directly in member states. It has several key objectives:

- To strengthen the resilience of the European critical raw materials value chain;
- To diversify the EU's imports of critical raw materials to reduce strategic dependencies;
- To improve the EU's capacity to monitor and mitigate current and future risks of disruptions to the supply of critical raw materials;
- To ensure the free movement of critical raw materials on the single market, while ensuring a high level of environmental protection by improving their circularity and sustainability. 111

To ensure that the CRMA helps in creating secure and resilient supply chains on the ground, the 'strategic projects' mechanism has been developed. Under this tool, projects in critical minerals mining, processing and recycling, both within and outside of the EU, can be considered to be of public interest and get EU support, with access to finance and a shorter permitting timeline (27 months for extraction permits and 15 months for processing and recycling permits). To date, 47 strategic projects in the EU and the first 13 strategic projects outside of the EU have been approved, with a new selection round expected over the course of 2025. The non-EU projects benefiting from the scheme are located in Canada (nickel, cobalt), Brazil (nickel, cobalt), Greenland (graphite), Ukraine (graphite), Kazakhstan (graphite), Norway (graphite, copper), the UK (tungsten), Madagascar (graphite), South Africa (rare earth elements for magnets), Malawi (rare earth elements for magnets), Zambia (cobalt) and New Caledonia (nickel).

Projects located in the EU can request a meeting of the financing subgroup, according to Article 16 of the CRMA, and seek advice on project financing options with private and public financial institutions, including the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). Funding from the European Development Fund and Cohesion Fund can also be utilized by member states or local authorities to support such projects. The non-EU strategic projects can request a meeting with the financing subgroup, according to Article 16 of the CRMA, to discuss public and private financing, including via the EIB and EBRD. They can also benefit from the Global Gateway Initiative.¹¹¹⁴ The initiative is Europe's strategic global investment plan, aiming to mobilize up to €300bn by 2027 in sustainable and secure infrastructure projects worldwide, serving as a counterbalance to China's Belt and Road Initiative.¹¹¹⁵

To be recognized as 'strategic' and benefit from this status, projects must meet a number of criteria, including social and environmental safeguards. Thus, projects '[...] would be implemented sustainably, in particular as regards the monitoring, prevention and minimisation of environmental impacts, the prevention and minimisation of socially adverse impacts through the use of socially responsible practices including respect for human rights, indigenous peoples and labour rights, in particular in the case of involuntary resettlement, potential for quality job creation and meaningful engagement with local communities and relevant social partners, and the use of transparent business practices with adequate compliance policies to prevent and minimise risks of adverse impacts on the proper functioning of public administration, including corruption and bribery.'116

The CRMA also recognizes the importance of public acceptance of the mining projects and requires that project promoters (any undertaking or consortium of undertakings developing a raw materials project) provide a plan to facilitate such acceptance, focusing on cooperation with social partners, CSOs and regulators. In addition, for strategic projects located outside of the EU, the CRMA requires that applications include a 'plan to improve the environmental state of the affected sites after the end of exploitation, with a view to restoring the prior environmental state while taking into account technical and economic feasibility'. ¹¹⁷

However, the CRMA does not explicitly include the principle of Free, Prior and Informed Consent (FPIC); it only mentions 'meaningful consultation' with local communities, which falls short of explicitly guaranteeing FPIC.

The CRMA also envisages other requirements for companies engaged in critical minerals value chains, regardless of whether their projects have, or aim to obtain, strategic status. In particular, 'large companies [companies with more than 500 employees on average and a net worldwide turnover of more than €150m in the most recent financial year for which annual financial statements have been prepared] manufacturing strategic technologies in the Union using strategic raw materials' are expected to conduct a risk assessment of their supply chains. During such assessment, the identified large companies should:

- Map the origins of their strategic raw materials;
- Analyse the factors that could affect their supply;
- Assess their vulnerabilities to supply disruptions;
- In the event of vulnerabilities being detected, take efforts to mitigate them. 119

The CRMA further clarifies that risk assessment procedures should be grounded in data obtained by companies from their suppliers. Where such data cannot be accessed, companies should rely on publicly available information or data published by the European Commission. EU member states may require that a report detailing this risk assessment be submitted to the company's board of directors. To safeguard trade and business secrets and to minimize the exposure of corporate vulnerabilities, this report should remain confidential and not be disclosed publicly. These measures aim to encourage greater attention to the potential costs of supply disruptions, while not mandating specific mitigation strategies.¹²⁰

In addition, the CRMA encourages the use of geospatial data to better monitor and understand land use changes and other negative environmental impacts of mining sites, particularly those located outside of the EU and in remote and inaccessible areas. 121 Deep-sea mining projects cannot be recognized as strategic 'before the effects of deep-sea mining on the marine environment, biodiversity and human activities are sufficiently researched'. 122 It is, however, unclear whether this requirement applies at site level, or whether such projects cannot be recognized at all until the safety and sustainability of deep-sea mining in general is scientifically proven.

The CRMA sees a role for certification schemes in ensuring the environmental and social sustainability of critical minerals value chains. Certification schemes under the CRMA are voluntary, but serve as an essential tool for strategic project applicants to demonstrate sustainability compliance. To be recognized, schemes must meet strict 'fitness' criteria, especially multistakeholder governance and transparency. However, policymakers and NGOs emphasize that certification must not replace broader due diligence and independent oversight.

To be recognized under the CRMA, a certification scheme must ensure that:

- 'It is open under transparent, fair and non-discriminatory terms to all economic operators willing and able to comply with the scheme's requirements and subject to multi-stakeholder governance;
- Verification and monitoring of compliance is objective, based on international, Union or national standards, requirements and procedures and carried out independently from the relevant economic operator;

- It includes sufficient requirements and procedures to ensure the competence and independence of the verifiers responsible;
- It includes requirements to ensure an audit report established at the site level. 123

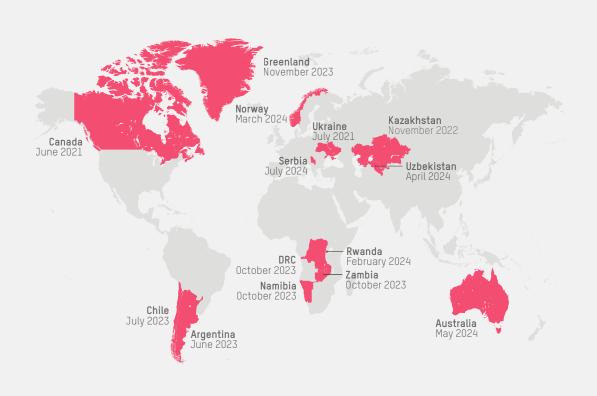
The CRMA also sets out the minimal sustainability criteria that certification schemes must cover in their assessment and certification process:

- Requirements ensuring environmentally sustainable practices, including requirements ensuring environmental management and impact mitigation in the following environmental risk categories:
 - air, including air pollution such as greenhouse gas emissions;
 - water, including seabed and marine environment, and water pollution, water use, water quantities, taking into account flooding or droughts, and access to water;
 - soil, including soil pollution, soil erosion, land use and land degradation;
 - biodiversity, including damage to habitats, wildlife, flora and ecosystems, including ecosystem services;
 - hazardous substances;
 - noise and vibration;
 - plant safety;
 - energy use;
 - waste and residues;
- Requirements for ensuring socially responsible practices, including respect for human rights and labour rights, including the community life of indigenous peoples;
- Requirements for ensuring business integrity and transparency, including requirements to apply sound management of financial, environmental and social matters and anti-corruption and anti-bribery policies.'124

To secure an uninterrupted supply of CRMs and SRMs from third countries, the EU is actively using diplomacy. As of July 2024, 14 partnership agreements were signed with resource-rich countries worldwide, as outlined in Figure 16. Many of the partnerships concern Global South countries. This potentially means that the higher environmental and social standards required by the CRMA and other relevant regulations will be cascaded to the production countries, where most of the negative impacts usually occur in and around mines.

At the same time, the CRMA may also create additional pressure on the ecosystems and communities in production countries. In a recent report, experts pointed to several risks resulting from CRMA implementation, risks which they claim '[...] span from refocusing the national Latin American economies on the production of primary commodities, to the possible human rights violations due to the creation of sacrifice zones that will suffer the economic, social, and environmental impacts of extractive projects in which minerals will be destined to satisfy the European market.'125

FIGURE 16. STRATEGIC PARTNERSHIPS ON RAW MATERIALS SIGNED BY THE EU AS OF JULY 2024



Source: European Parliament Research Service (n.d.), based on European Commission data

The European Parliament also highlights several weaknesses of the CRMA, including '[...] the lack of specific EU funding and doubt as to whether the measures to accelerate mining [within the EU] will prove effective'. 126

The European Commission outlines that '[...] the Regulation complements the [...] Directive on Corporate Sustainability Due Diligence. The CSDDD [...] might cover companies using CRMs, ensuring that they adequately address adverse human rights and environmental impact in their own operations and value chains, but does not develop the requirement to produce information on the environmental footprint of critical raw materials. Where relevant, the calculation of the environmental footprint of each material under the CRMs Regulation, could contribute to the effective implementation of a due diligence policy.'127

Currently, the CRMA is not directly impacted by the Omnibus changes; however, as the proposed changes affect CSDDD, the EU Taxonomy, and postpone or dilute many of the EU-level sustainability measures overall, the Omnibus package could influence how the CRMA is implemented or prioritized.

3.3 EU Batteries Regulation

The new Batteries Regulation entered into force on 7 August 2023, repealing the former Batteries Directive. From 2024, the EU work has been focusing on the '[...] application of the law in the Member States, and the redaction of secondary legislation (implementing and delegated acts) providing more detailed rules.'128

The EU Batteries Regulation complements the CRMA by setting specific requirements for battery production and recycling. The regulation states that '[...] some of the raw materials used in battery manufacturing, such as cobalt, lithium and natural graphite, are considered to be critical raw materials for the Union, [...] and their sustainable sourcing is required for the Union battery ecosystem to perform adequately.'129

The regulation mandates specific recycled content for several CRMs and SRMs. Starting from 2031, EV and large-scale industrial batteries produced in Europe must contain a minimum recycled content of 6% for lithium and nickel, 85% for lead (which, however, is not on the CRM and SRM lists) and 16% for cobalt. These percentages are set to increase five years later.

By aligning the CRMA with the Batteries Regulation, reducing reliance on external sources and promoting environmental sustainability, the EU aims to create a resilient and sustainable supply chain for critical raw materials.

TABLE 6. RECYCLED CONTENT REQUIREMENTS FOR EV AND INDUSTRIAL STORAGE BATTERIES

| Mineral | 2031 | 2036 |
|---------|------|------|
| Cobalt | 16% | 26% |
| Lead | 85% | 85% |
| Lithium | 6% | 12% |
| Nickel | 6% | 15% |

Source: European Commission (2023, July), EU Batteries Regulation

The Batteries Regulation envisages due diligence obligations, making it mandatory for an economic operator that places a battery on the EU market to develop a battery due diligence policy. Such policies are expected to be in line with the '[...] internationally recognised due diligence standards and principles, such as those in the United Nations Guiding Principles on Business and Human Rights, the Ten Principles of the United Nations Global Compact, the United Nations Environment Programme (UNEP) Guidelines for Social Life Cycle Assessment of Products, the International Labour Organisation (ILO) Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises and the OECD Due Diligence Guidance for Responsible Business Conduct.' Due diligence obligations must cover a range of social and environmental issues, including '[...] human rights, human health and safety of persons as well as occupational health and safety, and labour rights, on the one hand, and on the environment, in particular on water use, soil protection, air pollution, climate change and biodiversity, as well as protection of community life, on the other.' 131

The key social issues in scope include:

- · occupational health and safety
- child labour
- forced labour
- discrimination
- trade union freedoms
- community life, including that of Indigenous Peoples.

The due diligence obligations apply to the value chain, including mining sites. The regulation states that the obligations regarding the identification and mitigation of social and environmental risks associated with raw materials used in battery manufacturing should contribute to the implementation of UNEP Resolution 4/19 on Mineral Resource Governance, which recognizes the important contribution of the mining sector to the achievement of the 2030 Agenda and the Sustainable Development Goals.¹³²

While the Omnibus package does not explicitly amend the EU Batteries Regulation, its emphasis on harmonization and simplification across sustainability legislations suggests potential indirect effects:

- Firstly, the implementation starting date of the regulation, initially planned for 18 August 2025, has been postponed until 18 August 2027. 133
- Secondly, the development of detailed guidelines for the Batteries Regulation's due diligence requirements has been put on hold, awaiting the outcomes of the Omnibus proposal. This delay introduces uncertainty for businesses preparing to comply with the regulation's due diligence obligations. Currently, the guidelines are expected to be developed by 26 July 2026.
- Thirdly, if the Omnibus package leads to a standardized approach to due diligence across EU directives, the specific obligations under the Batteries Regulation might be revisited to ensure consistency, potentially altering the scope or depth of due diligence required for battery-related materials.

3.4 Corporate Sustainability Due Diligence Directive (CSDDD)

CSDDD (Directive 2024/1760) entered into force on 25 July 2024. The key objective of this legislation is to '[...] foster sustainable and responsible corporate behaviour in companies' operations and across their global value chains'. The rationale behind it is to tackle the social and environmental impacts of major companies both within and outside the EU, particularly in the Global South.

Several types of companies are included in the CSDDD scope:

- Large EU limited liability companies and partnerships: around 6,000 companies with >1,000 employees and > €450m turnover (net) worldwide.
- Large non-EU companies: +/- 900 companies with > €450m turnover (net) in EU. The Directive contains provisions to facilitate compliance and limit the burden on companies, both in scope and in the value chain.
- SMEs: micro companies and SMEs are not covered by the proposed rules. However, the Directive provides supporting and protective measures for SMEs, which could be indirectly affected as business partners in value chains.

Obligations under CSDDD involve identifying and addressing both potential and actual negative impacts on the environment and human rights within the company's own operations, its subsidiaries and, when relevant, the operations of its business partners in the value chain. Furthermore, the Directive requires large companies to develop and implement climate transition plans. Such plans must be in line with the Paris Agreement's goal of achieving climate neutrality by 2050, and comply with interim targets set under the European Climate Law.

Companies are expected to bear the costs associated with CSDDD implementation, including the costs of establishing and maintaining the due diligence system, adapting their business activities along the value chain to the due diligence obligations, and implementing transition plans. In addition, member states are expected to ensure that '[...] victims get compensation for damages resulting from an intentional or negligent failure to carry out due diligence'. 135

As a Directive, CSDDD has to be transposed into the national legislation of EU member states. Member states are also expected to designate an authority 'to supervise and enforce the rules' and ensure proportionate penalties for non-compliance, including fines.¹³⁶

CSDDD does not specifically mention CRMs or SRMs. However, its mandate covers all sectors, including those involved in the extraction, processing and use of these raw materials. This means that companies in scope of CSDDD (large EU and non-EU entities) dealing with CRMs and SRMs are required to conduct due diligence to demonstrate that their operations and value chains do not contribute to negative environmental and human rights impacts.

In February 2025, the European Commission introduced the Omnibus package, a series of proposals aimed to '[...] cut red tape and simplify EU rules for citizens and businesses' in order to 'regain competitiveness and unleash growth'. The package was designed to simplify and streamline administrative burdens, particularly for SMEs, by raising reporting thresholds, postponing deadlines, and focusing due diligence on direct suppliers.

On 3 April 2025, the European Parliament adopted the European Commission's 'Stop-the-clock' initiative, as part of the Omnibus package. This means that implementation dates for many corporate sustainability reporting and due diligence obligations, as well as the deadline for transposing the due diligence provisions, have been postponed. The adoption came just two days after the Parliament voted to approve an urgent procedure enabling the Directive to bypass committee-level discussions and proceed directly to a plenary vote. ¹³⁸ In June 2025, EU member states representatives agreed to the EU Council's negotiating mandate to further simplify and postpone the CSRD and CSDDD.

The key changes already approved are as follows:

Member states will have an extra year – until 26 July 2028 – to transpose CSDDD into national legislation.

The one-year extension will also apply to the first wave of businesses to be affected, namely EU companies with over 5,000 employees and net turnover higher than €1.5bn, and non-EU companies with a turnover above this threshold in the EU. These companies will only have to apply the rules from 2028.

Application of social and environmental reporting would be postponed by two years for the second and third waves of companies.¹³⁹

Overall, the European Parliament appears to be heavily divided over the proposed package, and it is not yet clear when and to what extent all the proposed changes may be adopted, with some experts saying the legislative process may take a year to fully complete. ¹⁴⁰ The table below summarizes the key proposed changes.

TABLE 7. OMNIBUS PACKAGE AND THE VALUE CHAIN DUE DILIGENCE OBLIGATIONS

| CSDDD requirement | Omnibus proposal | Potential impact |
|---------------------------|---|---|
| Value chain scope | Legal mandate for due diligence ONLY at the level of DIRECT business partners, and NOT the entire value chain. Implied obligation to go beyond Tier 1 ONLY where there is a complaint, credible NGO or media reports about harmful activities. Due diligence effectiveness relies SOLELY on codes of conduct with direct suppliers and contractual cascading. | The most severe impacts are rarely present in Tier 1. Aligning the value chain scope with German law repeats mistakes made where Tier 1 suppliers are overloaded with information requests. The Liefer-kettensorgfaltspflichtengesetz (LkSG), Germany's Supply Chain Due Diligence Act (in force since 2023), makes companies carry out due diligence in their own operations and with direct (Tier 1) suppliers, and only requires them to go beyond Tier 1 when they have 'substantiated knowledge' of problems at an indirect supplier. NGOs and media become de facto |
| Due diligence duty | Due diligence NO LONGER an ongoing obligation and the tracking of its effectiveness would now take place as little as ONLY every five years. REMOVES duty to terminate business relationships in the case of actual | enforcers and need to carry out the due diligence themselves. Companies will no longer monitor and address risks in real time. Companies can exploit the lack of obligation to terminate relationships, ignoring human rights or environmental violations. |
| Stakeholder engagement | and potential adverse impacts and replaces it with 'SUSPEND' activities. Narrows to 'RELEVANT' stakeholders, limiting the scope of stakeholders companies need to engage with. LIMITS engagement to those stakeholders that have a link to the specific stage of the due diligence process being carried out. | If due diligence is limited to Tier 1 (direct suppliers only), this further narrows the scope of stakeholders that companies engage with. Results in very limited engagement with truly impacted stakeholders. |

| Legal harmonization | PROHIBITS EU member states from introducing legislation that goes further than CSDDD. | CSDDD is intended as a minimum standard, but the proposal establishes a legal ceiling. |
|------------------------|---|---|
| | | This ceiling is lower than current international standards, such as the UN Guiding Principles on Business and Human Rights and OECD guidelines. |

Source: Van der Heide, M. et al. (2025), EU Omnibus Unveiled: Key implications for CSDDD, CSRD & EU Taxonomy, World Benchmarking Alliance

If adopted, the package may considerably dilute CSDDD requirements and significantly impact the environmental and social sustainability of CRM and SRM extraction and processing worldwide. There would be no EU-wide civil liability (until a possible review in 2030). Climate transition plans would remain mandatory but without the need for 'implementing actions', and companies would only have to make 'reasonable efforts' to ensure that business models are compatible with the bloc's climate law and the Paris Agreement. The proposal reintroduces the risk-based approach, but imposes significant restrictions to information requests. It also creates the possibility for companies to avoid penalties when 'reasonable explanation' can justify their failure to collect information on adverse impacts happening in their chain of activity. The proposal creates deep legal uncertainty for all, both victims and businesses, who are left with a fragmented single market and 27 separate civil liability regimes to navigate across the EU.

Perhaps the most important implication of the proposed 'simplification' of CSDDD under the Omnibus proposal would be the exclusion of upstream value chains from due diligence obligations. Under the original CSDDD text, EU companies and large non-EU companies supplying the EU market would have to conduct due diligence up to the mining sites and ensure that the relevant environmental and social criteria are met, including for human and labour rights. If the Omnibus changes are approved, in most cases only direct suppliers (for example, nickel concentrate or metallic nickel) will have to meet the EU green and social requirements.

Mining operations are often many tiers removed from EU buyers (e.g. through smelters, refiners and battery makers), so under the Omnibus proposal, most of the unsustainable practices in the mining sector will go under the radar for EU companies (e.g. EV manufacturers) that do not buy directly from mines. Due diligence on indirect suppliers is only triggered if plausible information suggests a risk – this is vague and reactive wording, which essentially shifts the responsibility of identifying any such risks from companies to civil society. Under the Omnibus proposal, annual monitoring is reduced to once every five years, making it even more difficult to monitor and react to any on-the-ground violations in an efficient and timely manner.

The proposed changes, however, are not yet approved and made into law. The European Council now rolls into negotiations with the Parliament. Trilogue talks between the European Council, Parliament and Commission are projected to commence after October 2025. If agreement is timely, final adoption could occur by Q1-Q2 in 2026.

3.5 Sustainable Finance Disclosures Regulation (SFDR)

The SFDR came into effect in 2021 and applies to EU and non-EU investment services providers and asset managers operating on the European market. The key rationale behind the regulation is to make obligatory 'disclosures to end investors on the integration of sustainability risks, on the consideration of adverse sustainability impacts, on sustainable investment objectives, or on the promotion of environmental or social characteristics, in investment decision-making and in advisory processes'. 141 SFDR requires financial market participants to make the relevant disclosures both at entity level and individual product level.

SFDR sets out the following three categories of financial products or funds based on how much they take into account environmental and social criteria and contribute to sustainability:

- Article 9: investments which have a sustainable investment objective.
- Article 8: investments which claim that they take into consideration social and/or environmental criteria
- Article 6: investments which do not have a sustainable investment objective and do not declare that they take ESG criteria into account essentially, all other investments that do not meet the criteria of articles 9 and 8.

Article 9 investments are sometimes called 'dark green', as they constitute investments in companies which outwardly contribute to a more sustainable future. Such funds may consist of investments in companies in a particular green sector (for example, clean energy or sustainable food systems) or exclusively of sustainable financial instruments (for example, green, social, sustainability and sustainability-linked bonds).

Article 8 investments are often referred to as 'light green'. Such portfolios may be comprised of bonds or shares of companies with high ESG ratings, or companies aligned with the Paris Agreement's climate objectives via verified science-based targets. These portfolios also often apply negative screening for companies from sectors with known negative environmental or social impacts and companies with ongoing ESG controversies.

SFDR does not oblige financial market participants to make such investment products available; it only obliges them to properly report on their ESG impacts if they already provide such products, to enable investors to understand the level of sustainability of their investment and avoid greenwashing. 142

In July 2022, Commission Delegated Regulation (EU) 2022/1288 was published. This legislation contains technical standards (the exact content, methodology and presentation of the information to be disclosed) which financial market players must use when disclosing sustainability-related information under SFDR. ¹⁴³ It also includes the lists of specific indicators, metrics and templates to be used to report on the principal sustainability impacts. The requirements set out in this delegated act started to apply on 20 February 2023.

The proposed Omnibus changes may also have indirect, yet potentially important impacts on SFRD implementation. SFDR Articles 8 and 9 require financial institutions to make public the alignment of relevant financial products with the EU Taxonomy. Therefore, changes to the Taxonomy criteria will also influence SFDR compliance. SFDR applies to financial market participants in many sectors, including CRM/SRM projects, so the changes may also impact how investments in the companies in these sectors are perceived, and how much funding is channelled there. However, the full extent of the impacts remains uncertain. 144

3.6 EU Taxonomy

The EU Taxonomy is a classification system established to guide investments towards environmentally sustainable economic activities, aligning with the objectives of the European Green Deal.

EU Taxonomy is a comprehensive classification system which categorizes sustainable economic activities that are aligned with a net zero trajectory by 2050 and supposed to contribute to the key environmental objectives: climate change mitigation and adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems. Activities that contribute to at least one of these goals are deemed Taxonomy-eligible. To be considered Taxonomy-aligned, activities should also meet specific Technical Screening Criteria (TSC) and Do No Significant Harm (DNSH) principles, as well as minimum social safeguards.¹⁴⁵

TSCs are activity-specific quantitative or qualitative rules and metrics. They are outlined in the Technical Annex to the Technical Expert Group final report on the EU Taxonomy, ¹⁴⁶ as well as in the more operable EU Taxonomy Compass. ¹⁴⁷

Regarding critical raw materials (CRMs) and strategic raw materials (SRMs), the Taxonomy currently addresses these materials primarily through the lens of recycling. Thus, critical materials are currently covered by the following sectors and eligible activities:

Information and communication

- Provision of IT/OT data-driven solutions contribution to circular economy.
 - Measures are in place to manage and recycle waste at the end of life, including through decommissioning contractual agreements with recycling service providers, reflection in financial projections or official project documentation. These measures ensure that components and materials are segregated and treated to maximize recycling and reuse in accordance with the waste hierarchy, EU waste regulation principles and applicable regulations, in particular through the reuse and recycling of batteries and electronics and the critical raw materials therein. These measures also include the control and management of hazardous materials.

Manufacturing

- Manufacture of electrical and electronic equipment:
 - For electrical and electronic equipment containing printed circuit boards, hard disc drives (HDDs), electric motors, permanent magnets, batteries, fluorescent powders, or any other components identified in Union legislation to be of high critical raw materials recovery potential, the information on product's end-of-life management [...] includes an indication of the critical raw materials typically contained in the components, information on the location of those components, and on the steps required for their separate removal. [...] Printed circuit boards, hard disc drives (HDDs), electric motors, permanent magnets, batteries, fluorescent powders, or any other components identified in Union legislation to be of high critical raw materials recovery potential are easy to access and to remove from the product.

Water supply, sewerage, waste management and remediation

- Depollution and dismantling of end-of-life products contribution to circular economy:
- Separate non-hazardous and hazardous waste fractions suited for material recovery, including recovery of critical raw materials
- Sorting and material recovery of non-hazardous waste contribution to circular economy:
 - The activity converts or allows the conversion of waste into secondary raw materials, including critical raw materials, that are suitable for the substitution of primary raw materials in production processes. 148

There have been calls from the industry advocating that '... adding mining and refining [to the EU Taxonomy] under the condition of high environmental standards could help generate private investment'. 149 In addition, in 2021 the European Federation of Geologists advocated for the '[...] further adoption of the new EU Taxonomy for mining activities', explaining that the 'Paris Agreement requires a quadrupling of mineral raw material requirements for clean energy technologies by 2040' and that mining within the EU 'has a direct impact on climate adaptation by reducing dependence on transglobal supply chains, as well as ensuring production within well-regulated jurisdictions'. However, given the generally destructive nature of mining operations and the negative social and environmental impacts in production countries, particularly in the Global South, this does not seem to be a viable option.

There are currently no obligations on economic entities to comply with the Taxonomy. Thus, the European Commission clarifies that the 'EU Taxonomy is not a mandatory list of economic activities for investors to invest in. Nor does it set mandatory requirements on environmental performance for companies or for financial products. Investors are free to choose what to invest in. However, it is expected that over time, the EU Taxonomy will be an enabler of change and encourage a transition towards sustainability.' 151

It is, however, obligatory to report on EU Taxonomy – though currently only for a limited array of entities. Thus, 'large financial and non-financial companies that fall under the scope of the Non-Financial Reporting Directive [...] have to disclose to what extent the activities that they carry out meet the criteria set out in the EU Taxonomy' and 'financial market participants (such as asset managers) will have to disclose to what extent the activities that their financial products fund meet the EU Taxonomy criteria.' 152

From 1 January 2024, under the Disclosures Delegated Act, ¹⁵³ financial institutions, including banks, are obliged to report on their Taxonomy eligibility and alignment. That is, to disclose 'to what extent their activities are covered by the EU Taxonomy (Taxonomy-eligibility) and comply with the criteria set in the Taxonomy delegated acts (Taxonomy-alignment)'. ¹⁵⁴ The reporting metric is called the Green Asset Ratio (GAR), which is calculated as a share of a credit institution's Taxonomy-aligned balance sheet exposures over the total eligible exposures. The GAR is supposed to help stakeholders understand financial institutions' contribution to European environmental and climate objectives.

As with many other EU sustainability regulations, the EU Taxonomy is being affected by the Omnibus package. If the proposed 'simplifications' are approved, this will result in several changes to Taxonomy application and reporting. These are summarized in the table below.

TABLE 8. OMNIBUS IMPACTS ON EU TAXONOMY IMPLEMENTATION

| Element | Previous rules | Omnibus proposal |
|---|---|--|
| Taxonomy regulation | Mandatory reporting under Taxonomy rules | Only companies with >1,000 employees and €450m turnover must report both Taxonomy eligibility and alignment. Those with >1,000 employees but <€450m turnover can report voluntarily. |
| Taxonomy partial alignment reporting | Not previously specified | Companies can report partial Taxonomy alignment. |
| Green Asset Ratio (GAR) | Banks must include all exposures in GAR denominator | Banks can exclude companies outside CSRD scope from GAR denominator. |
| Taxonomy DNSH (Do No Significant Harm) rules | Strict DNSH criteria | Simplified: The materiality threshold applies (10% financial materiality for turnover and CapEx) and the DNSH reporting burden is reduced by 70%. |

 $Source: D.A.\ Carlin\ and\ Company\ (2025, April),\ \textit{Omnibus\ Changes\ to\ European\ Sustainability\ Reporting}$

For companies along the critical minerals value chain, these changes could significantly simplify their disclosure by allowing them to label critical minerals procurement as immaterial relative to their broader revenue or operations. Companies can also claim partial alignment even if full traceability or sustainability criteria aren't met.

There are also implications for financiers. Under the proposed changes, banks can exclude SMEs or subsidiaries involved in critical minerals, potentially making their GAR appear artificially higher or 'greener'. Investors relying on GAR metrics could then be misled. Banks might show artificially inflated sustainability scores, masking their true exposure to problematic environmental and social practices in the supply chains of critical minerals. Furthermore, the EU's ambition (under the CRMA) for resilient, responsible mineral sourcing could be undermined if finance flows unchecked into less sustainable operations.

3.7 Other relevant regulations

The Conflict Minerals Regulation (Regulation (EU) 2017/821, effective since 1 January 2021) mandates EU importers of tin, tantalum, tungsten and gold (3TG) to ensure these minerals are sourced responsibly, particularly in conflict-affected and high-risk areas. The regulation imposes due diligence obligations to prevent the financing of armed conflicts and human rights abuses through mineral trade.

Management of Extractive Waste Directive (Directive 2006/21/EC) focuses on the management of waste from extractive industries, aiming to prevent or reduce adverse effects on the environment and human health. It mandates measures for waste management plans, permits, and the rehabilitation of mining sites.

3.8 Conclusions

The EU policy landscape provides frameworks regulating the market and value chains for critical and strategic raw materials. The key aim of this designated legislation – CRMA and Batteries Regulation in combination with EU Taxonomy, CSDDD and CSRD – is to ensure an uninterrupted supply of sustainably produced critical materials for EU industries, and to provide for diversified trade flows unaffected by geopolitical turbulence in the production countries.

However, many of the environmental and social requirements are formulated generically, asking for overall sustainability of operations without clear guidance. Under the CRMA, many of the sustainability criteria only apply to recognized 'strategic projects' but not to all entities in the scope of the Act.

In addition, much of this legislative framework is at risk of dilution and is already facing postponement because of the Omnibus package proposed in the spring of 2025. Simplified upstream due diligence obligations under CSDDD may cause significant harm to the sustainability of mining operations outside of the EU, as only direct suppliers will be included in the due diligence process if or when the Omnibus package is approved. The provision that due diligence further upstream is only required when there are substantiated concerns about environmental and social sustainability effectively shifts responsibility for monitoring from companies to CSOs, without providing for the necessary funding and tools.

The Batteries Regulation includes provisions for recycled content for several critical minerals, envisaging its gradual increase to mandatory levels of between 12% (for lithium) and 85% (for lead). It also envisages mandatory due diligence procedures, which are, technically, separate from and unrelated to the due diligence obligations under CSDDD. However, as the Omnibus proposal aims at overall simplification and harmonization of sustainability requirements across EU legislation, the Batteries Regulation is already seeing delays in development of the implementation guidelines, which are essential for its application.

Proposed changes to Taxonomy reporting and CSRD, which would allow 'partial alignment' and exclude a large number of 'smaller' entities from the GAR denominator, undermine investor trust in sustainable assets and could potentially hinder the channelling of funds to greener, socially responsible projects.

The key recommendations resulting from this chapter are outlined in Chapter 5, under 'Recommendations to the European Union'.

4. Evaluating the ESG policies of major EU-based investors and creditors

Mining companies are often associated with a myriad of environmental and social issues, from deforestation and water pollution to forced evictions and violations of Indigenous Peoples' rights.

In their roles as creditors or investors in companies producing critical minerals, financial institutions can use their leverage to influence mining companies to prevent or mitigate negative impacts on the environment, communities, workers and other stakeholders. This starts with setting clear expectations for clients or investees in public sustainability policies. This chapter looks at the sustainability policies relevant to the mining sector of eight of the largest EU financiers of critical minerals.

4.1 Selected financial institutions

The policy assessment focuses on eight of the largest EU financiers, as identified in the financial research (see Chapter 2). These banks and investors were selected based on their financial exposure to mining companies.

TABLE 9. OVERVIEW OF SELECTED FINANCIAL INSTITUTIONS

| Name | Туре | Loans and underwriting (Oct 2016-2024, US\$m) | Bond- and shareholding (Nov 2024, US\$m) | Country |
|-----------------|----------|--|---|---------|
| ABP | Investor | | 1,148 | NL |
| Allianz | Investor | | 1,327 | DE |
| BBVA | Bank | 2,371 | 98 | ES |
| BNP Paribas | Bank | 12,520 | 804 | FR |
| Crédit Agricole | Bank | 7,669 | 1,724 | FR |
| Deutsche Bank | Bank | 2,643 | 941 | DE |
| ING Group | Bank | 7,575 | 42 | NL |
| Santander | Bank | 6,364 | 803 | ES |

Source: Mining & Money

4.2 Methodology

The sustainability policies of the eight largest EU investors and creditors of critical minerals were assessed using a methodology developed by Profundo in collaboration with the Mining & Money initiative, which is part of the larger Forests & Finance initiative. The latter tracks the financial flows of companies whose operations impact natural ecosystems and local communities. ¹⁵⁵

The methodology is based on international sustainability standards developed specifically for the mining sector, such as the Initiative for Responsible Mining Assurance, the Responsible Mining Index Framework, and the International Council on Mining and Metals Principles. It is also based on other sustainability standards such as the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the International Finance Corporation Performance Standards, and the Fair Finance Guide International methodology. 156

Since financiers offer different forms of financing and investments to companies, it is important that a financier's ESG policies are also applicable to its activities in the mining sector. Financing includes all forms of credits, corporate finance, project finance, trade finance and underwritings. Investments cover asset management for own account and asset management for the account of clients.

The scoring thus also considers weighting factors which depend on the ratio between financing and investments found for this financial institution in the Mining & Money (M&M) database. For instance, if 60% of all financings and investments found for a certain financial institution in the M&M database consist of loans and credits, and only one of the policies of the financial institution covers its lending activities, a weighting factor of 60% is used for this policy. If the financial institution also has a separate policy for its investments, a weighting factor of 40% is used for that policy. If a certain criterion is covered in both policies, the scores assigned to both policies for this criterion are first multiplied by the respective weighting factors and then added up.

The assessment methodology includes 34 criteria that cover the three ESG pillars – environmental, social and governance. For each criterion, the financial institution is assigned 0 to 10 points. The points are added up, resulting in the total scores under each pillar and the consolidated total. These scores are then normalized to a scale of 0 to 10 by dividing the score of the financial institution by the maximum score that this financial institution could achieve (a maximum of 10 points for each relevant criterion) and then multiplying by 10. For instance, if a financial institution scores 162 out of the maximum possible score of 340, then the normalized score would be 4.8 out of 10. The detailed methodology and scoring guidelines are in Appendix 2.

4.3 Time frame and process

The policies of financial institutions have been assessed based on public information available as of 15 March 2025. Documents such as annual reports, sustainability reports, sector policies, exclusion lists, financial institution webpages and stewardship reports were researched. Note that policies or engagement initiatives solely related to coal mining fall outside the scope of this research. All financial institutions were given the opportunity to participate in one round of feedback on the detailed draft results of the assessment. Their feedback was analysed and, after being substantiated and aligned with the methodological approach, integrated in the final assessments. Five of the eight financial institutions provided feedback, namely Crédit Agricole, BNP, Allianz, Deutsche Bank and Santander.

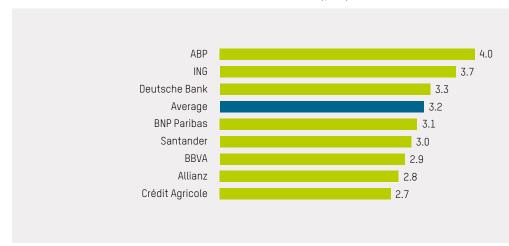
4.4 Main findings of the policy assessment

Overall, the research shows that the policies of the eight assessed financial institutions do not adequately address all the ESG issues related to their business relationships with mining companies. Figure 17 shows the consolidated ESG scores of financial institutions ranging from 2.7 to 4.0 out of 10, with an average score of 3.2.

Financial institutions are classified into three categories based on their scores: *frontrunners* for those scoring between 7 and 10, *followers* for those achieving scores between 4 and 6.9, and *laggards* for financial institutions that score below 3.9. Figure 18 shows the distribution of the eight assessed financial institutions across these three categories.

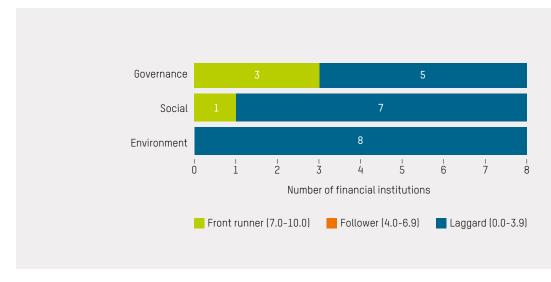
The findings evidence the absence of a frontrunner among the selected financial institutions. The highest score is achieved by the Dutch pension fund ABP, which falls into the follower category, while all the other financial institutions fall into the category of laggards. Three financial institutions – Crédit Agricole, Allianz and BBVA – score below 3 out of 10.

FIGURE 17. CONSOLIDATED POLICY ASSESSMENT SCORES (/10)



Source: https://forestsandfinance.org/mining-policies/

FIGURE 18. CATEGORIZATION OF SELECTED FINANCIAL INSTITUTIONS

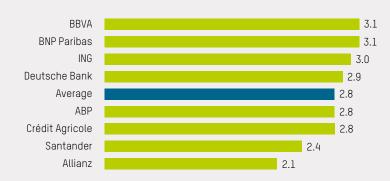


On average, the financial institutions perform better on governance topics while scoring lower on environmental and social indicators. This can be explained by the fact that the governance-related criteria also assess the overall sustainability strategy of financial institutions. Indeed, most of the financial institutions have adopted sustainability objectives and assigned responsibility for their oversight to the board of directors and/or senior management.

4.4.1 Environmental issues

The environmental pillar assesses whether financial institutions have formulated clear expectations for companies and their suppliers on a range of environmental topics, including deforestation, protection of natural ecosystems, and transition plans to mitigate greenhouse gas (GHG) emissions. This pillar evaluates whether companies are expected to commit to zero deforestation and not be involved in the conversion of important natural landscapes such as wetlands, peatlands, high conservation value areas, and other protected areas. The pillar also assesses whether financial institutions require companies involved in the mining sector to identify and minimize the biodiversity impacts of their operations.

FIGURE 19. FINANCIAL INSTITUTIONS' SCORES ON ENVIRONMENTAL CRITERIA (/10)



The financial institutions perform poorly in the environmental pillar, as evidenced by the low average score of 2.8 out of 10. Figure 19 reveals scores ranging from 2.1 for Allianz to 3.1 for BBVA. This indicates that the policies of the assessed financial institutions do not sufficiently address the adverse environmental impacts associated with the mining sector. The findings are discussed in more detail below.

Deforestation, conversion of natural landscapes, and biodiversity impacts

All the assessed financial institutions have policies that exclude or screen activities that could harm natural landscapes, such as wetlands or protected areas defined by the International Union for Conservation of Nature (IUCN). However, only three financial institutions have formulated a clear commitment against deforestation beyond these protected areas: ABP, ING and Deutsche Bank.

ABP has set timelines for its deforestation commitments. It expects high-risk companies to commit to zero deforestation by 2025 and to halt deforestation activities within its investment portfolio by 2030, in line with the Glasgow Declaration on Forests. ¹⁵⁷ ING restricts financing operations that involve deforestation, illegal logging, burning down tropical forests or the removal of high conservation-value forests. ¹⁵⁸ Deutsche Bank also discloses similar commitments towards the protection of primary forests and high carbon stocks (HCS). ¹⁵⁹

Due to the negative biodiversity impacts from their operations, financial institutions must require mining companies to take steps to protect flora and fauna and prevent any adverse impacts from mining-related activities. The findings of the policy assessment reveal that all the assessed financial institutions at least make a general commitment to protecting biodiversity. Four (ABP, Allianz, Deutsche Bank and ING) have policies that go beyond such a commitment.

ABP and Deutsche Bank clearly expect companies to identify and minimize the biodiversity impacts of their operations, including protecting the habitats of endangered species. Allianz discloses some screening criteria, such as the protection of key biodiversity-rich areas and mitigation measures to avoid or reduce impacts on endangered species. ING's metals and mining policy addresses the loss of biodiversity and threatened or endangered species as a key concern in the sector, and excludes the financing of operations that may impact critical natural habitats and the trade of endangered species. In a species of the biodiversity and the trade of endangered species.

Pollution and waste management

Concerns surrounding water scarcity are reflected in the policy assessment's findings, with almost all assessed financial institutions disclosing a general commitment to preserve water levels and/or water quality. However, these financial institutions do not specify what is expected of financed or investee companies. ABP stands out, with a clear expectation for companies to set targets for responsible water use. ING's metals and mining policy acknowledges contamination of groundwater and surface water as a key concern within the sector, and expects clients with high water usage or located in water-stressed areas to take steps to address this challenge. 162

Unfortunately, similar patterns were not found for assessment criteria that evaluated policies on preventing and mitigating air pollution. None of the financial institutions disclosed any policy specifically intended to address air quality concerns. Six out of the eight financial institutions (BBVA, BNP Paribas, Crédit Agricole, Deutsche Bank, ING and Santander) apply the IFC Performance Standards to their project finance transactions, although these requirements do not cover other types of financing offered to mining companies.

Poor management of extractive waste also contributes to significant environmental damage and the deterioration of natural resources (see section 1.3). Most of the assessed financial institutions have weak waste management policies that either do not formulate any clear expectations for companies or only address riverine or shallow marine tailings disposal. Santander is the only assessed financial institution that analyses the tailings management of companies and does not finance activities without tailings storage facilities.¹⁶³

GHG emission reduction and transition plans

The policy assessment evaluated whether banks and investors expect companies to disclose targets and credible transition plans to mitigate their GHG emissions. The findings reveal that none of the financial institutions require companies to develop a 1.5°C-aligned transition plan. Most financial institutions merely make general statements indicating their support in helping clients with their transition plans. ABP and Allianz have set stronger commitments requiring companies to report their emissions and set science-based targets. 164



Mine reclamation and other environmental issues

The conditions in which exhausted mines are left behind have significant consequences for populations and ecosystems in the vicinity, and the negative environmental and health effects can have an impact for many years. Despite this serious and long-lasting risk, none of the financial institutions require companies to prepare reclamation and closure plans compatible with the protection of human health and the environment. Half of the assessed financial institutions (ABP, Deutsche Bank, ING and Santander) had no policy on reclamation plans. The other four financial institutions assess or evaluate the decommissioning or closure plans as part of their due diligence, but their policy does not stipulate any objectives that these plans must achieve, such as demonstrating how affected areas will be returned to a stable landscape with an agreed postmining end use.

The policy assessment also evaluated financial institutions' policies on emergency response planning. A sound contingency plan is an important element in ensuring the systematic management of health and safety risks. Two of the assessed financial institutions (ABP and Allianz) did not disclose any policy on this topic. Four financial institutions (BBVA, Deutsche Bank, ING and Santander) apply the IFC Performance Standards to their project finance activities; however, this would not cover other financing activities, such as corporate credit or investments.

BNP Paribas and Crédit Agricole disclose more robust policies on health and safety management. BNP Paribas does not finance projects that do not operate in accordance with the ILO Safety and Health in Mines Convention (C-176) and does not finance companies that lack a proven track record regarding health and safety management. Crédit Agricole analyses the quality of accident management plans, particularly hazardous substances and spill preparedness plans.¹⁶⁵

Deep-seabed mining

Deep-seabed mining, a practice in which mineral deposits are extracted and excavated from ocean depths greater than 200 meters, has potentially devastating effects on ocean ecosystems and livelihoods dependent on healthy oceans. The assessment's findings reveal that five of the assessed financial institutions (ABP, Allianz, Crédit Agricole, ING and Santander) do not have any policy on deep-seabed mining or the protection of ocean ecosystems. Although BNP Paribas has a position paper on ocean protection that claims to pay attention to the ecological challenges related to such activities, no clear policy was disclosed.

4.4.2 Social issues

The social pillar assesses whether financial institutions have formulated expectations for companies and their suppliers on human rights and labour rights topics. Assessed topics cover requirements for companies and suppliers to develop human rights due diligence processes and ensure access to remedy when they cause or contribute to human rights abuses. In addition, this pillar looks at how financial institutions pay attention in their policies to the rights of Indigenous Peoples and communities with customary land rights, as well as human rights defenders. Finally, this pillar examines whether financial institutions require that the companies they finance or invest in respect and promote the fundamental rights covered in the ten ILO core conventions, as well as the right to a living wage.

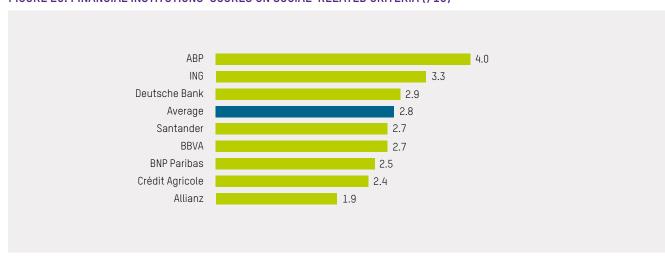


FIGURE 20. FINANCIAL INSTITUTIONS' SCORES ON SOCIAL-RELATED CRITERIA (/10)

The social pillar is the pillar which received the lowest average score. Figure 20 shows that financial institutions' scores range from 1.9 for Allianz to 4 for ABP.

FPIC of Indigenous Peoples and affected communities

All the financial institutions assessed that provide lending services – Deutsche Bank, BNP Paribas, BBVA, Crédit Agricole, ING and Santander – disclose a general commitment to the principle of Free, Prior, and Informed Consent (FPIC) for Indigenous Peoples. However, this commitment most often only applies to their project finance activities and does not extend to affected communities with customary land rights.

Among these six financial institutions, only Crédit Agricole and Santander also commit to respecting the FPIC of Indigenous Peoples in the context of their investment activities.

As for the two investors assessed, ABP's responsible investment policy does not explicitly mention Indigenous Peoples and FPIC, while Allianz's policy lacks robustness. Allianz states that risks to local communities are screened in mining-related transactions, including the risk that FPIC has not been obtained from impacted parties. However, it does not set clear expectations for investee companies, meaning Allianz may still invest in companies or projects that do not uphold FPIC rights.

Overall, none of the eight financial institutions assessed explain how companies should fulfil FPIC rights, nor do they clarify how they should conduct and document FPIC procedures.

Human rights due diligence and grievance mechanisms

Overall, all the financial institutions' policies address, to some extent, human rights issues related to their lending and/or investments. Most of these policies refer to international human rights standards like the UN Guiding Principles on Business and Human Rights (UNGPs) or the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct. ABP displays the strongest policies as it expects companies to take responsibility for the actions of their suppliers, and states that by 2030 all companies must 'at least develop sound policies on human rights within their operations and supply chains'. 166 ING also explicitly requires its clients 'to assess potential

human rights risks in their supply chain and use their leverage to address the most severe human rights violations with their suppliers and customers'.¹⁶⁷

All the financial institutions except Deutsche Bank and ABP recognize that additional attention must be brought to projects in sensitive countries or conflict-affected areas; BNP and ING have the most elaborated policies in this regard. BNP excludes providing financial products or services to mining projects located within an active armed conflict area. ING encourages its clients in the metals and mining sector to follow best practices, including the Voluntary Principles on Security and Human Rights and the OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. 168

All the banks and investors assessed require companies to provide access to remedy when they have caused or contributed to adverse impacts; however, this commitment does not extend to their suppliers. For three banks – BBVA, BNP Paribas and Santander – the scope of this requirement is limited to project finance to comply with the Equator Principles, which means only a minimal part of their lending activities is covered by this criterion.

Protection of human rights defenders

As mentioned in section 1.3.8, the mining sector has consistently been the most dangerous for human rights defenders over the last decade. Yet ING is the only financial institution that explicitly acknowledges the heightened risks faced by human rights defenders, particularly in the context of large development projects that affect access to land and livelihoods. All policies could be strengthened by requiring companies — as well as their direct and indirect suppliers — to adopt a zero tolerance approach to violence, intimidation and the criminalization of land, environmental and human rights defenders.

Labour rights

All the financial institutions assessed address fundamental human rights in the workplace in their policies, including the elimination of forced labour and child labour, and the rights to health and safety, freedom of association, collective bargaining and non-discrimination. However, these policies generally fail to articulate clear expectations for companies' direct and indirect suppliers, even though the most severe labour rights violations often occur within supply chains.

Almost all the financial institutions overlook the topic of living wages. Only ABP mentions living wages as one of the core social indicators it monitors for its investee companies;¹⁷⁰ however, the pension fund does not formulate clear expectations for companies to pay living wages.

Gender-based violence and sexual harassment in the workplace

Most financial institutions' investment and lending policies neglect sexual harassment and gender-based violence. Only ABP and Deutsche Bank receive partial recognition on this issue. ABP requires its investee companies to comply with the OECD Guidelines, which, in the updated 2023 edition, explicitly reference ILO Convention 190 on Violence and Harassment.

DWS, part of the Deutsche Bank Group, is the only institution that explicitly considers gender-based violence in its role as a responsible shareholder. In its proxy voting policy, the asset manager states that it will be 'generally supportive of proposals requesting that investee companies adopt fair labour practices consistent with recognised international human rights standards, including policies to eliminate gender-based violence and other forms of harassment from the workplace'. 171

However, this approach is insufficient to drive meaningful action, as very few such proposals are actually submitted at annual general meetings. A clearer and more proactive expectation for all investee companies to adopt a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination, including psychological abuse and verbal, physical or sexual harassment and violence, would have a greater impact.

Responsible artisanal and small-scale mining

While investment in industrial mining operations may not include direct investment in artisanal or small-scale mining, such investment does still have consequences for small-scale and artisanal mining. As the International Council on Mining and Metals (ICMM) Principle 9 states, companies should contribute to the social, economic and institutional development of the communities in which they operate. This includes the communities of artisanal and small-scale miners who often live and work around or close to large-scale mines. Out of the eight assessed financial institutions, only Crédit Agricole and BBVA mention artisanal and small-scale mining in their mining policies; however, their policies are not very advanced.

Crédit Agricole did not receive recognition for this mention, as its policy only states that the group commits to not supporting artisanal mining activities, ¹⁷² which does not help to make the sector more sustainable. BBVA's policy prohibits the financing of new artisanal or informal mining projects but also classifies 'clients for whom there is evidence of material controversies related to artisanal or small-scale mining' as 'requiring special attention'. The bank clarifies that for activities that 'require special attention' it will assess the environmental and social impacts derived from the activity to be financed, and initiate a plan for dialogue and support for the client (or potential new client), which will include measures aimed at understanding and trying to correct the situation. ¹⁷³

4.4.3 Governance issues

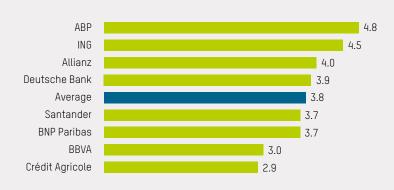
This pillar includes criteria covering the governance of financial institutions themselves and the governance of the companies they finance. The assessment framework evaluates whether financial institutions have sufficiently integrated ESG considerations into their governance structure and whether they are transparent about the scale and implications of their business interests in the mining sector. Other critical aspects, such as financial institutions' grievance mechanisms and engagement practices, are also evaluated. With regard to financial institutions' expectations of the governance of mining companies, topics such as supply chain traceability, corruption and bribery, and tax compliance are also assessed.

The governance pillar has the highest average score (3.8 out of 10) among the three ESG pillars. Figure 21 below shows that financial institutions' scores range from 2.9 for Crédit Agricole to 4.8 for ABP.

Governance structures and transparency in the implementation of ESG policies

To ensure that sustainability-related considerations are given due value, it is important that clear objectives are integrated into the governance structures of the financial institutions. Almost all assessed financial institutions were found to have incorporated ESG considerations into their governance structures by:





- Formulating strategic sustainability objectives;
- Assigning oversight responsibilities to board-level members or committees;
- Integrating clear sustainability incentives in the remuneration structure of employees, particularly the most senior executives.

The policy assessment also evaluated whether the financial institutions are transparent about the actions through which their sustainability policies are implemented. Examples of such actions include:

- Clearly communicating sustainability expectations to mining companies and the general public;
- Excluding companies if they are systematically involved in adverse environmental and social impacts such as deforestation, and prospects for improvement are low;
- Taking collective actions with peers, NGOs and other stakeholders to call upon corporate actors and governments to prevent, cease and remediate adverse impacts.

All of the assessed financial institutions have disclosed at least two to three important actions through which their ESG policies are implemented. These include publicly communicating sustainability expectations to companies through their environmental and social (E&S) frameworks or sector policies, providing sustainability-linked products, or regularly screening mining companies to ensure compliance with their sustainability policies. The investment arm of these financial institutions also discloses their stewardship policies through which they engage with companies on important environmental and social topics.

Four of the assessed financiers (ABP, Allianz, BNP Paribas and ING) have additionally disclosed details of their voting on ESG-related resolutions. ABP's voting policy discloses a commitment to vote against the reappointment of the supervisory board chair at mining companies without effective policies to conserve biodiversity and mitigate negative effects.

Financial institutions must also expand the scope of their ESG policies to cover the entire corporate group of the specific company they are financing or investing in. This would ensure that financing offered to a particular company is not being used by a sister company or other related entity that

may not be aligned with the financial institution's E&S framework. Allianz is the only assessed financial institution that applies a 'downward waterfall' approach, wherein all subsidiaries of excluded companies are also excluded.¹⁷⁴

Transparency in financing, financed emissions, and target-setting related to the mining sector

The policy assessment evaluates whether financial institutions are transparent about their exposure to the mining sector. Among the eight assessed financial institutions, only two (Allianz and BBVA) do not publish a sectoral breakdown of their financing and/or investment portfolio. Five financiers (BNP Paribas, Crédit Agricole, Deutsche Bank, ING and Santander) publish a sectoral breakdown which includes their credit exposure to the mining sector. ABP stands out as the only financial institution that is transparent about the names of investee companies. It is also important to note that apart from ABP, none of the financial institutions disclose details about their investments in the sector. 175

Along with their exposure to the mining sector, financial institutions must also be transparent about their financed emissions associated with the sector. Four of the assessed financial institutions (ABP, Allianz, BNP Paribas and Crédit Agricole) disclose sectoral data on their financed emissions; however, this does not cover the mining sector. The remaining financial institutions (BBVA, Deutsche Bank, ING and Santander) disclose absolute emissions data from the mining sector, including the scope 1, 2 and 3 emissions of the mining companies.

Regarding sectoral target-setting, the policy assessment reveals that none of the financial institutions disclose a specific target to reduce their financed emissions from the mining sector. Instead, they disclose decarbonization targets for different asset classes or sectors that do not cover mining activities.

Engagement with mining companies

Granular reporting is found to be a structural omission across most of the assessed financial institutions. Overall, there is a clear information gap between what banks disclose about their engagement with companies in which they invest and their engagement with corporate clients to whom they provide credit or underwriting services.

While most of the banks assessed publish some aggregated data on their engagement with corporate clients, none provide specific information (including companies' names) on efforts to engage with companies in the mining sector.

Financial institutions tend to be more transparent when it comes to engagement activities linked to their investments. In this area, ABP stands out: each year, it publishes a detailed overview of all the companies it has engaged with as part of its equity and corporate bond investments. This includes the names of the companies, the sectors they operate in, the issues addressed, and the outcomes of the engagement (e.g. successful or unsuccessful).

Other investors – such as Allianz Global Investors, BNP and DWS – also disclose a list of engaged companies. However, they rarely provide detailed information on the nature, progress or results of those engagements. When further detail is offered, it usually comes in the form of anonymized case studies, which makes it difficult to assess the effectiveness of their stewardship efforts.

For instance, DWS reports that it has engaged with a Brazilian company belonging to the 'materials' sector following controversies related to significant environmental damage such as

river contamination. Its stewardship report states that due to the gravity of the controversies, it voted against the re-election of some non-executive directors and engaged with the company on remediation, tailings management and its overall biodiversity strategy. ¹⁷⁶ DWS also provides an example of an 'escalated case' with a mining company based in Switzerland. Following the company's recurring involvement in several severe controversies concerning human rights, business ethics and labour rights, DWS sent a letter to the company's board of directors asking specific questions. ¹⁷⁷ However, in both of the cases above, the names of the companies are not disclosed. Disclosure of company names is essential to ensure accountability and allow stakeholders to assess the effectiveness of engagement.

The engagement strategy of Amundi, the asset management arm of Crédit Agricole, is centred on potential improvements. The engagement process will lead to exclusion when the corrective actions taken are found to be insufficient or if the engagement process itself is found to be weak. Amundi also recognizes the threat to biodiversity posed by mining operations and discloses its engagement activities with BHP, an Australian multinational mining and metals company. 178

Allianz identifies the mining sector as one of its priority sectors for engagement on biodiversity issues. It reports engaging with mining companies alongside other investors through collective investor initiatives such as Spring, the Investor Mining and Tailings Safety Initiative, and Mining 2030.¹⁷⁹ Specifically on the topic of critical raw materials (CRMs), Allianz Global Investors states that it has engaged with its *'top mining holdings to understand:*

- How they respond strategically to societal demand for CRMs and what the related challenges may be in extracting resources from undeveloped sites,
- How they deliver on expectations responsibly to mitigate potential environmental and social impacts, and
- How they ensure their continued social license to operate. '180

However, details on the names of the companies engaged and the achieved results are missing.

Financial institutions' responsibility to enable access to remedy

Deutsche Bank, Allianz, BBVA, BNP and ING have set up some complaint channels for communities and individuals that have been adversely impacted by the activities of companies they finance. However, these channels are not labelled as grievance mechanisms or aligned with the effectiveness criteria for non-judicial grievance mechanisms outlined in the UNGPs. According to the UNGPs, non-judicial grievance mechanisms should be legitimate, accessible, predictable, equitable, transparent, rights-compatible and a source of continuous learning.

It is unclear if Deutsche Bank's complaints channels can be used to express concerns about DWS's investments. As for Crédit Agricole and ABP, no complaint channels open to external third parties were identified.

Driving corporate transparency and responsible practices

Overall, financial institutions' policies aiming to influence companies to trace the ESG risks in their supply chain are weak. ING and ABP do recognize the responsibility of companies to identify those risks and respect human rights throughout their supply chain; however, they do not proactively require companies to integrate ESG compliance criteria in procurement contracts and to disclose more detailed information on the name or location of their first-tier suppliers.

With the exception of ING – which provides a general statement on the issue – none of the financial institutions explicitly require companies to provide proof of the legality of their operations and commodity supply chains, particularly with regard to compliance with applicable laws and regulations on land acquisition and land use.

With regard to tax strategies, six out of the eight banks reviewed – ABP, Allianz, BNP Paribas, Deutsche Bank, Crédit Agricole and Santander – indicate that they assess tax-related risks in their business relationships or investment decisions. Among these, ABP's policy is the most explicit: it commits to 'question listed companies in which it invests on tax-responsible behavior and check whether they have a tax policy'. 181

DWS, ABP and Allianz address tax issues in their voting policies. Notably, DWS's *Corporate Governance and Proxy Voting Policy 2024*¹⁸² is weaker in this regard compared to the 2023 version. The 2023 policy included a clear expectation for investee companies 'to act as responsible, good corporate citizens, respect and comply with applicable national and international tax regimes, and fight tax abuse and harmful tax avoidance'. ¹⁸³ This language has been removed from the 2024 policy.

Most of the financial institutions assessed encourage public sustainability reporting by companies; however, in many cases it is not formulated as a strict requirement. Allianz, DWS and BNP refer to international sustainability reporting standards such as the Global Reporting Initiative, Sustainability Accounting Standards Board, Task Force on Climate-Related Financial Disclosures or Taskforce on Nature-related Financial Disclosures.



5. Recommendations

RECOMMENDATIONS

Based on the findings of this research project, Oxfam, Fair Finance International and 11.11.11 make the following recommendations to financial institutions that are financing and/or investing in producers of critical minerals, to mining companies and to the European Union.

5.1 Recommendations to financial institutions

1. Enhance transparency significantly

Transparency increases accountability of both financial institutions and companies in their lending/investment portfolio towards their stakeholders and society. Financial institutions should improve transparency by systematically publishing the details of each engagement activity with mining companies producing critical minerals, including the names of companies engaged, engagement goals, milestones achieved, and escalation steps taken in case of insufficient progress. In addition, financial institutions can use their leverage to foster greater transparency by companies, by requiring their corporate clients and investees to:

- Provide proof of the legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operations;
- Develop and ensure compliance with ESG policies for their suppliers;
- Disclose their supply chain, ensuring full traceability to their suppliers' operations;
- Publish a sustainability report that is set up in accordance with recognized sustainability reporting frameworks;
- Agree to mentioning the name of the company in financial institutions' reporting on loans and investments;
- Require mining companies to disclose publicly: i) beneficial ownership information for the project; ii) the principal contract with the host government that sets out the key terms and conditions under which a resource will be exploited (including any riders, addendums and amendments); iii) material project payments to the host government (such as royalties, taxes, and profit sharing); and iv) public country-by-country tax reporting.

2. Develop measures that enable effective remedy for affected stakeholders

If financial institutions have business relationships with companies involved in human rights violations, they have a responsibility to enable remediation for affected stakeholders. To do so, financial institutions must:

- Establish a transparent and gender-responsive grievance mechanism, aligned with the UN Guiding Principles on Business and Human Rights, that allows rights holders (individuals, Indigenous Peoples, local communities or CSOs representing them) to raise concerns and seek remedies;
- Require that companies they finance or invest in establish similar operational-level grievance mechanisms;
- Include clauses in loan documentation addressing how financed companies are responsible for remediating any adverse impacts that they may cause or contribute to;
 Include access to remedy as an important topic of engagement within their broader stewardship policies.

Financial institutions may establish their own grievance mechanisms or opt to join an external grievance mechanism platform. This mechanism must operate independently of management oversight and influence, be run by qualified professionals and supported by a framework that clearly outlines the entire process. To build public confidence, financial institutions and businesses must monitor their operational-level grievance mechanisms and report transparently on their effectiveness and progress.

3. Strengthen their environmental and social expectations for mining companies

The extractive industry, particularly the critical minerals segment, has the potential to generate economic benefits for local communities. However, this is hinged on the adoption of strong environmental and social safeguards that can avoid or mitigate adverse impacts. To that end, financial institutions must strengthen their ESG policies and formulate clear expectations for mining companies to:

- Conduct and disclose gender-responsive environmental, social and human rights impact assessments;
- Develop and implement air and water quality management plans to avoid and/or minimize adverse impacts, and share monitoring data with local stakeholders;
- Require the Free, Prior and Informed Consent (FPIC) of affected Indigenous Peoples and communities with customary land rights if any planned operations may affect them;
- Reduce overall extractive waste, and manage and process waste responsibly by adequately tracking, reviewing and improving tailings risk management;
- Prepare mine reclamation plans that are compatible with the protection of human health and the environment;
- Ensure workers receive a living wage that allows them to satisfy their basic needs and lead a dignified life;
- Adopt a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination and violence.

4. Expand the scope of their sustainability policies to include companies' suppliers

Financial institutions should formulate expectations for companies to conduct human rights and environmental due diligence throughout their supply chain in line with:

- The UN Guiding Principles on Business and Human Rights;
- The OECD Guidelines for Multinational Enterprises on Responsible Business Conduct;
- The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas; and
- The OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector.

Supply chain due diligence should prioritize high-risk areas identified based on operating and geographical context, sector issues, and the company's track record on human rights and environmental issues. In situations of armed conflict or heightened risk of serious human rights abuses, companies should be required to conduct enhanced due diligence.

5. Recognize the critical role of human rights defenders and protect their rights

Financial institutions should publicly acknowledge, in their policies, the critical role played by human rights defenders who speak out against the harmful impacts of corporate activities, and the heightened risks they face in the course of their work, such as arbitrary arrest, threats, harassment and intimidation.

In this context, financial institutions should:

- Consider human rights defenders as a key source of information when conducting human rights and environmental due diligence on critical minerals projects or mining companies;
- Assess the civic space conditions in countries where the companies or projects they finance operate, and require additional safeguards to protect human rights defenders in high-risk contexts;
- Require that the companies they finance or invest in adopt, disclose and enforce a zero tolerance policy towards threats, violence and the criminalization of land, environmental and human rights defenders;
- Encourage companies to use their leverage and speak out in defence of human rights defenders, and against legal reforms aimed at restricting civil society space.

6. Develop a sustainable critical minerals strategy

Financial institutions should develop a sustainable critical minerals strategy that:

- Prioritizes engagement on ESG issues with both producers and users of critical minerals to ensure that the global rush for critical minerals does not perpetuate existing power imbalances and benefits workers and local communities in producing countries;
- Identifies and prioritizes the financing of sectors and end uses that contribute to a just transition;
- Acknowledges the need for reduced consumption of critical minerals in the Global North to ensure that enough critical minerals are available for the Global South.

7. Publicly raise concerns about the current rollback of environmental and social regulatory ambition in the EU, and advocate for ambitious sustainability regulations

Financial institutions should influence regulators and voice their concerns about the increasing erosion of the EU's sustainability agenda, marked by repeated delays, weakened ambitions and the narrowing of regulatory scope. Organizations such as the Principles for Responsible Investment (PRI), ¹⁸⁴ the Institutional Investors Group on Climate Change ¹⁸⁵ and the Investor Alliance for Human Rights ¹⁸⁶ have already issued several statements to this effect. Financial institutions should clearly state to regulators that mandatory disclosure requirements should apply to all companies with more than 250 employees – not just large corporations. More transparency and comparable data are essential to enable investors to reallocate capital towards companies and projects that advance a just energy transition, ensuring workers and communities benefit. Financial institutions can also advocate for the development and adoption of sector-specific standards under the European Sustainability Reporting Standards (ESRS) — including for high-impact sectors such as mining — especially as the European Commission has proposed to eliminate them in its recent Omnibus package.

5.2 Recommendations to mining companies

- 1. Conduct environmental and human rights due diligence across their value chain in line with the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and its Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. They should also report publicly on their due diligence efforts.
- **2. Reduce extractive waste and manage it responsibly** by implementing robust systems to track, review and continuously improve their tailings risk management. They should also adopt a zero-failure objective for tailings storage facilities.
- **3. Develop and implement air and water quality management plans** to avoid and/or minimize adverse impacts, and share monitoring data with local stakeholders;
- **4. Develop and enforce policies and internal systems** to systematically ensure inclusive and gender-responsive community consultation and meaningful participation for all affected local communities, and Free, Prior and Informed Consent processes for Indigenous Peoples and communities with customary land rights that are at risk of being affected by their operations.
- **5. Establish a gender-responsive grievance mechanism** and ensure that information about it is disseminated in local languages to key stakeholders, including workers, affected local communities, Indigenous Peoples, minorities and human rights defenders. Adopt and disclose a zero tolerance policy towards retaliation and reprisals. Companies should ensure that the identity of individuals raising concerns is protected at all times.
- **6.** Recognize and commit to protecting the rights and legitimacy of human rights defenders by adopting and disclosing a policy to protect their rights and by using their influence to speak out against legal reforms aimed at restricting civil society space.
- **7. Publicly disclose:** i) beneficial ownership information for the project; ii) the principal contract with the host government that sets out the key terms and conditions under which a resource will be exploited (including any riders, addendums and amendments); iii) material project payments to the host government (such as royalties, taxes, and profit sharing); and iv) public country-by-country tax reporting.

5.3 Recommendations to the European Union

Robust regulations mandatory for all market actors and encompassing the upstream and downstream value chains for raw materials are essential for ensuring their sustainable production, processing and recycling. To ensure that adequate regulatory frameworks are in place and properly enforced, EU authorities should:

- 1. Retain all due diligence obligations under the Batteries Regulation regardless of the outcomes of the Omnibus discussion on the Corporate Sustainability Due Diligence Directive (CSDDD). If CSDDD simplification and lower thresholds for the in-scope companies are approved, develop a list of exception sectors with high upstream environmental and social risks, including CRM and SRM mining and processing.
- 2. Ensure that the review clause with respect to the provision of financial services and investment activities is reinstalled in the CSDDD. Financial institutions' downstream activities, corresponding

to their core activities of providing financial services, should fall within the scope of CSDDD and Omnibus regulation.¹⁸⁷

- **3.** Engage with mining companies and critical mineral purchasers to promote sustainable mineral consumption that contributes to a just energy transition and recognizes the need for reduced consumption in the Global North.
- **4. Do not postpone the implementation of the Batteries Regulation** and instead keep the original deadline; urgently develop the guidelines on the application of battery due diligence requirements.
- **5.** Increase the target share of recycled content under the Batteries Regulation to make it more attractive for companies to use recycled content rather than (currently) cheaper virgin materials.
- **6. Expand the environmental and social criteria that are currently mandatory** for the strategic projects recognized under the CRMA; make them mandatory for all companies along the critical minerals value chains, not only for projects that seek to obtain recognition.
- **7. Make mining sustainability requirements for the CRMA strategic projects more stringent**. In particular, ensure that post-operative restoration and rehabilitation is mandatory in full, not only in as much as it is 'economically feasible'.
- **8.** Introduce the concept of Free, Prior and Informed Consent (FPIC) into both the Batteries Regulation and the CRMA, and make it mandatory to obtain FPIC prior to any mining operations concerning critical and strategic raw materials.
- 9. Ensure that strict environmental and social criteria for the production, processing and trade in CRMs and SRMs are included in all EU trade agreements, including those currently being negotiated (Indonesia, India, Australia, Thailand, Tajikistan, the Philippines, Thailand) and those already in force. Taking into account the high risk of mining operations, such requirements should go above and beyond the standard Trade and Sustainable Development (TSD) provisions.
- 10. Ensure that the concept of just transition is integrated in all the relevant legislation. As critical minerals are essential for climate transition and as they contribute to modern technologies and cleaner energy production and storage largely in the Global North, while most of the environmental and social externalities affect workers and local communities in the Global South the concept of just transition should be integrated in all the relevant legislation. Currently, only the CRMA has a passing reference to it, envisaging that EU-based strategic projects can benefit from the Just Transition Fund established by Regulation (EU) 2021/1056, provided such projects contribute to reducing the social and economic costs brought by the green transition. This fund should be accompanied by a Fund for Just Transition for Global South countries.
- 11. Stop the dilution and postponement of CSDDD, CSRD, SFDR, EU Taxonomy and other relevant due diligence and reporting legislation, and retain their original scope, thresholds and implementation timelines.
- 12. The European Commission's opaque selection of strategic projects raises serious concerns about accountability, human rights, Indigenous rights, and public participation. The EU should ensure that the selected projects are subject to robust human rights and environmental due diligence, with full transparency and meaningful participation of affected communities, including Indigenous Peoples, in line with international standards and the principle of Free, Prior and Informed Consent.

Appendix 1
The mineral factor:
Driving the energy
transition or driving
the economy?

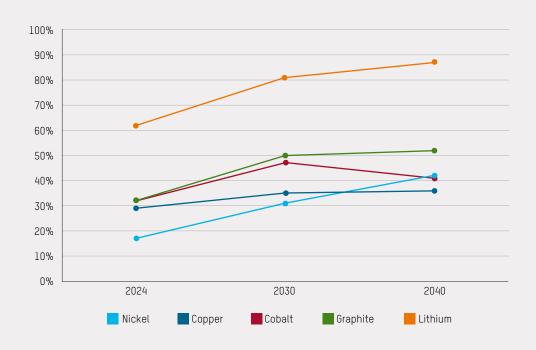
APPENDIX 1. THE MINERAL FACTOR: DRIVING THE ENERGY TRANSITION OR DRIVING THE ECONOMY?

While the energy transition creates a significant demand for the five selected critical minerals, most mineral demand is currently still driven by other important sectors, including defence, construction, metallurgy, electronics and transportation.

Clean technology demand: future projections

Clean (energy) technology (or 'cleantech' in this report) includes any device, component of a device or process dedicated to producing, storing or distributing energy with low CO2 emissions intensity, or a device that provides an energy service or energy commodity that enables users to minimize their contributions to atmospheric CO2 concentrations in line with net zero emissions globally. Related shares for the five minerals in this report generally relate to electric vehicles (EVs) and battery storage. Only in the case of copper, cleantech also covers electricity networks (transmission, distribution and transformer) and solar photovoltaic (PV). Related to the main source used in this report is the *Global Minerals Outlook 2025* report of the International Energy Agency, which is complemented with data (estimates) from the U.S. Geological Survey and mineral institutes.

FIGURE 22. CLEANTECH SHARE OF DEMAND FOR THE FIVE MINERALS (% OF TOTAL DEMAND) 2024-2040



Source: International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, pp. 102, 114, 127, 140, 151

Clean technology demand for the five minerals is expected to grow in the coming decade (Figure 22). Over the whole period (2024–2040), the strongest growth rates are expected for nickel and graphite, as Table 10 shows. Meanwhile, other sectors still play an important role in the demand for these minerals. Apart from lithium, the largest share of which is currently used for clean technologies (62%), demand for the other minerals is still largely driven by other industries and sectors, including construction, metallurgy, electronics and transport.

TABLE 10. CLEANTECH DEMAND FOR THE FIVE MINERALS (% OF TOTAL DEMAND) 2024 AND 2040

| Country | Cleantech demand 2024 | Cleantech demand 2040 | Growth rate 2024-2040 |
|----------|--------------------------|--------------------------|--------------------------|
| Cobalt | 32% | 41% | 28%190 |
| Copper | 29% | 36% | 24%191 |
| Graphite | 32% | 52% | 63%192 |
| Lithium | 62% | 87% | 40%193 |
| Nickel | 17% | 42% | 147% ¹⁹⁴ |

Cobalt

Almost all cobalt is mined as a byproduct of copper and nickel, largely in the DRC, followed by Indonesia and Russia (see Table 11). The top three refiners are China (77%), Finland and Indonesia. 195

TABLE 11. TOP FIVE COBALT PRODUCERS (2024)

| Country | Mine production (metric tons) |
|-------------|-------------------------------|
| DRC | 220,000 |
| Indonesia | 28,000 |
| Russia | 8,700 |
| Canada | 4,500 |
| Philippines | 3,800 |
| World total | 290,000 |

Source: U.S. Geological Survey (2025, January) Mineral Commodity Summaries, Cobalt, p. 2

End uses

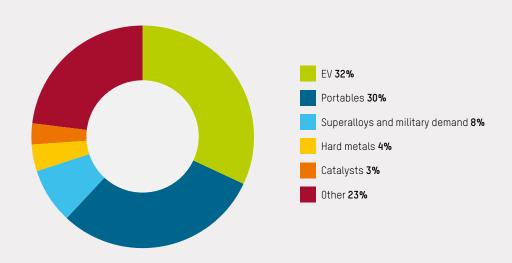
Crude cobalt is refined into various cobalt chemicals and metals. Refined cobalt intermediates are then manufactured into different products, such as sulphates, salts, powders and cathodes, which are used for various applications. For instance, cobalt salts are used to produce materials for batteries, catalysts, ceramics and other applications. Cobalt metal is used to manufacture industrial metals and superalloys, or dissolved into acid to make cobalt chemicals to eventually produce industrial tools, portable electronics, cars, aircraft, paints and tyres.¹⁹⁶

The leading end use of cobalt is in rechargeable battery electrodes for EVs and portable electronics. Estimates for clean technologies, which are largely EVs, currently suggest a share of 32% to 43% of total cobalt demand. ¹⁹⁷ In Figure 23, the most conservative percentage (published by the International Energy Agency) was included; the remainder (11%) was added to the category 'other'. Portables primarily include mobiles, laptops and tablets, but also power tools and consumer electronics. ¹⁹⁸

Cobalt is also used in several non-battery applications, primarily in superalloys for the aerospace and defence sectors, which are supported by increased global military spending. Cobalt-based superalloys are used in gas turbines, space vehicles, rocket motors, nuclear reactors, power plants and chemical equipment.¹⁹⁹

Cobalt is further used to produce hard metals (also called cemented carbides), or composite materials in which cobalt metal is the metallic binder. These hard metals are used to manufacture machine tools, metal rollers and engine components for many different industries, including automotive, aerospace, energy, mining and general engineering. The metals can also be used for other applications, including skis, surgical instruments, hip and knee prosthetics, dental implants and jewellery. Pinally, cobalt plays a vital role in catalysing the removal of sulphur from oil (desulphurization). Cobalt and cobalt compounds are also used to make colours for inks and pigments. Pigure 23 shows the current end uses of cobalt and their respective shares.

FIGURE 23. END USES OF COBALT, 2024

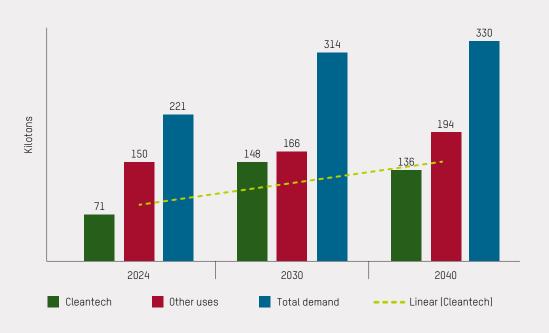


Source: Cobalt Institute (2025, May), Cobalt Market Report 2025, p. 5; International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 140

Future demand prospects

Battery applications are the dominant driver of cobalt market growth, though projections have weakened. Total cobalt demand is expected to grow from 221 kilotons (kt) in 2024 to 330 kt in 2040. Superalloys will remain the largest non-battery driver. Figure 24 shows that demand from the cleantech sector is expected to increase from approximately 30% in 2024 to 41% in 2040, a 28% growth rate.

FIGURE 24. EXPECTED CLEANTECH SHARE IN COBALT DEMAND 2024-2040



Source: International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 140

Copper

Copper is a metallic element that is an excellent conductor of heat and electricity. The metal is corrosion-resistant and antimicrobial. Chile, the DRC and Peru are the largest producers of copper (Table 12). The USA and Indonesia share fifth place. China is by far the largest refiner in the world, accounting for 44% of global copper refining (Table 13).

TABLE 12. TOP SIX COPPER PRODUCERS (2024)

| Country | Mine production (metric tons) |
|-------------|-------------------------------|
| Chile | 5,300,000 |
| DRC | 3,300,000 |
| Peru | 2,600,000 |
| China | 1,800,000 |
| USA | 1,100,000 |
| Indonesia | 1,100,000 |
| World total | 23,000,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Copper, p. 2.

TABLE 13. TOP FIVE REFINERS OF COPPER (2024)

| Country | Refinery production (metric tons) |
|-------------|-----------------------------------|
| China | 12,000,000 |
| DRC | 2,500,000 |
| Chile | 1,900,000 |
| Japan | 1,600,000 |
| Russia | 960,000 |
| World total | 27,000,000 |

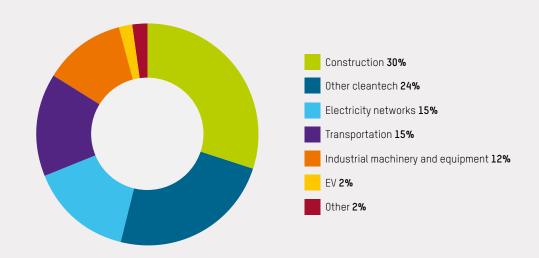
Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Copper, p. 2

End uses

Copper is processed and refined into semi-finished materials such as powder, bars, plates, foil and pipes. Historically, refined copper demand has been dominated by construction and electricity networks, followed by industrial machinery and equipment, and the transportation sector. In total, these sectors accounted for 72% of the total refined copper demand in 2023. ²⁰⁴ Copper is also used in applications such as copper roofing, door hardware, railings and decorative trim, as well as in musical instruments and coinage, among many other uses. Figure 25 shows the different end uses of copper in 2023.

Copper is the only critical mineral present in all important clean energy technologies, including EVs, solar PV, wind, battery storage and electricity networks, though not in hydrogen technologies. Copper is critical for lithium-ion batteries, used in battery packs and in EV motors. In renewable energy technologies, copper was, in 2023, mainly used in electricity networks. Currently, approximately a quarter of copper demand stems from clean energy technologies (see Figure 25).

FIGURE 25. END USES OF COPPER, 2023



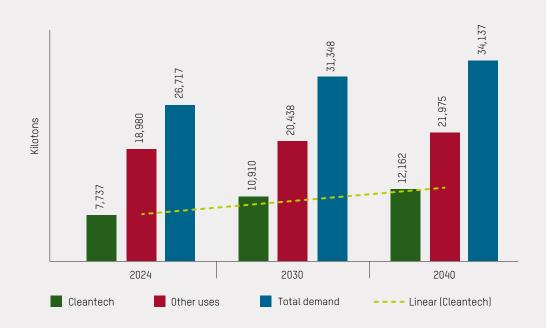
Source: International Energy Agency (2024, May) Global Critical Minerals Outlook 2024, p. 110

Future demand prospects

Global refined copper demand is expected to grow from 27 million tons in 2024 to around 37 million tons in 2050. ²⁰⁷ This demand will primarily be driven by the growing deployment of EVs, though construction and electricity networks remain the largest sources of demand. ²⁰⁸

The share of clean energy technology in total copper demand is expected to grow from 29% in 2024 to 36% in 2040, a growth rate of 24%, and this is expected to stay the same until 2050. Demand for copper specifically for EVs is expected to increase from 2% in 2024 to 10% in 2050.²⁰⁹ See Figure 26 for demand growth in kilotons (Kt).

FIGURE 26, EXPECTED CLEANTECH SHARE IN COPPER DEMAND 2024-2040



Source: International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 102.

Graphite

Graphite is found naturally as a mineral and is produced in synthetic processes from fossil fuel-based products. This report focuses on natural graphite, which is mined and then mechanically and chemically cleaned to obtain the graphite concentrate. ²¹⁰ China is by far the largest producer of graphite, accounting for 79% of global production (see Table 14). China, followed by Brazil, also contains the largest graphite reserves in the world; together the two countries hold more than half of the global reserves (Table 15).

TABLE 14. TOP FIVE GRAPHITE PRODUCERS (2024)

| Country | Mine production (metric tons) |
|-------------|-------------------------------|
| China | 1,270,000 |
| Madagascar | 89,000 |
| Mozambique | 75,000 |
| Brazil | 68,000 |
| India | 27,800 |
| World total | 1,600,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Graphite, p. 2.

TABLE 15. TOP FIVE COUNTRIES WITH THE LARGEST GRAPHITE RESERVES (2024)

| Country | Reserves (metric tons) |
|-------------|------------------------|
| China | 81,000,000 |
| Brazil | 74,000,000 |
| Madagascar | 27,000,000 |
| Mozambique | 25,000,000 |
| Tanzania | 18,000,000 |
| World total | 290,000,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Graphite, p. 2

End uses

Natural graphite is used in various technical applications. Historically, the metallurgical industry has been the primary consumer of graphite, using it as a component in bricks which line blast furnaces ('refractories'), and as a liner for ladles and crucibles.²¹¹

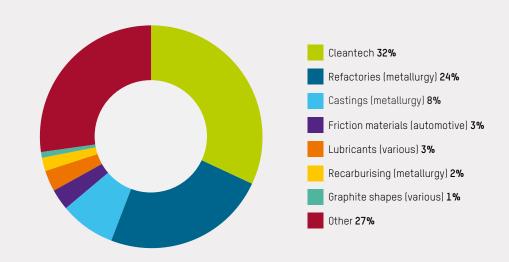
Graphite is used in brake linings, gaskets and clutch materials in the automotive industry. It also has many other industrial uses, including lubricants, carbon brushes for electric motors, fire retardants, and insulation and reinforcement products.²¹²

The EV industry emerges as a primary consumer of graphite. Currently, approximately 32% of graphite demand is coming from clean technology applications, primarily EVs and battery storage.²¹³ Graphite is used as an anode material in lithium-ion battery cells and for energy storage.²¹⁴ See Figure 27 for different end uses of graphite tied to several industries.

Future demand prospects

Batteries are rapidly emerging as the leading user of graphite, especially for use in battery anodes for EV batteries, but also in energy storage. The expected adoption of alternative anode chemistries (with lower cobalt and nickel intensity, presumably due to sustainability concerns), among others, might temper natural graphite demand in the long term, which is reflected in Figure 28.²¹⁵ The cleantech share of demand for graphite is expected to increase from 32% to 52% between 2024 and 2040, a growth rate of 63%.

FIGURE 27. END USES OF GRAPHITE, 2024



Source: European Carbon and Graphite Association (2024), 'Main uses of carbon and graphite', https://ecga.net/main-uses-of-graphite/, accessed February 2025; International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 151

FIGURE 28. EXPECTED CLEANTECH SHARE IN GRAPHITE DEMAND 2024-2040



Source: International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 151

Lithium

Lithium is the lightest metal and the least dense solid. It occurs in several hard rock types and pegmatitic minerals, is present in the water of the oceans and salt lakes, and is obtained from brine and clays. Lithium is nicknamed 'white gold', but it is extremely flammable, explosive and toxic.²¹⁶

Table 16 shows that Australia is the largest producer of lithium, followed by Chile and China. The largest lithium reserves are in Chile and Australia, which together account for 54% of global reserves of the mineral (Table 17).

TABLE 16. TOP FIVE LITHIUM PRODUCERS (2024)

| Country | Mine production (metric tons) |
|-------------|-------------------------------|
| Australia | 88,000 |
| Chile | 49,000 |
| China | 41,000 |
| Zimbabwe | 22,000 |
| Argentina | 18,000 |
| World total | 7,240,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Lithium, p. 2

TABLE 17. TOP FIVE COUNTRIES WITH THE LARGEST LITHIUM RESERVES (2024)

| Country | Reserves (metric tons) |
|-------------|------------------------|
| Chile | 9,300,000 |
| Australia | 7,000,000 |
| Argentina | 4,000,000 |
| China | 3,000,000 |
| USA | 1,800,000 |
| World total | 30,000,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Lithium, p. 2

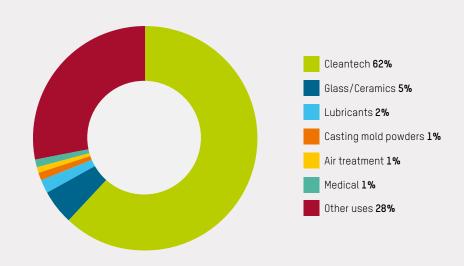
End uses

Lithium and its compounds have many old industrial applications, including the manufacturing of heat-resistant glass and ceramics, lubricants, high-resistance and low-weight alloys for aeronautics, additives used in iron, steel and aluminium production, nuclear fusion weapons, and in alkaline batteries with lithium-ion batteries.²¹⁷

Furthermore, lithium is used in medicines, among others, for rheumatic treatments, bipolar disorder and other psychiatric illnesses, though in small volumes.²¹⁸ Lithium is also used in a variety of metallurgical applications, including steel and iron castings (Figure 29).²¹⁹

Over the past ten years, batteries have become the dominant driver of global lithium demand growth, due to the increased use of rechargeable lithium batteries for EVs, as well as portable electronic devices, electric tools and energy grid storage applications.²²⁰ Lithium-ion-based batteries became the dominant use after 2007.²²¹ In 2024, clean technology accounted for 62% of total lithium demand.²²²

FIGURE 29. END USES OF LITHIUM, 2023

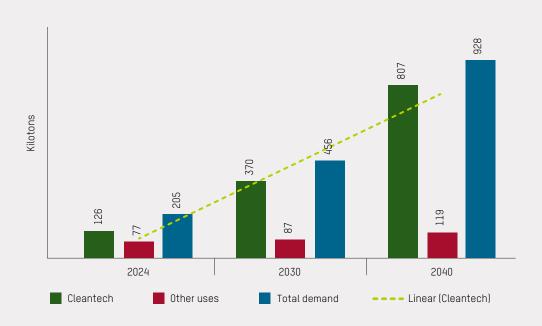


Source: U.S. Geological Survey (2025), Mineral Commodity Summaries 2025, Lithium, p. 110

Future demand prospects

Lithium is critical to the clean energy transition, and rechargeable batteries are the fastest-growing application for lithium.²²³ The EV industry contributes to about 90% of future lithium demand growth between today and 2050, which is expected not to be altered significantly due to alternative technologies.²²⁴ Battery storage is currently a minor consumer of lithium, but this is also expected to change rapidly. See Figure 30 for future lithium demand from clean technologies. The share of this demand is expected to increase from 62% to 87% between 2024 and 2040, a growth rate of 40%.

FIGURE 30. EXPECTED CLEANTECH SHARE IN LITHIUM DEMAND 2024-2040



Source: International Energy Agency (2025, June), Global Critical Minerals Outlook 2025, p. 114.

Nickel

Nickel is the fifth-most common element on earth, and its physical and chemical properties (corrosion resistance) make it an important mineral in a myriad of products.²²⁵ Indonesia is the biggest nickel producer (see Table 18). Indonesia possesses more than 42% of global nickel reserves, followed by Australia (18%) and Brazil (12%) (see Table 19).

TABLE 18. TOP FIVE NICKEL PRODUCERS (2024)

| Country | Mine production (metric tons) |
|-------------|-------------------------------|
| Indonesia | 2,200,000 |
| Philippines | 330,000 |
| Russia | 210,000 |
| Canada | 190,000 |
| China | 120,000 |
| World total | 3,700,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Nickel, p. 125.

TABLE 19. TOP FIVE COUNTRIES WITH THE LARGEST NICKEL RESERVES (2024)

| Country | Reserves (metric tons) |
|---------------|------------------------|
| Indonesia | 55,000,000 |
| Australia | 24,000,000 |
| Brazil | 16,000,000 |
| Russia | 8,300,000 |
| New Caledonia | 7,100,000 |
| World total | 130,000,000 |

Source: U.S. Geological Survey (2025, January), Mineral Commodity Summaries, Nickel, p. 125.

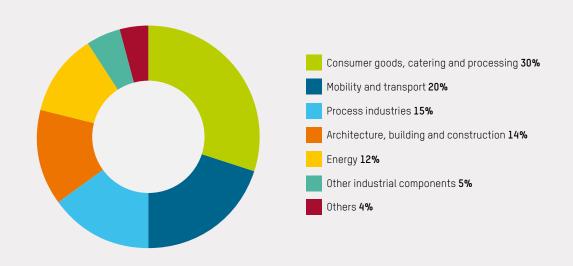
End uses

The majority (65%) of nickel is used to make stainless steel, while 12% goes into superalloys or nonferrous alloys.²²⁶ These alloys are found in, for example:

- Food contact materials and the health sector, because of their ease of cleaning and disinfection;
- Industry (turbine blades, processing plants, power generation, pollution control, chemical and pharmaceutical production);
- Transport;
- Architecture, structural applications and reinforcement in concrete;
- Water, in wastewater treatment, water distribution, plumbing and desalination;²²⁷
- The aerospace industry (e.g. in turbine blades, discs and other critical parts of jet engines).
- Land-based combustion turbines, such as those found at electric power generation stations.²²⁸

Nickel is also key for the clean energy sector, e.g. as a cathode material in EV batteries²²⁹ and other low-emission power generation technologies (including nuclear, bioenergy, hydro, geothermal, and concentrated solar power). Current cleantech demand for nickel is 15%.²³⁰ See Figure 31 for more detailed current end uses of nickel.

FIGURE 31. END USES OF NICKEL, 2023



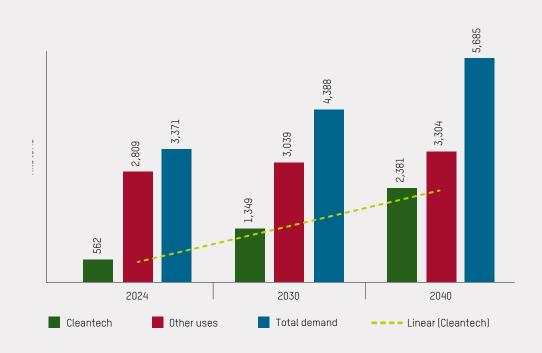
Source: Nickel Institute (2023), "End use of nickel". https://nickelinstitute.org/en/nickel-applications/#04-first-use-nickel, accessed May 2025

Future demand prospects

Global nickel demand reached around 3.3 million tons in 2024 and demand is set to grow further as a result of the clean energy transition.²³¹

Historically, demand for nickel was primarily driven by its use in alloys, including stainless steel and non-ferrous applications, which accounted for 75% of demand in 2020. See Figure 32 for expected future demand for nickel from clean technologies until 2040, which is expected to increase from 17% to 42%, a growth rate of 147% between 2024 and 2040. After that, demand is predicted to fall slightly due to lower demand for nickel-rich chemistries, presumably as a result of the rapid adoption of other chemistries such as LFP (lithium-iron-phosphate) cathode chemistries.²³²

FIGURE 32. EXPECTED CLEANTECH SHARE IN NICKEL DEMAND 2024-3040



Appendix 2 Policy assessment methodology

POLICY ASSESSMENT METHODOLOGY

This policy assessment focuses on the mining of minerals and metals critical for the energy transition. This document describes the Mining & Money Policy Assessment Methodology used in this case study to assess the financing and investment policies of financial institutions involved in financing or investing in the mining sector. It is important to note that the coal policies of the financial institutions are not within the scope of this assessment. For a full overview of the methodology, see https://forestsandfinance.org/mining-policies/

Assessment criteria

Table 20 lists the criteria selected in the Mining & Money Policy Assessment Methodology for each of these three categories.

TABLE 20. MINING & MONEY POLICY ASSESSMENT CRITERIA GROUPED BY CATEGORY

| Category | No. | Criteria |
|-------------|-----|---|
| Environment | 1 | Companies and their suppliers must commit to zero deforestation and no-conversion of natural landscapes. |
| | 2 | Companies and their suppliers must identify and minimize the biodiversity impacts, including the protection of endangered species habitats, associated with the construction of access roads and other mining-related infrastructure activities. |
| | 3 | Companies and their suppliers must minimize their impacts on water levels and quality. |
| | 4 | Companies and their suppliers must disclose targets and credible transition plans to mitigate their GHG emissions. |
| | 5 | Companies and their suppliers have systems in place to assess the impacts of their operations on air quality and maintain a management plan that documents measures to avoid or minimize adverse impacts on air quality. |
| | 6 | Companies and their suppliers reduce extractive waste and manage and process it responsibly by adequately tracking, reviewing, and acting to improve their tailings risk management and by adopting a zero-failure objective for tailings storage facilities. |
| | 7 | Companies and their suppliers prepare a reclamation and closure plan that is compatible with the protection of human health, the environment and the existing biodiversity in the region, and that demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end-use. |
| | 8 | Companies mitigate the chance of accidents by making use of the best available techniques and have a solid road map for crisis situations (a 'contingency plan'). |
| | 9 | Companies and their suppliers do not engage in deep sea mining. |

| Social | 10 | Companies and their suppliers must respect the right of Indigenous Peoples and communities with customary land rights to give or withhold Free, Prior and Informed Consent (FPIC) if they could be affected by planned operations. |
|---------------------------|----|--|
| | 11 | Companies and their suppliers may not operate on, or source any materials from, the territories of uncontacted Indigenous Peoples (also known as Indigenous Peoples in voluntary isolation). |
| | 12 | Companies and their suppliers must establish human rights due diligence processes and monitoring systems. |
| | 13 | Companies and their suppliers must commit to the resolution of complaints and disputes through an open and transparent process using consultation and mediation methods. |
| | 14 | Companies and their suppliers must maintain zero tolerance towards violence and the criminalization of land, environmental and human rights defenders. |
| | 15 | Companies and their suppliers only operate in weak governance zones or conflict-affected areas if they are able to demonstrate that they are not causing or contributing to human rights abuses. |
| | 16 | Companies and their suppliers do not engage in forced labour or child labour. |
| | 17 | Companies and their suppliers must uphold the rights to freedom of association, collective bargaining and freedom from discrimination. |
| | 18 | Companies and their suppliers must pay at least a living wage. |
| | 19 | Companies and their suppliers must protect the safety and health of workers. Companies must periodically provide reports on human and environmental health in the region of direct and indirect impact, using the river basin and wind direction as the basis for analysis. |
| | 20 | Companies and their suppliers must have a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination and violence. |
| | 21 | Companies and their suppliers respect small-scale and artisanal mining and improve sustainable economic and social development on a local level. |
| Governance (of the | 22 | The financial institution has integrated sustainability objectives in its governance structure. |
| financial institution) | 23 | The financial institution is transparent on the actions through which its ESG policies are implemented and enforced. |
| | 24 | The financial institution applies its ESG policies to the entire corporate group to which its client or investee company belongs to. |
| | 25 | The financial institution is transparent on its investments and financings in the mining sector. |
| | 26 | The financial institution discloses its financed GHG emissions related to the mining sector. |
| | 27 | The financial institution discloses targets and a credible transition plan to mitigate GHG emissions by mining sector companies in its portfolio. |

| | 28 | The financial institution is transparent on its engagements with companies in the mining sector. |
|---------------------------------|----|---|
| | 29 | The financial institution commits to a transparent and effective grievance mechanism regarding its financing of, or investments in, companies in the mining sector. |
| Governance (of companies) | 30 | Companies and their suppliers must provide proof of legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operation. |
| | 31 | Companies and their suppliers must ensure supply chain transparency and traceability. |
| | 32 | Companies and their suppliers are not engaged in corruption, bribery and financial crimes. |
| | 33 | Companies and their suppliers must comply with the letter and the spirit of the tax laws and regulations in the countries where they operate, publish their group structure and country-by-country data, and not set up international corporate structures solely for tax avoidance purposes. |
| | 34 | Companies and their suppliers publish a sustainability report that is set up in accordance with recognized sustainability reporting frameworks. |

Scoring model

To assess a financial institution against the criteria listed in Table 20, the policy documents and other relevant publications, such as sustainability reports, of the financial institution are researched. For each of the *Environmental*, *Social* and *Governance* criteria the financial institution is assigned 0 to 10 points. The general scoring model for the methodology for each ESG criteria is clarified in Table 21.

TABLE 21. GENERAL SCORING MODEL FOR THE METHODOLOGY

| Points | Assessment |
|--------|--|
| 0 | The financial institution does not commit to the criteria. |
| 3 | The financial institution makes a general commitment to the criteria, but this commitment is not very specific on what is expected of companies. |
| 5 | The financial institution makes a general commitment to the criteria and formulates requirements for companies, but these do not include all elements covered by the criteria or include other exceptions. |
| 7 | The financial institution commits unequivocally to the criteria and formulates all necessary requirements, but applies it only to its clients or investees and not to their suppliers. |
| 10 | The financial institution commits unequivocally to the criteria and formulates all necessary requirements, and applies it to its clients or investees and their suppliers. |

Note: Suppliers are companies and smallholders from which clients or investee companies source materials for trading or processing.

More specific scoring guidelines for each of the ESG criteria are defined below.

Scoring guidance

The M&M Policy Assessment Methodology includes the following 32 criteria to assess how financial institutions deal with ESG issues.

Environmental criteria

1. Companies and their suppliers must commit to zero deforestation and no conversion of natural landscapes, both directly and indirectly.

The financial institution should require that the companies it finances or invests in do not engage in activities that degrade or convert natural ecosystems, including natural forests. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers and should include a credible cut-off date or no cut-off date at all.

This is in line with the 1992 UN Convention on Biological Diversity (CBD), which demands that each member state establishes a system to preserve the biodiversity in protected areas, or ensure the protection of ecosystems in other ways. Virtually all countries in the world have signed the convention.²³³ The CBD is complemented by the 1982 UN Convention on the Law of the Sea (UNCLOS) that obliges all signatory countries to protect and preserve the biodiversity in ocean areas and the Ramsar Convention on Wetlands²³⁵ which ensures protection and proper management of wetlands.

One of the Sustainable Development Goals of the United Nations, number 15 of Life on Land, requires: 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.'236 The International Finance Corporation's (IFC) Performance Standard 6 concerning Biodiversity Conservation and Sustainable Management of Living Natural Resources determines how companies must operate in order to avoid negative consequences on areas of high biodiversity value, including impact on natural habitats as well as endangered and endemic species.²³⁷

In this respect, (sectoral) cut-off dates are important: 'The date after which deforestation or conversion renders a given production area non-compliant with no-deforestation or no-conversion commitments.' This means that companies are not only expected not to be involved in deforestation or conversion themselves, but they are also expected not to undertake any activity in areas which were deforested or converted (by others) after the cut-off date. In its policy, the financial institution should define a credible cut-off date or no cut-off date at all. A cut-off date is credible when it is in line with existing sectoral cut-off dates, not later than 2020 (for no-deforestation) and as early as possible and pre-dating the date on which the commitment was made (for no-conversion).²³⁸

TABLE 22. SCORING TABLE CRITERIA 1 DEFORESTATION

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on deforestation and the conversion of natural landscapes. |
| 3 | The financial institution makes a general commitment to the protection of natural landscapes, but this commitment is not very specific on what is expected from companies. |

| 5 | The financial institution explicitly requires companies to commit to zero deforestation and no conversion of natural landscapes. At least 3 of the following categories are explicitly mentioned – wetlands, peatlands, categories I-IV of the IUCN, HCS forest areas or HCV areas. |
|----|---|
| 7 | The financial institution explicitly requires companies to commit to zero deforestation and no conversion of wetlands, peatlands, categories I-IV of the IUCN, HCS forest areas, and HCV areas (after a credible cutoff date). |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers to commit to zero deforestation and no conversion of wetlands, peatlands, categories I-IV of the IUCN, HCS forest areas, and HCV areas (after a credible cutoff date). |

2. Companies and their suppliers must identify and minimize the biodiversity impacts, including the protection of endangered species habitats, associated with the construction of access roads and other mining-related infrastructure activities.

The financial institution should require that companies it finances or invests in prevent negative impacts on endangered flora and fauna species. Companies must not harvest, or trade in, endangered species and must protect the habitats of endangered species. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

The leading inventory of which flora and fauna species can be considered endangered is the IUCN Red List of Threatened Species.²³⁹ The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) sets stringent conditions for the international trade in all endangered species.²⁴⁰

Mining companies have the potential to directly affect biodiversity, for example through the clearing of vegetation for roads, removal of primary forests and soils to access ore bodies, the conversion of land, wetlands or water bodies into waste disposal sites, and planned or unplanned discharges of waste products to the environment. There may also be indirect impacts on biodiversity and ecosystem services from mining, such as increased pressures on wildlife for trade or bushmeat when mining roads are built in previously inaccessible areas, or intensified clearing of land as a result of the in-migration of mine workers or others seeking economic opportunities.²⁴¹

TABLE 23. SCORING TABLE CRITERIA 2 BIODIVERSITY IMPACTS

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on limiting biodiversity impacts. |
| 3 | The financial institution makes a general commitment to protect biodiversity, but this commitment is not very specific on what is expected from companies. |
| 5 | The financial institution requires companies to identify and minimize biodiversity impacts associated with its operations. |
| 7 | The financial institution explicitly requires companies to identify and minimize biodiversity impacts of their operations, including the protection of endangered species habitats, associated with the construction of access roads and other mining-related infrastructure activities. |

| 10 | The financial institution explicitly requires companies and their direct and indirect |
|----|--|
| | suppliers to identify and minimize biodiversity impacts of their operations, including the |
| | protection of endangered species habitats, associated with the construction of access |
| | roads and other mining-related infrastructure activities. |

3. Companies and their suppliers must minimize their impacts on water levels and quality

If the existing climate change scenario becomes a reality, almost half the world's population will be living in areas of high water stress by 2030. Furthermore, water scarcity in some arid and semi-arid places will cause the displacement of between 24 million and 700 million people.²⁴² The Pantanal region in Brazil, Paraguay and Bolivia for instance, the world's largest area of tropical wetlands, is reportedly starting to wither. Over the past 15 years, about 2.25 million hectares have been altered under the influence of soy farms and cattle ranches.²⁴³

The financial institution should require that companies it finances or invests in do minimize their impacts on water levels (surface and groundwater) and water quality through irrigation systems, draining, pesticides, fertilizers, erosion or other sources. When starting or expanding their operations, companies are expected to conduct water scarcity impact assessments in water scarce regions and – when necessary – put comprehensive mitigation measures in place to address community and ecosystem water requirements. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

The urgency of the issue of water scarcity is recently being acknowledged more clearly in the corporate world, among others through the establishment of the UN Global Compact's CEO Water Mandate: a public-private initiative designed to assist companies in the development, implementation and disclosure of water sustainability policies and practices. Together with the United Nations Environment Programme (UNEP), the CEO Water Mandate has published a Guidance on Corporate Water Accounting.²⁴⁴

TABLE 24. SCORING TABLE CRITERIA 3 WATER MANAGEMENT

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on water scarcity and quality. |
| 3 | The financial institution makes a general commitment to preserve water levels and/or water quality, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy on water scarcity or water quality. |
| 7 | The financial institution makes clear that companies must take concrete steps to minimize their impacts on water levels and water quality. |
| 10 | The financial institution makes clear that companies and their direct and indirect suppliers must take concrete steps to minimize their impacts on water levels and water quality. |

4. Companies and their suppliers must disclose targets and credible transition plans to mitigate their GHG emissions

The 6th assessment report of the Intergovernmental Panel on Climate Change (IPCC) finds that the *Agriculture, Forestry and Other Land Use (AFOLU)* sector on average accounted for 13-21% of global

total anthropogenic GHG emissions in the period 2010-2019.²⁴⁵ Deforestation is responsible for 45% of total AFOLU emissions, while methane emissions caused by enteric fermentation by livestock animals are also an important source.²⁴⁶ The financial institution should require that companies it finances or invests in measure their GHG emissions and develop targets and a credible transition plan to mitigate their GHG emissions.

To measure GHG emissions, the standards of the <u>Greenhouse Gas Protocol</u> (scope 1-3) are relevant.²⁴⁷ The targets the company sets for its GHG emissions should align with a 1.5°C global warming scenario under the Paris Climate Agreement, which requires a reduction of around 50% by 2030. The Expert Peer Review Group (EPRG) of the UN Race to Zero campaign notes that this reduction target implies average annual reductions of approximately 7% following the 'Carbon Law' as a rapid roadmap for global decarbonization. However, the EPRG also recognizes that change may not be linear, in particular for hard-to-abate sectors and that 7% per year may be more/less ambitious depending on baseline, sector and geography.²⁴⁸

The United Nation's High-Level Expert Group recommends: 'Company transition plans must: [...] disclose short-, medium- and long-term absolute emission reduction targets, and, if relevant, relative emission reduction targets.'249 The targets and pathways to net zero should be generated using a robust methodology consistent with limiting warming to 1.5°C with no or limited overshoot verified by a third party 'for example by the Science Based Targets Initiative (SBTi), the Partnership for Carbon Accounting Financials (PCAF), The Paris Agreement Capital Transition Assessment (PACTA), the Transition Pathway Initiative (TPI), the International Organization for Standardization (ISO), among others'.²⁵⁰

TABLE 25. SCORING TABLE CRITERIA 4 GHG EMISSIONS

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on the GHG emissions of the companies it finances or invests in. |
| 3 | The financial institution makes a general commitment that the companies it finances or invests in should mitigate their GHG emissions, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires the companies it finances or invests in to measure and mitigate their GHG emissions, but the financial institution does not require a 1.5°C degrees-aligned transition plan with short-term, medium-term and long-term targets based on a credible methodology. |
| 7 | The financial institution requires the companies it finances or invests in to measure and mitigate their GHG emissions and develop a 1.5°C degrees-aligned transition plan with short-term, medium-term and long-term targets based on a credible methodology, or requires adherence to international standards which include this requirement. |
| 10 | The financial institution requires the companies it finances or invests in, as well as their direct and indirect suppliers, to measure and mitigate their GHG emissions and develop a 1.5°C degrees-aligned transition plan with short-term, medium-term and long-term targets based on a credible methodology. |

5. Companies and their suppliers have systems in place to assess the impacts of their operations on air quality and maintain a management plan that documents measures to avoid or minimize adverse impacts on air quality

Air pollution is a major health problem, with data from the World Health Organization (WHO) showing that air pollution kills an estimated seven million people worldwide every year.²⁵¹ Mine sites can release significant quantities of air contaminants. By volume, the great majority of air contaminants are particulate matter, such as dust from blasting, large truck and equipment traffic, conveyors, and ore crushing.²⁵²

The financial institution should require the mining company to carry out air quality screening to determine if there may be significant air quality impacts associated with the mining project and its operations. The company must also develop, maintain and implement an air quality management plan that documents measures to avoid and/or minimize adverse impacts. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

TABLE 26. SCORING TABLE CRITERIA 5 AIR QUALITY

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on maintaining air quality. |
| 3 | The financial institution makes a general commitment to maintaining air quality, but this commitment is not very specific on what is expected from companies. |
| 5 | The financial institution requires companies to assess the impacts of their operations on air quality. |
| 7 | The financial institution explicitly requires companies to assess the impacts of their operations on air quality and maintain a management plan that documents measures to avoid or minimize adverse impacts on air quality. |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers to assess the impacts of their operations on air quality and maintain a management plan that documents measures to avoid or minimize adverse impacts on air quality. |

6. Companies and their suppliers reduce extractive waste and manage and process it responsibly by adequately tracking, reviewing, and acting to improve their tailings risk management and by adopting a zero-failure objective for tailings storage facilities

Many environmental problems in the extractive industry concern the way extractive waste is dealt with. In this respect, the management of tailings storage systems is especially relevant. According to the Responsible Mining Foundation, the increasing number of failures in tailings storage facilities in recent years highlights that mining companies still insufficiently monitor and address the risks associated with tailings dams.²⁵³ The Church of England Pensions Board and Swedish Council on Ethics partnered with GRID Arendal to develop the Global Tailings Portal, which was launched in January 2020. It is a free, searchable database with detailed information on more than 1,800 mine tailings dams around the world.

The Global Tailings Review is an initiative by the ICMM, UNEP and PRI, convened to develop an international standard to prevent catastrophic damage from failures at tailings storage facilities. The standard is to become an ICMM company member commitment. The Global Industry Standard on Tailings Management was published in August 2020.

The financial institution should require companies, their subsidiaries and suppliers to have a responsible waste management policy that is explicit about reducing extractive waste. The financier must also require a policy that monitors the risks associated with tailings storage and has a zero-failure objective to tailings storage facilities.

TABLE 27. SCORING TABLE CRITERIA 6 WASTE AND TAILINGS

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on the disposal of hazardous materials such as mine tailing. |
| 3 | The financial institution makes a general commitment to responsibly dispose of hazardous materials, such as not practising riverine and sub-marine disposal of mine tailings. |
| 5 | The financial institution requires companies to reduce extractive waste and manage and process it in a responsible way. |
| 7 | The financial institution explicitly requires companies to reduce extractive waste, manage and process it responsibly by adequately tracking, reviewing, and acting to improve their tailings risk management and by adopting a zero-failure objective for tailings storage facilities. |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers to reduce extractive waste, manage and process it responsibly by adequately tracking, reviewing, and acting to improve their tailings risk management and by adopting a zero-failure objective for tailings storage facilities. |

7. Companies and their suppliers prepare a reclamation and closure plan that is compatible with the protection of human health, the environment and the existing biodiversity in the region, and that demonstrates how affected areas will be returned to a stable landscape with an agreed postmining end use.

The condition in which exhausted mines are left behind has large consequences for the populations and ecosystems in the vicinity. Negative environmental and health effects can have an impact for years – perhaps even centuries. The Mining, Minerals and Sustainable Development (MMSD) project asks companies to take the environment and health effects after closing mines into consideration in the plans for the development of the mine and in the assessment of the effects on local communities. This means the future destination of the mine, the provisions to be made and the responsibilities of the mining company need to be taken into account.²⁵⁴

The financial institution should require companies to prepare a reclamation and closure plan before beginning the mine construction activities. This expectation should cover the company's subsidiaries and its suppliers.

TABLE 28. SCORING TABLE CRITERIA 7 MINE CLOSURE

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on mine reclamation and closure. |
| 3 | The financial institution makes a general commitment towards mine reclamation and closure, but this commitment is not very specific on what is expected from companies. |
| 5 | The financial institution requires companies to prepare a reclamation and closure plan that is compatible with the protection of human health, the environment, and existing biodiversity. |
| 7 | The financial institution explicitly requires companies to prepare a reclamation and closure plan that is compatible with the protection of human health, the environment, and the existing biodiversity and demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end use. |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers to prepare a reclamation and closure plan that is compatible with protection of human health, the environment, and the existing biodiversity, and demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining enduse. |

8. Companies mitigate the chance of accidents by using the best available techniques and having a solid road map for crisis situations (a 'contingency plan')

The International Council on Mining and Metals (ICMM) Principle 4 requires companies to 'develop, maintain and test effective emergency response procedures in collaboration with potentially affected parties'. International Finance Corporation's (IFC) Performance Standard 1 also requires companies to have a solid roadmap for crisis situations and develop a contingency plan.²⁵⁵

The financial institution should expect companies to work towards best practices in health and safety management and to operate a response plan for emergencies (contingency plan, crisis plan, etc). This requirement is equivalent to the mining company committing to follow the IFC Environmental, Health, and Safety Guidelines or the IFC Performance Standards.

TABLE 29. SCORING TABLE CRITERIA 8 HEALTH AND SAFETY

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on emergency response planning. |
| 3 | The financial institution makes a general commitment to preventing accidents through sound risk management, but this commitment is not very specific on what is expected from companies. |
| 5 | The financial institution requires companies to adopt emergency response or crisis management planning. |
| 7 | The financial institution requires companies to work towards best practices in health and safety management, or to operate a contingency plan for emergencies. |
| 10 | The financial institution explicitly requires companies to work towards best practices in health and safety management and to operate a contingency plan for emergencies. |

9. Companies and their suppliers do not engage in deep-sea mining

Deep seabed mining is a mining practice in which mineral deposits are extracted and excavated from the deep seabed, which is at ocean depths greater than 200 meters, and covering about two-thirds of the total seafloor. Deep seabed mining has potentially devastating effects on ocean ecosystems and livelihoods dependent on a healthy ocean. Since the exact negative environmental and social risks of deep seabed mining are not yet properly understood, various NGOs, including WWF and the Deep Sea Conservation Coalition, have spearheaded a campaign calling for a moratorium on seabed mining until, amongst others, it is clearly demonstrated that 'demonstrated that such activities can be managed in a way that ensures the effective protection of the marine environment'.

TABLE 30. SCORING TABLE CRITERIA 9 DEEP-SEA MINING

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on protecting the oceans or deep-sea mining. |
| 3 | The financial institution makes a general commitment towards the protection of the oceans, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to have policies for protecting oceans but does not provide further details. |
| 7 | The financial institution requires companies to not engage in deep-sea mining. |
| 10 | The financial institution requires companies and their direct and indirect suppliers to not engage in deep-sea mining. |

Social criteria

10. Companies and their suppliers must respect the right of Indigenous Peoples and communities with customary land rights to give or withhold Free, Prior and Informed Consent (FPIC) if they could be affected by planned operations

The financial institution should require that companies it finances or invests in adhere to the principle of Free, Prior and Informed Consent (FPIC) for Indigenous Peoples and communities with customary land rights that could be affected by their planned operations. FPIC should be sought when operations are planned on, or in the vicinity of, Indigenous lands. Companies must not cause resettlement of people who are dependent for their livelihoods on land affected by the company's operations, whether full or partial, permanent or temporary, physical or economical, without their Free, Prior and Informed Consent. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers. Well before any activity starts, Indigenous communities need to be given all information related to the planned operation, including names of the operation's proponents and contractors, size and boundaries, maps etc.

TABLE 31. SCORING TABLE CRITERIA 10 FPIC

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on the principle of Free, Prior and Informed Consent (FPIC). |
| 3 | The financial institution makes a general commitment to the principle of Free, Prior and Informed Consent (FPIC), but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to respect the right of Indigenous Peoples and communities with customary land rights to give or withhold Free, Prior and Informed Consent (FPIC) if they could be affected by planned operations, or it requires adherence to international standards, which include this requirement, but the financial institution does not provide any details on the procedures to be followed. |
| 7 | The financial institution requires companies to respect the right of Indigenous Peoples and communities with customary land rights to give or withhold Free, Prior and Informed Consent (FPIC) if they could be affected by planned operations. The financial institution also clarifies how companies should fulfil FPIC rights, how they should co-design and document the FPIC procedures, and what best practices must be adhered to in the mining sector. |
| 10 | The financial institution requires companies and their direct and indirect suppliers to respect the right of Indigenous Peoples and communities with customary land rights to give or withhold Free, Prior and Informed Consent (FPIC) if they could be affected by planned operations. The financial institution also clarifies how companies should fulfil FPIC rights, how they should co-design and document the FPIC procedures, and what best practices must be adhered to in the mining sector. |

11. Companies and their suppliers may not operate on, or source any materials from, the territories of uncontacted Indigenous Peoples (also known as Indigenous Peoples in voluntary isolation)

Companies and their suppliers must respect the rights of uncontacted Indigenous Peoples (also known as Indigenous Peoples in voluntary isolation). Uncontacted Indigenous Peoples cannot give Free, Prior and Informed Consent (FPIC). Contacting them or entering their territories for any reason, including asking for their FPIC, violates their right to self-determination and risks wiping them out through diseases to which they have no immunity. Hence, no companies should be operating on the territories of uncontacted peoples. Therefore, the financial institution should explicitly require that companies it finances, and their direct and indirect suppliers, do not operate on or source materials from the territories of uncontacted Indigenous Peoples, or from companies operating on their territories.

TABLE 32. SCORING TABLE CRITERIA 11 UNCONTACTED INDIGENOUS PEOPLES

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on uncontacted Indigenous Peoples (also known as Indigenous Peoples in voluntary isolation). |
| 3 | The financial institution makes a general commitment to protecting the rights of uncontacted Indigenous Peoples, but the policy is not very specific on what is expected of companies. |

| 5 | The financial institution requires companies not to operate on or source materials from the territories of uncontacted Indigenous Peoples. |
|----|---|
| 7 | The financial institution explicitly requires companies and their direct and indirect suppliers not to operate on or source materials from the territories of uncontacted Indigenous Peoples. |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers not to operate on or source materials from the territories of uncontacted Indigenous Peoples. |

12. Companies and their suppliers must establish human rights due diligence processes and monitoring systems

The financial institution should require that companies it finances or invests in fully comply with the UN Guiding Principles on Business and Human Rights, which means that companies establish human rights due diligence processes and monitoring systems. The aim of human rights due diligence and monitoring systems is to assess how the human rights of individuals and communities are affected by their present operations and how they could be affected by their expansion plans. These (potential) impacts should also address health impacts. The requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

This obligation is grounded in the 2011 United Nations Guiding Principles on Business and Human Rights (UNGPs) which clarify that the responsibility to respect human rights is a global standard of expected conduct for all companies, wherever they operate. It exists independently of states' abilities and/or willingness to fulfil their own human rights obligations, and does not diminish those obligations. Furthermore, this responsibility exists over and above compliance with national laws and regulations protecting human rights.

The responsibility to respect human rights requires that companies: 257

- Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; and
- Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

According to Guiding Principle 15 of the UNGPs, in order to meet the responsibility to respect human rights, companies must have in place a *policy commitment* to meet their responsibility to respect human rights and establish a *human rights due-diligence process* to identify, prevent, mitigate and account for how they address their impacts on human rights. Guiding Principles 16 to 24 of the UNGPs provide operational guidance on how the required policies and processes should be put into practice.

The UNGPs are broadly supported; among others the OECD Guidelines for Multinational Enterprises²⁵⁸ and the Equator Principles²⁵⁹ have aligned their human rights recommendations with the UNGPs.

TABLE 33. SCORING TABLE CRITERIA 12 HUMAN RIGHTS

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on the protection of human rights by the companies it finances or invests in. |
| 3 | The financial institution makes a general commitment to the protection of human rights, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution formulates requirements for companies to protect human rights, without explicitly requiring that companies establish human rights due diligence processes and monitoring systems. |
| 7 | The financial institution has a policy which explicitly requires companies to establish human rights due diligence processes and monitoring systems, or requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to establish human rights due diligence processes and monitoring systems. |

13. Companies and their suppliers must commit to the resolution of complaints and disputes through an open and transparent process using consultation and mediation methods

The financial institution should require that companies it finances or invests in fully comply with the UN Guiding Principles on Business and Human Rights (UNGPs), which also means that companies must offer individuals and communities affected by their operations access to remedy. In practice this means that companies must commit to the resolution of complaints and disputes through an open, transparent and consultative process. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

This obligation is grounded in the 2011 United Nations Guiding Principles on Business and Human Rights (UNGPs) which clarify that the responsibility to respect human rights requires that companies seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

According to Guiding Principle 15 of the UNGPs, companies must have processes in place to enable the *remediation* of any adverse human rights impacts.²⁶⁰ Guiding Principle 29 therefore recommends companies to establish or participate in effective operational-level grievance mechanisms for individuals and communities who may be adversely impacted. Guiding Principle 31 details the criteria to ensure the effectiveness of grievance mechanisms. It also includes expectation that mechanisms must be:²⁶¹

- Legitimate;
- Accessible;
- Predictable:
- Equitable;
- Transparent;
- · Rights-compatible;
- A source of continuous learning; and
- Based on engagement and dialogue.

The UNGPs are broadly supported; among others the OECD Guidelines for Multinational Enterprises²⁶² and the Equator Principles²⁶³ have aligned their human rights recommendations with the UNGPs.

TABLE 34. SCORING TABLE CRITERIA 13 ACCESS TO REMEDY

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on access to remedy. |
| 3 | The financial institution makes a general commitment to access to remedy, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy which requires companies to provide access to remedy, without explicitly requiring that companies commit to the resolution of complaints and disputes through an open, transparent and consultative process. |
| 7 | The financial institution has a policy which explicitly requires companies to commit to the resolution of complaints and disputes through an open, transparent and consultative process, or requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to commit to the resolution of complaints and disputes through an open, transparent and consultative process. |

14. Companies and their suppliers must maintain zero tolerance towards violence and the criminalization of land, environmental and human rights defenders

Land, environmental and human rights defenders active in mining sectors are often threatened, repressed, de-legitimized, criminalized, unrecognized, kidnapped and even killed because of their activities mobilizing as individuals, communities, peoples and organizations to protect their lands, territories and the environment. They are named and shamed as 'enemies' of development, and they are falsely labelled as terrorists and criminals.

The financial institution should require that companies it finances or invests in maintain zero tolerance towards threats, violence and the criminalization of land, environmental and human rights defenders. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

The often difficult position of human rights defenders received international recognition by the adoption of the Declaration on Human Rights Defenders by the United Nations in 1998 and the appointment of the UN Special Rapporteur on the situation of human rights defenders in 2000. In November 2019, the Zero Tolerance Initiative released the Geneva Declaration, demanding zero tolerance towards violence and the criminalization of land, environmental and human rights defenders. This is a global coalition led by Indigenous Peoples, local community representatives and supportive NGOs working collectively to address the root causes of killings and violence against human rights defenders linked to global supply chains. The state of the control of the co

TABLE 35. SCORING TABLE CRITERIA 14 HUMAN RIGHTS DEFENDERS

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on land, environmental and human rights defenders. |
| 3 | The financial institution makes a general commitment to protect land, environmental and human rights defenders, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to protect land, environmental and human rights defenders, without explicitly requiring zero tolerance. |
| 7 | The financial institution has a policy which explicitly requires companies to maintain zero tolerance towards violence and the criminalization of land, environmental and human rights defenders, or requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to maintain zero tolerance towards violence and the criminalization of land, environmental and human rights defenders. |

15. Companies and their suppliers only operate in weak governance zones or conflict-affected areas if they are able to demonstrate that they are not causing or contributing to human rights abuses

In order to minimize the negative consequences of the resource curse, it is important that the development of the extractive industry is combined with the development of capable and reliable governance. The World Bank Extractive Industries Review (EIR) advises against stimulating private investments in the extractive industry in countries where governance is ineffective. It also states that the quality of governance has to meet explicit conditions before an extractive industry project can be financed by the World Bank. The United Nations Guiding Principles on Business and Human Rights (UNGP) highlights the heightened risks of involvement in gross human rights abuses in conflict-affected areas. A company should manage its own impact in order to prevent involvement in human rights violations.²⁶⁶

The OECD Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones could be helpful in detecting areas where strong governance is needed to avoid human rights abuses or to refrain from doing business.²⁶⁷

The Natural Resource Charter of the Natural Resource Governance Institute is a set of 'principles to guide governments' and societies' use of natural resources so these economic opportunities result in maximum and sustained returns for a country's citizens. It outlines tools and policy options designed to avoid the mismanagement of diminishing natural riches, and ensure their ongoing benefits.'268 Although the Charter is primarily aimed at governments and societies, the document also describes the responsibilities of state-owned extractive companies and private companies.

TABLE 36. SCORING TABLE CRITERIA 15 CONFLICT-AFFECTED AREAS

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on operating in weak governance zones or conflict-affected areas. |
| 3 | The financial institution makes a general commitment to be mindful of (potential) human rights abuses while operating in weak governance zones or conflict-affected areas, but this commitment is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to adhere to the Voluntary Principles on Security and Human Rights. |
| 7 | The financial institution requires companies to either not operate in weak governance zones or conflict areas, or to only operate if they demonstrate that they are not contributing to human rights abuses, or adhere to the Voluntary Principles on Security and Human Rights. |
| 10 | The financial institution requires companies and their direct and indirect suppliers to either not operate in weak governance zones or conflict areas, or to only operate if they demonstrate that they are not contributing to human rights abuses, or adhere to the Voluntary Principles on Security and Human Rights. |

16. Companies and their suppliers do not engage in forced labour or child labour

The financial institution should require that companies it finances or invests in do not make use of forced labour (including bonded labour) or child labour in any way. This requirement should also apply to the company's subsidiaries and affiliates, as well as to the smallholders and other direct and indirect suppliers it is sourcing from.

Companies should be expected to take proactive steps to assess if forced labour (including bonded labour) and/or child labour is occurring in any way in their operations and their supply chains. For companies operating in or sourcing form Brazil, the starting point for this assessment should be the official government list of companies found to be involved in slave labour and debt bondage. Special attention should be given to (illegal) migrants and refugees, who have a high vulnerability to become victims of human trafficking, modern slavery and forced labour. On the basis of this assessment of the occurrence of forced labour and child labour in their operations and supply chain, companies should detail steps they will take (with their direct and indirect suppliers if relevant) to abolish these practices.

These principles are firmly grounded in the 1998 ILO Declaration on Fundamental Principles and Rights at Work²⁷¹ in which the International Labour Organization (ILO) identified ten of its conventions as 'fundamental' conventions. ²⁷² These ten conventions cover five crucial topics, including the elimination of all forms of forced and compulsory labour²⁷³ and the effective abolition of child labour.²⁷⁴

The commitment to abolish all forms of forced labour, bonded labour and child labour is supported by many other ESG standards, such as the OECD Guidelines for Multinational Enterprises, ²⁷⁵ the International Finance Corporation's (IFC) Performance Standard 2 concerning Labor and Working Conditions²⁷⁶ and the UN Global Compact.²⁷⁷

TABLE 37. SCORING TABLE CRITERIA 16 FORCED AND CHILD LABOUR

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on forced labour and child labour. |
| 3 | The financial institution makes a general commitment against forced labour and child labour, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy which requires companies not to make use of either forced labour or of child labour. |
| 7 | The financial institution has a policy which requires companies not to make use of forced labour and child labour, or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which requires companies and their direct and indirect suppliers not to make use of forced labour and child labour, in their operations and in their supply chains. |

17. Companies and their suppliers must uphold the rights to freedom of association, collective bargaining and freedom from discrimination

The financial institution requires companies it finances or invests in to uphold fundamental labour rights as stipulated by the ILO including: the right to freedom of association and the effective recognition of the right to collective bargaining, and the elimination of discrimination in respect of employment and occupation. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

These principles are firmly grounded in the 1998 ILO Declaration on Fundamental Principles and Rights at Work²⁷⁸ in which the International Labour Organization (ILO) identified ten of its conventions as 'fundamental' conventions.²⁷⁹ These ten conventions cover five crucial topics, including the freedom of association and the effective recognition of the right to collective bargaining,²⁸⁰ and the elimination of discrimination in respect of employment and occupation.²⁸¹

The commitment to uphold the rights to freedom of association, collective bargaining and freedom from discrimination is supported by many other ESG standards, such as the OECD Guidelines for Multinational Enterprises, ²⁸² the International Finance Corporation's (IFC) Performance Standard 2 concerning Labor and Working Conditions²⁸³ and the UN Global Compact. ²⁸⁴

TABLE 38. SCORING TABLE CRITERIA 17 FUNDAMENTAL LABOUR RIGHTS

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on rights to freedom of association, collective bargaining and freedom from discrimination. |
| 3 | The financial institution makes a general commitment to the rights to freedom of association, collective bargaining and freedom from discrimination, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to respect labour rights, but this policy does not mention explicitly the right to freedom of association, and/or the right to collective bargaining and/or the right to freedom from discrimination. |

| 7 | The financial institution has a policy which explicitly requires companies to uphold the rights to freedom of association, collective bargaining and freedom from discrimination, or it requires adherence to international standards which include this requirement. |
|----|---|
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to uphold the rights to freedom of association, collective bargaining and freedom from discrimination. |

18. Companies and their suppliers must pay at least a living wage

The financial institution should require that companies it finances or invests in pay a living wage to their employees and ensure that their suppliers pay a living wage to their employees. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

Workers in many countries are not paid enough to support themselves and their families. While some of these countries do have a legal minimum wage, it is often much lower than a living wage. A living wage is a family income earned within a standard working week, which should be sufficient to meet basic needs, usually conceived of as the ability to obtain adequate food, clean water, shelter, clothes, education, healthcare, transport and energy, and provide some discretionary income. WageIndicator publishes living wage estimates for 173 countries, as well as for regions within these countries.

Declarations of the International Labour Organization (ILO) referring to living wage include the 2017 ILO Tripartite Declaration on Principles concerning Multinational Enterprises and Social Policy²⁸⁷ and the 2008 ILO Declaration on Social Justice for a Fair Globalization.²⁸⁸ The Universal Declaration of Human Rights (UDHR) states that 'everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity'.²⁸⁹ In addition, the 2011 OECD Guidelines for Multinational Enterprises recommend paying a wage that 'should be at least adequate to satisfy the basic needs of the workers and their families'.²⁹⁰

TABLE 39. SCORING TABLE CRITERIA 18 LIVING WAGES

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on living wages. |
| 3 | The financial institution makes a general commitment to living wages, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to pay living wages, but does not clarify that this needs to be earned in a standard working week or the financial institution makes other exceptions. |
| 7 | The financial institution has a policy which explicitly requires companies to pay a living wage within a standard working week, or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to pay a living wage within a standard working week. |

19. Companies and their suppliers must protect the safety and health of workers

The financial institution should require that companies it finances or invests in will implement all reasonable precautions to protect the health and safety of workers. This requirement should also apply to the company's subsidiaries and affiliates, as well as to the smallholders and other third party suppliers it is sourcing from.

These principles are firmly grounded in the 1998 ILO Declaration on Fundamental Principles and Rights at Work²⁹¹ in which the International Labour Organization (ILO) identified ten of its conventions as 'fundamental' conventions.²⁹² These ten conventions cover five crucial topics, including a safe and healthy work environment.²⁹³ The International Finance Corporation (IFC) has covered occupational safety and health in Performance Standard 2 concerning Labor and Working Conditions.²⁹⁴

TABLE 40. SCORING TABLE CRITERIA 19 OCCUPATIONAL HEALTH AND SAFETY

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on occupational safety and health at the companies it finances or invests in. |
| 3 | The financial institution makes a general commitment to occupational safety and health, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution does require companies to ensure occupational safety and health but focuses on a specific area of occupational safety and health or makes certain exceptions. |
| 7 | The financial institution has a policy which explicitly requires companies to protect the safety and health of their workers in all aspects, or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to protect the safety and health of their workers in all aspects. |

20. Companies and their suppliers must have a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination and violence

The financial institution should require that companies it finances or invests in have a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination, including psychological harm and verbal, physical and sexual harassment and violence. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

This requirement is based, among others, on the UN Convention on the Elimination of all forms of Discrimination against Women (CEDAW), various standards of the International Labour Organization (ILO) on gender equality and the UN Beijing Declaration and Platform for Action which states that 'removing all the obstacles to women's active participation in all spheres of public and private life through a full and equal share in economic, social, cultural and political decision-making' is fundamental for the achievement of gender equality. The International Finance Corporation (IFC) has covered gender equality in Performance Standard 2 concerning Labor and Working Conditions.

TABLE 41. SCORING TABLE CRITERIA 20 GENDER-BASED DISCRIMINATION AND SEXUAL HARASSMENT

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on gender-based discrimination. |
| 3 | The financial institution makes a general commitment against gender-based discrimination, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to abstain from gender-based discrimination, but this policy does not include all types of gender-based discrimination. |
| 7 | The financial institution has a policy which explicitly requires companies to have a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination, including psychological harm and verbal, physical and sexual harassment and violence. Or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to have a gender-sensitive zero tolerance policy towards all forms of gender-based discrimination, including psychological harm and verbal, physical and sexual harassment and violence. |

21. Companies and their suppliers respect small-scale and artisanal mining and improve sustainable economic and social development on a local level

Small-scale and artisanal extractive industry projects – provided they are well managed – can enhance sustainable economic and social development on a local level. The Alliance for Responsible Mining (ARM) is an independent multi-stakeholder initiative that aims to enhance social justice and wellbeing in the small-scale extractive industry by improving social, environmental and working conditions, solid management of the mines and conducting repair work for the ecosystem. In November 2013 the ARM started cooperation with the Swiss Institute for Market Ecology in order to develop an independent certification and auditing system for the Fairmined Standard. In 2014 the Fairmined Standard for Gold and Associated Precious Metals was launched.²⁹⁵

While investment in mining activities may not include direct investment in artisanal or small-scale mining, investment in industrial mining operations does still have consequences for small-scale and artisanal mining. As the International Council on Mining and Metals (ICMM) Principle 9 states, companies should contribute to the social, economic and institutional development of the communities in which they operate.²⁹⁶ This includes the communities of artisanal and small-scale miners, who often live and work around or near large-scale mines. Large-scale mining operations already engage with artisanal miners and their dependants through community development programmes, but certain issues, such as security and human rights, still require attention.²⁹⁷

TABLE 42. SCORING TABLE CRITERIA 21 SMALL-SCALE AND ARTISANAL MINING

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no policy on small-scale and artisanal mining. |
| 3 | The financial institution makes a general commitment to respect small-scale and artisanal mining, but this commitment is not very specific on what is expected from companies. |

| 5 | The financial institution requires companies to engage with small-scale and artisanal miners in and around the communities in which companies operate. |
|----|---|
| 7 | The financial institution explicitly requires companies to improve sustainable economic and social development of small-scale and artisanal mining. |
| 10 | The financial institution explicitly requires companies and their direct and indirect suppliers to improve sustainable economic and social development of small-scale and artisanal mining. |

Governance criteria

Governance of the financial institution

22. The financial institution has integrated sustainability objectives in its governance structure

To ensure that all employees of the financial institution take deforestation and related sustainability seriously and implement and enforce the ESG policies of the financial institution in a rigorous way, the financial institution needs to integrate sustainability objectives in its governance structure. This means inter alia that the financial institution has formulated strategic sustainability objectives, has assigned responsibility for oversight of sustainability objectives and risks to a Board member, and has integrated clear sustainability targets and incentives in the remuneration structure of the financial institution's employees.

TABLE 43. SCORING TABLE CRITERIA 22 SUSTAINABILITY OBJECTIVES

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no sustainability objectives. |
| 3 | The financial institution has sustainability objectives, but does not make clear how these objectives are integrated in its governance structure. |
| 5 | The financial institution has made at least one of the following three steps: it has formulated strategic sustainability objectives, and/or it has assigned responsibility for oversight of sustainability objectives and risks to a board member and/or it has integrated clear sustainability targets and incentives in the remuneration structure of its employees. |
| 7 | The financial institution has made two of the following three steps: it has formulated strategic sustainability objectives, and it has assigned responsibility for oversight of sustainability objectives and risks to a board member, and it has integrated clear sustainability targets and incentives in the remuneration structure of its employees. |
| 10 | The financial institution has made all of the following three steps: it has formulated strategic sustainability objectives, and it has assigned responsibility for oversight of sustainability objectives and risks to a board member, and it has integrated clear sustainability targets and incentives in the remuneration structure of its employees. |

23. The financial institution is transparent on the actions through which its ESG policies are implemented and enforced

A financial institution's sustainability policies are worthless if not implemented and enforced rigorously. The financial institution therefore needs to be transparent on the actions through which its policies are implemented and enforced. Such actions need to include:²⁹⁸

- Clearly communicating their sustainability expectations to mining companies and the general public;
- Screening of all mining companies on a regular basis via a credible, transparent natural ecosystem monitoring system;
- Excluding companies from financings and investments if they or their direct and indirect suppliers are systematically involved in deforestation and related harmful impacts, and prospects for improvement are low;
- Engaging with mining companies to conclude time-bound corrective action plans banning the conversion and degradation of forests from their operations and supply chains, to which the companies commit;
- Formalizing agreements made with mining companies in clauses in loan contracts;
- Monitoring the companies' progress with implementing the agreed action plans via credible independent verification systems;
- Encouraging further steps by providing sustainability performance linked loans;
- Voting on deforestation-related shareholder resolutions and voting against board members that refuse to act; and
- Taking collective initiatives with peers, NGOs, national and local governments and other stakeholders to collectively call upon corporate actors and governments to prevent, cease and remediate deforestation and its effects.

TABLE 44. SCORING TABLE CRITERIA 23 IMPLEMENTATION OF ESG POLICIES

| Points | Assessment |
|--------|---|
| 0 | The financial institution does not disclose how its ESG policies are implemented. |
| 3 | The financial institution discloses a general description of the implementation of its ESG policies, but does not elaborate on any of the important actions (as mentioned above). |
| 5 | The financial institution discloses a description of the implementation of its ESG policies, in which it elaborates on one to three important actions (as mentioned above). |
| 7 | The financial institution discloses a description of the implementation of its ESG policies, in which it elaborates on at least four important actions (as mentioned above). |
| 10 | The financial institution discloses a description of the implementation of its ESG policies, in which it elaborates on at least four important actions (as mentioned above) and provides details on how these actions influence companies in the mining sector. |

24. The financial institution applies its ESG policies to the entire corporate group to which its client or investee company belongs to

To be able to attract financing from financial institutions which have adopted sound ESG policies, a company or corporate group active in mining sectors might only look for financings or investments from these financial institutions for specific subsidiaries or projects which meet the criteria of the

financial institution. Meanwhile, the companies looking for finance might have other subsidiaries, sister companies or related companies (ultimately owned by the same owners) which do not meet the criteria of the financial institution. The financings or investments by the financial institution will then provide extra capital to the complete corporate group, part of which is not meeting the criteria in the ESG policies of the financial institution.

Strong ESG policies should deal with this threat to their credibility and effectiveness, by increasing the scope of their policies to the entire corporate group to which the specific company belongs that they are financing or investing in. This would mean that not only the client or investee company should meet the criteria in the financial institution's ESG policy, but also its subsidiaries and parent companies, its sister companies and the companies owned or controlled by the same ultimate beneficial owners (UBOs).

TABLE 45. SCORING TABLE CRITERIA 24 SCOPE OF ESG POLICIES

| Points | Assessment |
|--------|--|
| 0 | The financial institution does not have ESG policies. |
| 3 | The financial institution does have ESG policies, but does not specify what the policies mean for the entire corporate group to which the client or investee company belongs. |
| 5 | The financial institution mentions in one of its ESG policies that the policy also applies to the entire corporate group to which the client or investee company belongs. |
| 7 | The financial institution clarifies that all its ESG policies also apply to the entire corporate group to which the client or investee company belongs. |
| 10 | The financial institution clarifies that all its ESG policies also apply to the entire corporate group to which the client or investee company belongs, clarifying how this corporate group is identified. |

25. The financial institution is transparent on its investments and financings in the mining sector

The financial institution should publish on its website which mining companies it is providing financing to or in which it is investing. This transparency should preferably include the name of the company, the country and region it operates in and the size of the investment or financing.

As a second-best option, the financial institution can provide an overview in its annual report or on its website of the sectoral and regional breakdown of its financings and investments. Such information is required in indicator FS6 of the Global Reporting Initiative's 64 Financial Services Sector Disclosure (FSSD). If the sector breakdown is sufficiently detailed, for example based on the first four digits of NACE or ISIC, this would give a good indication of the financial institution's exposure to mining commodity sectors.

The Global Reporting Initiative recommends financial institutions to continue using this G4 Financial Services Sector Disclosure together with the new GRI Universal Standard, as long as the three new Sector Standards for the financial sector are under development.

TABLE 46. SCORING TABLE CRITERIA 25 MINING PORTFOLIO DISCLOSURE

| Points | Assessment |
|--------|---|
| 0 | The financial institution does not publish a sectoral breakdown of its investments and financings. |
| 3 | The financial institution does publish a sectoral breakdown of its investments and financings, but this breakdown is not detailed enough to get a good indication of the exposure to the mining sector. |
| 5 | The financial institution publishes a breakdown of its portfolio by region, size and industry which is detailed enough to get a good indication of the exposure to the mining sector. |
| 7 | The financial institution publishes the names of companies active in the mining sector to which it is providing financing or in which it is investing. |
| 10 | The financial institution publishes the names of companies active in the mining sector to which it is providing financing or in which it is investing, together with assessments of how these companies live up to the ESG policies of the financial institution. |

26. The financial institution discloses its financed GHG emissions related to the mining sector

The mining sector is largely energy-intensive, having long-lasting impacts on the environment, and depends on the exploitation of finite resources. A 2010 estimation of the mining industry's contribution to global emissions calculated it to be close to 1 Gt carbon dioxide equivalent (C02e) per year, corresponding to about 2% of total global emissions. Approximately half of the sector's emissions derive from the use of fuel in mining and processing operations and from fugitive methane (CH4) emissions at coal mines, while the other half comes from electricity use, primarily in refining and smelting operations.²⁹⁹ Financial institutions contribute to these emissions through their financing and investment activities and must account for these financed emissions in their GHG inventories.

To do so, the standards of the <u>Greenhouse Gas Protocol</u> (scope 1-3)³⁰⁰ and the recommendations of the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD) are relevant.³⁰¹ Various methodologies to measure the financed emissions of a financial institution are developed, for instance the Platform Carbon Accounting Financials (PCAF)³⁰² and the <u>Paris</u> Agreement Climate Transition Assessment (PACTA) project.³⁰³

TABLE 47. SCORING TABLE CRITERIA 26 FINANCED EMISSIONS

| Points | Assessment |
|--------|--|
| 0 | The financial institution does not disclose any data on its financed emissions. |
| 3 | The financial institution discloses data on its financed emissions but does not provide disaggregated figures for emissions related to the mining sector. |
| 5 | The financial institution discloses data on its financed emissions from the mining sector, but these are not based on a credible methodology or use emissions per invested amount as metric. |

| 7 | The financial institution discloses data on its financed emissions from the mining sector which use absolute emission volumes or emissions per revenue unit or comparable metrics. |
|----|---|
| 10 | The financial institution discloses data on its financed emissions from the mining sector which use absolute emission volumes or emissions per revenue unit or comparable metrics and which include the scope 1, 2 and 3 emissions of the mining companies. |

27. The financial institution discloses targets and a credible transition plan to mitigate GHG emissions by mining sector companies in its portfolio

The financial institution should publish targets for its financed emissions, including targets for the mining sector emissions, and should develop specific transition plans.

The targets should align with a 1.5°C global warming scenario under the Paris Climate Agreement, which requires a reduction of around 50% by 2030. The Expert Peer Review Group (EPRG) of the UN Race to Zero campaign notes that this reduction target implies average annual reductions of approximately 7% following the 'Carbon Law' as a rapid roadmap for global decarbonization. However, the EPRG also recognizes that change may not be linear, in particular for hard-to-abate sectors, and that 7% per year may be more/less ambitious depending on baseline, sector and geography.³⁰⁴

The UN Race to Zero also stipulates that the financial institution's climate change targets should include a specific target for methane reduction of at least 34% by 2030. Transition plans should cover what actions will be taken each year, within two to three years and by 2030, and demonstrate how the financial institution will achieve its decarbonization targets.³⁰⁵

The United Nation's High-Level Expert Group recommends: 'Company transition plans must: [...] disclose short-, medium- and long-term absolute emission reduction targets, and, if relevant, relative emission reduction targets.'306 The targets and pathways to net zero should be generated using a robust methodology consistent with limiting warming to 1.5°C with no or limited overshoot verified by a third party, 'for example by the Science Based Targets Initiative (SBTi), the Partnership for Carbon Accounting Financials (PCAF), The Paris Agreement Capital Transition Assessment (PACTA), the Transition Pathway Initiative (TPI), the International Organization for Standardization (ISO), among others'.307

TABLE 48. SCORING TABLE CRITERIA 27 GHG REDUCTION TARGETS AND TRANSITION PLAN

| Points | Assessment |
|--------|---|
| 0 | The financial institution does not disclose targets nor transition plans to reduce its financed emissions. |
| 3 | The financial institution does disclose targets to reduce its financed emissions but has no disaggregated target for emissions from the mining sector. |
| 5 | The financial institution does disclose a specific target to reduce its emissions from the mining sector, but this target is not further elaborated in a transition plan with short-term, medium-term and long-term goals, and with a clear description of instruments and actions. |

| 7 | The financial institution does disclose a transition plan with short-term, medium-term and long-term goals to reduce its emissions from the mining sector, but this transition plan relies partly on carbon offsets to reduce financed emissions or does not cover scope 3 emissions. |
|----|---|
| 10 | The financial institution does disclose a transition plan with short-term, medium-term and long-term goals to reduce its emissions from the mining sector. This transition plan does not rely on carbon offsets to reduce financed emissions and covers scope 3 emissions. |

28. The financial institution is transparent on its engagements with companies in the mining sector

The financial institution should publish on its website how it interacts with companies active in the mining sector, to make sure that these companies meet the policy requirements of the financial institutions and address problems that might occur.

This is in line with the *G4 Financial Services Sector Disclosure (FSSD)* of the Global Reporting Initiative (GRI). These require the financial institution to provide information on its voting practices and on how a financial institution deals with investments that do not (or no longer) meet the policy, the norms, or the contract conditions of the financial institution is now explicitly requested. Financial institutions have to report which action they have taken in these situations (for example engagement or exclusion), whether these actions have been successful and what further steps will be taken.

The GRI recommends financial institutions to continue using this *G4 Financial Services Sector Disclosure* together with the new *GRI Universal Standard*, as long as the three new Sector Standards for the financial sector are under development.³⁰⁸

TABLE 49. SCORING TABLE CRITERIA 28 ENGAGEMENT

| Points | Assessment |
|--------|---|
| 0 | The financial institution is not transparent on its engagements with companies. |
| 3 | The financial institution provides some information on its engagements with companies, but this does not include any information on any company operating in the mining sector. |
| 5 | The financial institution provides some information on its engagements with one or two companies operating in the mining sector. |
| 7 | The financial institution provides detailed information on its engagements with one or two companies operating in the mining sector, such as names of companies, topics, or results. |
| 10 | The financial institution provides detailed information on its engagements with at least five companies operating in the mining sector, such as names of companies, topics, or results. |

29. The financial institution commits to a transparent and independent grievance mechanism regarding its financing of, or investments in, companies in the mining sector

The financial institution should establish or participate in transparent and independent operational-level grievance mechanisms for individuals and communities that may be adversely impacted by the activities of mining companies that it has financed or invested in. Where state-based non-judicial and judicial grievance mechanisms exist, such as the OECD National Contact Points, the financial institution should commit to respect and cooperate in good faith with these grievance mechanisms when cases that it is connected to are brought to such a mechanism.

According to the Office of the High Commissioner for Human Rights, Guiding Principle 29 of the UN Guiding Principles on Business and Human Rights (UNGPs) expects banks to have grievance mechanisms in place: their own, or grievance mechanisms they participate in or cooperate with. Furthermore, in line with the Guiding Principle, banks, too, are expected to take responsibility for enabling remediation to communities and individuals that have been adversely impacted by the activities of companies that are financed by the bank. While operational level grievance mechanisms (either of the bank itself or established by other entities) are one means through which remediation can be provided, some impacts may be best remediated through other legitimate mechanisms, including state-based judicial and non-judicial mechanisms. Banks should respect stakeholder preferences with respect to use of a grievance mechanism or other legitimate processes, and 'engage with the latter in good faith'.³⁰⁹

The OECD National Contact Points can be considered a state-based non-judicial grievance mechanism. Financial institutions should, therefore, cooperate with OECD National Contact Points if stakeholders prefer to use them as a grievance mechanism.

TABLE 50. SCORING TABLE CRITERIA 29 GRIEVANCE MECHANISMS

| Points | Assessment |
|--------|--|
| 0 | The financial institution does not have, or does not participate in, a grievance mechanism which is open for communities and individuals adversely impacted by the activities of companies that are financed by the financial institution. |
| 3 | The financial institution has an internal complaint mechanism, which is open for communities and individuals adversely impacted by the activities of companies that are financed by the financial institution. |
| 5 | The financial institution has an internal grievance mechanism, described as such, which is open for communities and individuals adversely impacted by the activities of companies that are financed by the financial institution. |
| 7 | The financial institution has an internal grievance mechanism, described as such, which is open for communities and individuals adversely impacted by the activities of companies that are financed by the financial institution, and has clearly committed to respect and cooperate in good faith with all state-based grievance mechanisms. |
| 10 | The financial institution has established a transparent and independent grievance mechanism, which is open for communities and individuals adversely impacted by the activities of companies that are financed by the financial institution, and has committed to respect and cooperate in good faith with all state-based grievance mechanisms. |

Governance of companies

30. Companies and their suppliers must provide proof of legality of their operations and supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operation

The financial institution should require companies it finances or invests in to (preferably publicly) provide proof of legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operation. All prospective clients must be in full compliance with all local, national and international norms, regulations, laws and conventions related to acquisition, harvesting, sourcing or use of land, concessions, forest products or production materials as well as for the implementation of pulp and paper mills and other related infrastructure. Main international norms are ILO core conventions and the Universal Declaration of Human Rights. Regarding their own operations and those of their subsidiaries and affiliates, they should be able to show all the permits which are legally required according to the laws and regulations of the countries they operate in. They should also be able to prove that their commodity suppliers have all the necessary permits and other legal documents related to the commodities they produce and sell.

TABLE 51. SCORING TABLE CRITERIA 30 PROOF OF LEGALITY

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on the legality of operations and commodity supplies of the companies it is financing or investing in. |
| 3 | The financial institution makes a general commitment on the legality of operations and commodity supplies of the companies it is financing or investing in, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy on the legality of operations and commodity supplies of the companies it is financing or investing in but does not make clear how companies are screened for their adherence to this policy. |
| 7 | The financial institution has a policy which explicitly requires companies to provide proof of legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operation. Or the financial institution requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to provide proof of legality of their operations and commodity supplies, in particular proof of compliance with all prevailing laws and regulations on land acquisition and land operation. |

31. Companies must integrate ESG compliance criteria in their procurement contracts, requiring supply chain transparency and traceability

The financial institution should require that the companies it finances or invests in oblige their suppliers to meet important ESG criteria, as discussed in other elements of this methodology. This would also require companies and their suppliers to be transparent on their supply chains and to

have a time-bound plan to ensure that all the ores, metals and minerals they buy, process and/ or sell can be traced back to a specific mine of one of their suppliers. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

TABLE 52. SCORING TABLE CRITERIA 31 SUPPLY CHAIN TRANSPARENCY AND TRACEABILITY

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on procurement and supply chain transparency and traceability. |
| 3 | The financial institution makes a general commitment to supply chain transparency and traceability, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy on ESG compliance and supply chain transparency by the suppliers of companies, but the policy does not explicitly require companies to include such criteria in procurement contracts. |
| 7 | The financial institution has a policy which explicitly requires companies to have ESG compliance policies in place for their suppliers and to publicly disclose their first-tier supply chain, ensuring full traceability to their direct suppliers' operations. |
| 10 | The financial institution requires the company to integrate ESG compliance criteria in procurement contracts and to be able to publicly trace the ores, minerals or metals it buys, processes and/or sells back to a specific operation of one of its (indirect) suppliers. |

32. Companies and their suppliers are not engaged in corruption, bribery and financial crimes

Corruption has significant negative political, social and environmental consequences. Politically, corruption forms a large obstacle to developing the rule of law. Government representatives lose their legitimacy when many abuse their office for personal gain. Bribery and corruption undermine the trust of the people in the political system, which leads to frustration and apathy. It clears the way for leaders, whether chosen democratically or not, to appropriate national assets for themselves without supervision. And if corruption is the norm, honest and capable civilians will leave the country. In mining sectors, corruption can serve to obtain concessions, permits and licences, or to avoid government control on relevant laws and regulation. Corruption therefore undermines law enforcement and the protection of social and environmental interests.

The financial institution should require companies it finances or invests in to implement clear anti-corruption and anti-bribery policies which ensure that the company will not get engaged in corruption, bribery and financial crimes. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

The main international standards on corruption are the 2004 UN Convention against Corruption (UNCAC), which contains minimum standards in order to prevent corruption as well as money laundering and is signed by 140 nations; ³¹¹ and the 1999 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, which obliges countries to make paying bribes to foreign public officials a criminal offence. ³¹² These standards are further supported by, among others, the OECD Guidelines for Multinational Enterprises, ³¹³ the UN Global Compact ³¹⁴ and Sustainable Development Goal (SDG) 16: Peace, Justice and Strong Institutions. One of the targets

of this goal is to substantially reduce corruption and bribery in all their forms. Another target is to develop effective, accountable and transparent institutions at all levels, which also underpins the importance of corruption-free institutions.³¹⁵

TABLE 53. SCORING TABLE CRITERIA 32 CORRUPTION

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on corruption and bribery, or its policies on corruption and bribery do not cover the companies it is financing or investing in. |
| 3 | The financial institution makes a general commitment on corruption and bribery by the companies it is financing or investing in, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy on corruption and bribery by the companies it is financing or investing in, but this policy only states that the financial institution does not want to be involved in any financial transaction related to corruption, bribery and financial crimes. |
| 7 | The financial institution has a policy which explicitly requires companies to implement clear anti-corruption policies which ensure that the company does not engage in corruption, bribery and financial crimes, or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to implement clear anti-corruption policies which ensure that the company does not engage in corruption, bribery and financial crimes, or it requires adherence to international standards which include this requirement. |

33. Companies and their suppliers must comply with the letter and the spirit of the tax laws and regulations in the countries where they operate, publish their group structure and country-by-country data, and not set up international corporate structures solely for tax avoidance purposes

For each democratic society, tax revenues are essential to finance public provisions such as healthcare, education, infrastructure and social security. Research shows that a fair system of taxation contributes more to the development of a healthy, democratic society than revenues from development aid or from the export of raw materials. After all, in order to raise taxes, the development of a capable and reliable public administration is required, while conversely civilians that have to pay tax expect a lot more of, and are more involved with, the public administration. Following the adage 'No taxation without representation', a development towards more democracy is often closely related to striving for higher tax revenues.³¹⁶

The financial institution should require companies it finances or invests in to comply with both the letter and spirit of the tax laws and regulations in the countries in which they operate. Companies should not set up subsidiaries, branches or associates in jurisdictions with no or zero corporate tax or in jurisdictions with harmful corporate tax practices, unless they have substance and their profits are generated from local economic activities. This requirement should also apply to the company's subsidiaries and direct and indirect suppliers.

Important standards on tax issues are the OECD Action Plan on Base Erosion and Profit Shifting (BEPS), which strives to modernize tax systems and to prevent tax avoidance by multinationals;³¹⁷

the OECD Guidelines for Multinational Enterprises,³¹⁸ and the Engagement Guidance on Corporate Tax Responsibility of the Principles for Responsible Investment, providing guidance to investors on why and how to engage with investee companies involved in tax planning.³¹⁹

TABLE 54. SCORING TABLE CRITERIA 33 TAX

| Points | Assessment |
|--------|--|
| 0 | The financial institution has no tax policy or its tax policy does not cover the tax behaviour of the companies it is financing or investing in. |
| 3 | The financial institution makes a general commitment on tax evasion and tax avoidance, but the policy is not very specific on what is expected of companies. |
| 5 | The financial institution has a policy on the tax behaviour of the companies it is financing or investing in, but this policy does not cover tax avoidance or it only specifies that the financial institution does not want to be involved in financial deals which have the purpose of tax avoidance or tax evasion. |
| 7 | The financial institution has a policy which explicitly requires companies to comply with the letter and spirit of the tax laws and regulations in the countries in which they operate, or it requires adherence to international standards which include this requirement. |
| 10 | The financial institution has a policy which explicitly requires companies and their direct and indirect suppliers to comply with the letter and spirit of the tax laws and regulations in the countries in which they operate. |

34. Companies publish a sustainability report that is set up in accordance with recognized sustainability reporting frameworks

The best-known guidelines for sustainability reporting in general are the Global Reporting Initiative (GRI) Standards. The new GRI Universal Standard was released in 2021, which will be complemented by various Sector and Topic Standards.³²⁰ In February 2024, the Sector Standard for Mining was released.³²¹

The financial institution should require companies to publish sustainability reports aligned with international standards such as the GRI Standards.

TABLE 55. SCORING TABLE CRITERIA 34 SUSTAINABILITY REPORTING

| Points | Assessment |
|--------|---|
| 0 | The financial institution has no policy on sustainability reporting. |
| 3 | The financial institution makes a general commitment to transparency in sustainability reporting, but this commitment is not very specific on what is expected of companies. |
| 5 | The financial institution requires companies to publish a sustainability report. |
| 7 | The financial institution explicitly requires companies to publish a sustainability report that covers the environmental, social and governance-related performance of the company. |

| 10 | The financial institution explicitly requires companies to follow international standards |
|----|---|
| | for sustainability reporting, such as the GRI Sustainability Reporting Standards (GRI |
| | Standards) and the International Sustainability Standards Board. |

Checklist

Table 56 provides a checklist on whether a financial institution, being a signatory to the Equator Principles, and consequently applying the IFC Performance Standards and the IFC Environmental, Health, and Safety (EHS) Guidelines, could be eligible for a score. The maximum eligible score of 7 points is only applicable if the financial institution applies the IFC standard to both project finance and general corporate credit. When the financial institution states that it applies the IFC standard to project finance only, with no additional policies covering the content of the criterion assessed for other types of financing, a score of 3 is given.

TABLE 56. CHECKLIST OF APPLICABILITY OF IFC STANDARDS FOR 7 POINTS

| Criteria | IFC PS | IFC EHS | |
|----------|------------------------|------------|--|
| 1 | Applicable | | |
| 2 | Applicable | | |
| 3 | Applicable | | |
| 4 | | | |
| 5 | Applicable | | |
| 6 | Applicable for max 5pt | Applicable | |
| 7 | | | |
| 8 | Applicable | Applicable | |
| 9 | | | |
| 10 | Applicable for max 3pt | | |
| 11 | | | |
| 12 | Applicable | | |
| 13 | Applicable | | |
| 14 | | | |
| 15 | | | |
| 16 | Applicable | | |
| 17 | Applicable | | |
| 18 | | | |
| 19 | Applicable | Applicable | |
| 20 | | | |
| 21 | | | |

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- 104 Please find the full response from Glencore here: https://www.glencore.com/publications/esg publications#responses-to-ngos
- Email by BNP Paribas: For confidentiality reasons, we do not communicate on our relationship with companies beyond what is already public. However, we would like to recall that BNP Paribas is fully aware that the mining sector, while playing a focal role in supporting the global energy transition, is also associated with high environmental and social risks especially with regards to human rights, environmental pollution and biodiversity. It is precisely to address these complex issues that as early as in 2013, BNP Paribas adopted a

mining sector policy, which regulates BNP Paribas' financing and investment activities in this sector, both for companies and for projects. The Group's sector policy includes mandatory requirements linked to the protection of human rights and those of local communities, and to the safeguard of biodiversity and of the environment. This policy is updated regularly.

With regard to project finance, BNP Paribas has been applying the 4th version of the Equator Principles (EP4) since 2020, after having actively participating in the process of updating them (BNP Paribas is an EP signatory since 2008)

In addition, as part of our global ESG risk management system for all our financing and investment activities (described each year in the Group's Universal Registration Document – See page 698 of URD 2024), a strengthened ESG assessment is being rolled out since 2021 covering the 3 ESG pillars: environmental (climate and biodiversity), social (health security and impact on communities) and governance (business ethics and Human rights). It is composed of various questionnaires which are sector- specific and related to the French law on the Duty of Vigilance, as well as an in-depth analysis of the controversies affecting clients. These various tools make it possible to identify, assess and monitor the ESG performance and risks of the corporate clients of the Bank.

Please note that mining & metallurgy have been listed among the 19 high-stakes sectors for which the assessment includes additional ESG topics, enabling us to better integrate the challenges and issues specific to the sector. In this context, we stay alert to reports from civil society organizations which are helpful in particular to raise potential issues.

All of the Group's major corporate clients have already been subjected to this new ESG assessment.

Lastly, regarding more specifically Glencore, we wanted to recall that BNP Paribas no longer has any banking relationship with Glencore and that BNP Paribas Asset Management does not hold securities of this company in the funds it manages.

We trust that this response clarifies BNP Paribas' commitment and processes to implementing reinforced due diligence to mining activities.

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