



Environmental, Social and Governance (ESG) Performance Expectations in Mining

How to avoid checking the box

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If you are a manager in the mining industry today, you are facing dramatically changing market expectations on disclosure and transparency regarding the environmental and social impacts of projects. You will also be asked about your governance procedures to ensure you are effectively managing social and environmental risk. This type of environmental, social and governance (ESG) analysis is referred to as ESG performance by the investment community. When combined with financial and economic data it is referred to as sustainability.

Below are answers to some ESG questions that you might be thinking about.

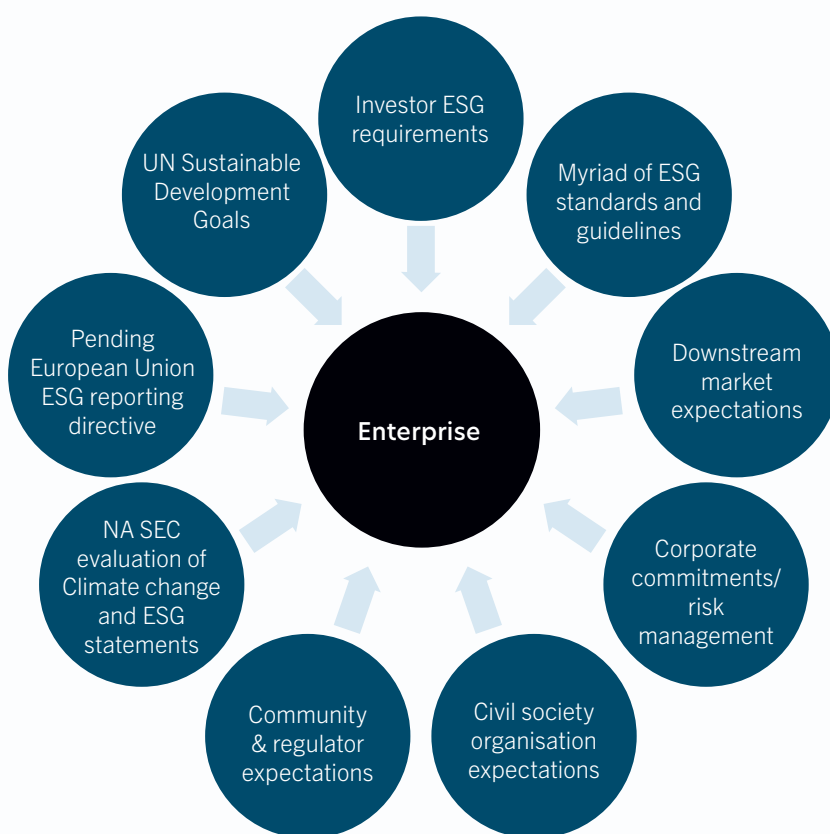
What is driving the interest in ESG?

ESG expectations go well beyond environmental and socio-economic impact assessment studies on a project. They now include scrutiny of environmental and social practices across the mine life cycle, in supply chains and in some cases into the material life cycle (e.g., how the mineral or metal is used in society). How companies are structuring their governance practices to ensure that risks are eliminated or managed is also under the microscope. ESG practices are now part of how mining companies and mine sites are being evaluated by a wide range of stakeholders. Figure 1 illustrates some of the drivers and stakeholders pushing mining companies to up their game when it comes to ESG strategy and performance.



Figure 1. ESG Drivers

Growing social and environmental impacts and risks, such as climate change, social inequality, resource consumption, are driving expectations higher.



Notes: SEC – Securities and Exchange Commission, UN – United Nations.

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What are the ESG risk/performance areas of most interest?

ESG is being translated into specific practices and performance expectations that are coming from investors, development banks, civil society organisations and multilateral organisations like the United Nations and the Organisation for Economic Co-operation and Development (OECD). Commonly the expectations are aligned with one or more performance standards that the mining company is being asked to meet. Sometimes an ESG requirement is a request for information on how key issues of interest to stakeholders are being addressed. Issues of concern vary, but often cited are energy and greenhouse gas (GHG) emissions, working conditions in supply chains, tailings management, and

worker and community health and safety. How relationships and partnerships with First Nations and Indigenous groups are created and managed is also of high interest.

Annex A provides some of the key performance standards of interest to mining, and Figure 2 provides a list of many of the performance/risk categories found in standards, guidelines and rating schemes. Often these categories are elaborated on to identify whether specific standards or business practices are in place to evaluate the level of implementation and achievement of progress. The mining-related standards often include specific risks such as tailings pond management, biodiversity and mine closure.



Figure 2. Defining Expectations - What are the main performance categories of interest?

Environment	Social	Governance
• Environmental Policy • Environmental Management Systems • Green Purchasing/Procurement • Energy Efficiency / Alternative Energy • Climate Change / GHG emissions • Emissions to Air (Non-GHG) • Emissions/Discharges to Water • Water Use / Efficiency • Non-hazardous Waste Management • Hazardous Waste Management • Material Use: Dematerialisation / Efficiency & Hazardous/Toxics • Biodiversity • Environmental Impact of Product & Services • Environmental Value Chain Management	• Social Policy • Social Management Systems • Employees • Training • Salaries & Benefits • Working Conditions • H&S • Non-Discrimination • Child Labour • Forced Labour • Freedom of Association • Local Communities: • Development • Health and safety • Indigenous Peoples • Social Impacts of Products & Services • Social Value Chain Management • Global Community - Human Rights	• High-Level Commitment to Sustainability • Ethics • Governance & Accountability • Corporate Sustainability Reporting • Stakeholder Engagement • Strategic Planning • Financial Reporting & Disclosure • Investor Relations • Investments • Risk Management • Economic impact • Investments and Acquisitions

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What level of detail is being asked?

Using one risk/performance area from each of the main ESG categories, Table 1 illustrates how detailed the expectations can become, particularly for environmentally and financially significant issues such as climate change.

Table 1. Examples of expectations for each performance category

Environment Climate change / greenhouse gas emissions	Social Community health and safety	Governance Stakeholder engagement
The organisation has a high-level commitment or strategy that addresses its climate performance.	The organisation is committed to identifying and prioritising risks its operations may pose to neighbouring communities.	The organisation has a commitment to engaging stakeholders in social and environmental decision making (e.g., policy, program development).
The organisation has strategy or action plan that addresses the GHG emissions throughout its value chain (e.g., raw materials, product use, end of life).	The organisation has a program to consult with and inform neighbouring communities of any risks and risk management measures (i.e., an emergency response plan and associated procedures).	The organisation operates programs to actively seek out and engage stakeholder groups for dialogue on the organisation's environmental and social performance (e.g., organisation's construction and maintenance, tenants, airlines, local regulators and community members).
The organisation includes climate change in its risk management policy/program (e.g., regulatory risks and opportunities, physical risks and opportunities, market risks/opportunities).	The organisation has a program to involve the local community in its emergency response planning and response procedures.	The organisation provides training for local managers in stakeholder engagement.
Responsibility for climate change-related issues rests at the senior management level in the organisation.	The organisation regularly tests its emergency response and preparedness plan or plans.	The organisation publicly reports on the nature or approach of its stakeholder consultation (i.e., list of its key stakeholders, key attributes of each and relationship to the organisation; whether one-way, two-way, or collaborative; how frequently).
The organisation engages with policy makers to encourage further action on mitigation and/or adaptation.	The organisation has developed a public outreach program to regularly consult with key stakeholders, including local community members and Indigenous people, on the potential environmental and health impacts of its operations.	The organisation publicly reports on its process for identifying and determining which stakeholders to engage.
Before acting, the organisation discloses the potential financial implications of identified climate change-related risks and opportunities, and the costs associated with acting.	The organisation operates education, training, counselling, prevention or risk control programs to assist workers, their families or community members regarding serious diseases.	The organisation publicly reports on the type of information generated by stakeholder consultations (e.g., key issues raised, concerns).
The organisation has in place internal financial incentives to help achieve its climate change/ GHG goals and targets (e.g., internal emission trading scheme, management incentives, shadow price for GHGs).		The organisation publicly reports on the use of information resulting from stakeholder engagements (e.g., selecting performance benchmarks, influence policy decisions).
The organisation operates programs targeted at reducing its GHGs (e.g., redesigning products or processes, improving energy efficiency, co-generation, switching to fuels with lower carbon content, reduced venting).		
The organisation participates in greenhouse gas emissions trading, where appropriate (e.g., EU Emission Trading Scheme, Regional Greenhouse Gas Initiative).		
The organisation sets clear greenhouse gas emissions reduction targets (note absolute or intensity-based targets).		
The organisation measures, monitors and reviews its direct and indirect greenhouse gas emissions against its stated targets.		
The organisation reports on emissions reductions (in CO ₂ e) from initiatives that were active within the reporting year (this can include those in the planning and implementation phases).		
The organisation's reported scope 1 and scope 2 GHG emissions reductions are verified by an appropriate external party.		
The organisation's reported scope 3 GHG emissions reduction are verified by an appropriate external party.		

Should I be chasing standards or defining priorities?

There is no doubt that tracking leading ESG/sustainability standards, financial rating schemes and civil society guidelines can be valuable as they provide good proxies for what a company should be doing to reduce risk and improve performance. When you look at the details of these standards you find between 30 and 40 major risk/performance categories, and each one of these categories has associated business practices required to manage the risk or capitalise on the opportunity. The more robust standards have an implicit implementation framework that starts with ESG commitments and strategy and continues to management systems, policies and programs, data and information. Transparency and reporting are also important, as is chain of custody for the material-specific schemes (e.g., the Aluminium Stewardship Initiative).

The overabundance of such standards leaves small to medium-sized mining companies wondering where to focus their ESG efforts and what standards to adhere to. For example, the Responsible Minerals Initiative (an initiative of the Responsible Business Alliance) reviewed 50 mining-related standards to develop their own set of risk/performance areas. A company can start their ESG risk and opportunity analysis by looking at a standard, but in our view, it is better to build an ESG initiative from the ground up. Standards have a role, particularly if adhering to them is tied funding, but there is much a company can do to ensure that they are aligned on their ESG strategy and tactics. The list below provides a set of key steps for integrating ESG into an organisation.

Key steps for integrating ESG

- 1. Have an informed conversation.** Rather than letting standards define your ESG issues, put a multi-functional team together that knows your business from exploration to end of the mine life and identify where environmental and social issues will arise across the life cycle of your project or projects. If you are unsure, you can benchmark against the main risk/performance categories in the leading standards to reveal any hot spots that you may have missed. Look for synergy among issues (e.g., renewables, energy costs, GHG and air emissions) and be sure to include marketing functions that understand how your materials are used and perceived in society and what are the data expectations of markets. Identify and close gaps in the information base.
- 2. Talk to stakeholders.** This is best done early in the project development cycle and should involve anyone affected by the project(s). Talk to a wide range of stakeholders and other potentially affected parties including investors, partners, consulting firms, directly affected communities including Indigenous communities, civil society organisations, regulators, and employees. Doing early engagement will keep you onside of regulatory agency, recommended or mandatory, practices in many jurisdictions.
- 3. Revise your initial issue list** and develop an implementation plan to address each issue. Your plan should include a clear definition of the issue, who is accountable, clear targets/goals, actions, standards or norms to be used, resources needed, training needs, communication activities, synergy with other issues and benefits anticipated.
- 4. Ensure your governance structure** can demonstrate how you will track and manage your ESG performance. The ESG commitment should be visible in the company vision/mission/values, and the governance structure should include senior leadership commitment and oversight, as well as appropriate policies and programs to drive performance on priority issues.
- 5. Engage suppliers and contractors.** Many issues such as energy consumption, water usage and local community engagement can be addressed in partnership with suppliers and contractors. Engaging suppliers and contractors deepens relationships, reduces risk and helps drive performance.
- 6. Be aware** of how your minerals or metals are being used. Engaging with end users of your products help you communicate their benefits to society, which is an important contrast to the mining footprint.
- 7. Be transparent and report out.** In early stages this will be about the process you have followed to identify and address key ESG issues. As projects move into production it becomes a data collection and handling exercise that enables reporting internally and externally. For smaller companies, a full-blown report in line with Global Reporting Initiative guidance is usually beyond reach, but many other data platforms enable low-cost data collection.
- 8. Keep a lookout for new issues and solutions.** Have a plan to keep your key stakeholders informed on your ESG performance and use those conversations to identify any changes in expectations. It is important to also monitor technological changes that might positively affect your ESG performance

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What is the benefit of improving my ESG performance?

As noted, ESG risks range from how a company's governance structures are designed to management system-related risks: Do governance structures ensure that environmental, social and ethical risks are identified and managed? Are social and environmental issues integrated into management systems? Climate change is the major risk that is leading to action by governments, investors and many large corporations. It is driving the need to reduce carbon intensity across the mine life cycle. But many other areas are gaining attention – supply chains, tailings, water quality and efficiency, labour practices, community engagement. Proactively addressing ESG can turn a risk into an opportunity – opportunity to attract investment, opportunity to secure community and regulatory support for projects and opportunity to attract and retain high-quality employees and partners. Put simply, improved ESG performance helps secure access to land, capital and people.

Where in the project cycle should I start?

In capital projects, the best time to consider ESG risks and how to mitigate them is in the upfront stages such as the pre-feasibility and feasibility study. It is at this stage where many of the long-term impacts are being locked in. If you take the time to ask the right questions on social and environmental impacts and opportunities, you can design out problems and design in solutions that will reduce risk. Stakeholder engagement is also critical, since organisations that engage with stakeholders early and meaningfully can identify issues that might otherwise slow down or stop project approval.

What is coming?

Today we are seeing a wave of activity that affects how resource companies disclose and manage ESG risks. In the coming years, this activity will spread and intensify.



It will be driven by investors and large end users in sectors such as automotive, electronic, jewellery and building/ infrastructure, but regulators are also starting to act. One can also expect how we define ESG performance to become more refined, and there will be a push for indicators/metrics that are comparable. For example, the Responsible Minerals Initiative recently released an ESG Standard for Mineral Supply Chains. The new ESG Standard 'provides criteria applicable to mineral processors, smelters and refiners, including those integrated with mine sites'. The criteria in the ESG standard are to be 'used by an audit firm and their individual auditors to assess responsible workplace and other ESG matters at mineral processors'.

On the regulatory and government front, in the United States the Securities and Exchange Commission is moving on climate change and ESG-related

disclosures¹, and the European Union is working on a Corporate Sustainability Reporting Directive, which will amend the existing reporting requirements². Additionally, the ESG investment community is being scrutinised. The Ontario Securities Commission and the British Columbia Securities Commission are currently performing desk reviews of registrants identified as participants in ESG investing.³ In May of 2021, the Government of Canada announced the launch of a 'Sustainable Finance Action Council, which is aimed at helping mobilise the capital and investment necessary to meet the country's sustainability goals'. In the spring of 2021, the International Financial Reporting Standards Foundation (IFRS) launched a proposal to amend its constitution to encompass the development of sustainability standards within its objectives, with the aim of establishing an International Sustainability Standards Board.

¹ [U.S. Securities and Exchange Commission. 2021. SEC response to climate and ESG risks and opportunities](#)

² [Corporate Sustainability Reporting Directive proposal \(europa.eu\)](#)

³ [BLG. 2021. Canadian securities regulators conduct a 'green' sweep of ESG products and practices.](#)

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Parties (rating firms, industry coalitions, industry associations, investment houses, governments) are making efforts to harmonise metrics and partnerships related to ESG, in addition to which sustainable mining standards are growing (see Box 1 for some examples). The harmonisation issue is challenging for a few reasons. Each initiative has their own business model and brand, they have different stakeholder groups, some have propriety models for assessing performance and others have publicly available standards. Views differ on the norms and standards that need to be used, the metrics that best define performance and the level of transparency that should be met by participating companies.

The various initiatives and the variety of reporting guidance can be confusing, and they are likely to remain so for the near future. This means companies should be addressing any funding related requests and doing the groundwork to identify their own ESG strategy, priorities, programs, and reporting, as noted above in the section titled 'Should I be chasing standards or defining priorities?'

Box 1. Examples of cooperation in developing responsible mining frameworks

The [Responsible Minerals Initiative \(RMI\)](#) includes 380 companies and associations from 10 industries. They have developed numerous partnerships including:

- Work with the Global Reporting Initiative on a reporting toolkit for conflict metals
- A Joint Due Diligence Standard for Copper, Lead, Nickel and Zinc

The World Economic Forum and the International Business Council in partnership with the big 4 accounting firms (KPMG, EY, PwC and Deloitte) released a report on [Stakeholder Capitalism Metrics](#) that outlines what they believe are the core (and optional) ESG metrics companies should report on.

The [Value Reporting Initiative](#) is a new collaboration between the Sustainability Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC) to develop a combined set of guidance integrating the IIRC capitals model reporting framework with SASB's work on sector-specific material risks.

Conclusion

When considering how to manage your ESG performance, it is best to take a strategic approach that ensures the decisions are based on a foundation of solid data. That includes ESG trends and drivers, stakeholder opinions, performance expectations in leading standards, expectations from investors and the activity of peers. Once you have a solid information base, you can:

- Have an informed discussion on how to position the company and its projects (how you will govern the management of ESG)
- Establish priorities (e.g., ensuring you are not locking in carbon- intensive energy carriers)
- Develop plans to hard-wire ESG into your core business processes (e.g., ensuring ESG is considered broadly in capital project design).

You can do all these things with the knowledge that you followed a credible process in line with best practice and that you will be ready for any conversation on your ESG priorities and performance.

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Annex A – Select ESG/sustainability standards and guidance

Below are some of the many ESG/Sustainability standards and guidelines available.

Mining Specific Standards/Guidance

Initiative for Responsible Mining Assurance (IRMA)

IRMA is ‘independent third-party verification and certification against a comprehensive standard for all mined materials’ ‘that covers ‘the full range of issues related to the impacts of industrial-scale mines’. [IRMA: About Us](#)

Responsible Minerals Initiative (RMI)

RMI is developing ‘business practices to support responsible mineral production and sourcing globally, including but not limited to conflict-affected and high-risk areas, providing companies with tools and resources that improve regulatory compliance, align with international standards, and support industry and stakeholder expectations’. RMI has recently released an [ESG Standard for Mineral Supply Chains](#) which is aligned with ISO auditing and environmental management standards. [RMI website](#)

Towards Sustainable Mining (TSM)

The Mining Association of Canada’s ‘TSM standard is a globally recognised sustainability program that supports mining companies in managing key environmental and social risks. TSM was the first mining sustainability standard in the world to require site-level assessments and is mandatory for all companies that are members of implementing associations’. [The Mining Association of Canada: Towards Sustainable Mining](#)

International Council of Mining and Metals (ICMM) Principles and Performance Expectations

ICMM’s Mining Principles and performance expectations are aligned with the objectives of other responsible sourcing initiatives and cover environmental, social and governance performance. They have an [Assurance and Validation Procedure](#) to reinforce commitments to transparency, and ensure ‘the credibility of reported progress’. [ICMM: Mining Principles](#)

Value Reporting Initiative’s Sustainability Assessment and Standards Boards (SASB) standards

‘SASB Standards identify the subset of environmental, social, and governance issues most relevant to financial performance in 77 industries. They are designed to help companies disclose financially-material sustainability information to investors’. Mining-related standards include coal, iron and steel, metals and mining, and construction materials. [Value Reporting Foundation: SASB Standards website](#)

OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-affected and High-risk Areas

This guidance ‘provides detailed recommendations to help companies respect human rights and avoid contributing to conflict through their mineral purchasing decisions and practices. The Guidance is for use by any company potentially sourcing minerals or metals from conflict-affected and high-risk areas. The OECD Guidance is global in scope and applies to all mineral supply chains’. [OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas - OECD](#)

Enduring Value: Minerals Council of Australia’s framework for sustainable development

‘The framework falls in line with the industry’s global commitment in effectively managing the social, health, safety, environmental and economic issues in order to deliver sustainable shareholder value’. This is done by ‘assisting industry members to improve their overall reporting and performance in sustainability values. One of the main roles for “Enduring Value” is to assist the industry in creating and implementing practical programs that fall in line with community and societal expectations of long-term sustainable and environmental development’.

[Minerals Council of Australia: Enduring Value Framework](#)

Other mining-specific initiatives

There are also a number of commodity-specific initiatives, standards and guidance such as the [Aluminium Stewardship Initiative](#), [The Copper Mark](#), [The Cobalt Industry Responsible Assessment Framework](#) and the [International Zinc Association Sustainable Development Goals \(SDG\) Sector Roadmap](#).

Annex A – Select ESG/sustainability standards and guidance

Broadly applicable standards/guidance

Equator Principles (EPs)

These principles are ‘a financial industry benchmark for determining, assessing and managing environmental and social risk in projects’. They are ‘primarily intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision making. The EPs apply globally, to all industry sectors and to five financial products: 1) Project Finance Advisory Services, 2) Project Finance, 3) Project-Related Corporate Loans, 4) Bridge Loans and 5) Project-Related Refinance and Project-Related Acquisition Finance.’ ‘Currently 118 Equator Principles Financial Institutions (EPFIs) in 37 countries have officially adopted the EPs, covering the majority of international project finance debt within developed and emerging markets’. [Equator Principles website](#)

The International Finance Corporation’s (IFC) environmental and social performance standards

These are the technical framework upon which the Equator Principles were built. They define IFC clients’ responsibilities for managing their environmental and social risks. Although IFC performance standards are mandatory for IFC clients, they are used by other companies. There are eight standards covering risk management, labour, resource efficiency, community, land resettlement, biodiversity, indigenous people, and cultural heritage. [IFC: Performance Standards](#)

United Nations Sustainable Development Goals

‘The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future’. The agenda includes 17 Sustainable Development Goals (SDGs), addressed at ending poverty and other deprivations as well as goals to improve health and education, reduce inequality, and spur economic growth, while tackling climate change and working to preserve our oceans and forests. Although the SDGs are national-government focused, many companies are using them to help identify key environmental and social impacts to act on. [United Nations. Department of Economic and Social Affairs. Transforming our world: the 2030 Agenda for Sustainable Development](#)

Global Reporting Initiative (GRI) Standards

The GRI Standards create a common language for organisations – large or small, private or public – to report on their sustainability impacts in a consistent and credible way. The Standards are designed as an easy-to-use modular set, starting with the universal Standards. Topic Standards are then selected, based on the organisation’s material topics – economic, environmental, or social. This process ensures that the sustainability report provides an inclusive picture of material topics, their related impacts, and how they are managed. Intended reports generated using GRI standards are aimed at a multi-stakeholder audience. [GRI: The global standards for sustainability reporting](#)

International Organisation for Standardisation (ISO) Social Responsibility Guidance (ISO 26000)

ISO provides a non-management-system standard that provides guidance on what ‘social responsibility is, helps businesses and organisations translate principles into effective actions and shares best practices relating to social responsibility, globally. It is aimed at all types of organisations regardless of their activity, size or location’. Although titled Social Responsibility, it covers environment and governance aspects. [ISO. ISO 26000: Social responsibility](#)



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