



COMMITTEE FOR MINERAL RESERVES INTERNATIONAL REPORTING STANDARDS

ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) DEFINITIONS GUIDE

in support of the public reporting of

**EXPLORATION TARGETS, EXPLORATION
RESULTS, MINERAL RESOURCES AND MINERAL
RESERVES**

October 2024



FOREWORD

At its 2021 annual general meeting (AGM), the members of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) agreed to establish a sub-committee to progress discussions on the importance of environmental, social and governance (ESG) considerations in Public Reports on Exploration Results, Exploration Targets, Mineral Resources, and Mineral Reserves. This group was formally constituted in December 2021, comprising representatives of the various national reporting organisations (NROs). The sub-committee was governed by terms of reference approved by the CRIRSCO Executive. Participants included nominated representatives of NROs, who are Competent Persons in their own right, and ESG specialists who were invited by NRO representatives to contribute to the workstreams.

The composition of the initial sub-committee was refined, and later a smaller working group was constituted to drive advancement of the deliverables of the sub-committee. This working group provided feedback to the sub-committee as needed.

At CRIRSCO's 2023 AGM, definitions for 'ESG Factors', 'Environmental Factors', 'Social Factors', and 'Governance Factors' were formally approved. The working group was then tasked with developing a guide that would support the interpretation and application of these definitions. This 'ESG Definitions Guide' is the result of the work carried out as part of that mandate.

ACKNOWLEDGEMENTS

The following individuals are recognised for their specific contributions to the preparation of this ESG Definitions Guide:

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1. INTRODUCTION

This Guide focusses on the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) definitions for environmental, social and governance (ESG) Factors, which were approved at CRIRSCO's 2023 Annual General Meeting (AGM). It aims to support Competent Persons (CPs) and their advisors to interpret these definitions when preparing Public Reports as defined in the CRIRSCO Template and aligned reporting codes.

The Working Group acknowledges that the CRIRSCO Template aligned national reporting codes already include requirements for the disclosure of some environmental, social, and governance topics in the form of Modifying Factors and, in some instances, additional specific requirements as stated within the checklists of assessment and reporting criteria (Table 1s) contained in most of the Codes. However, interpretation of how these requirements should be addressed in Public Reports is subjective and varies widely. As with all other matters reported, ESG information should adhere to the principles of *materiality*, *transparency*, and *competency*.

1.1. Objectives and format of the Guide

This Guide has three objectives, reflected in the components presented. These are to:

1. set out the approved ESG definitions and provide additional guidance on the interpretation of these within the context of Public Reporting. Examples of ESG issues or topics that may be relevant to mineral projects are also provided;
2. highlight reporting principles that apply to the identification and assessment of ESG factors in Public Reporting; and
3. present an approach that can be used by CPs and their supporting specialists to identify, evaluate, and integrate ESG related topics into the preparation of Public Reports.

1.2. Further guidance on ESG

This Guide is not intended to present detail on all aspects related to ESG Factors that may be relevant to mining projects and Public Reports. ESG Factors vary depending on site-specific conditions and management responses to these. It is therefore not possible for this Guide to prescribe exactly which ESG Factors should be assessed or what information should be disclosed in Public Reports.

Authors are also reminded to consult the disclosure requirements of their specific securities exchange, which may require additional, specific disclosures to demonstrate compliance to listing regulations.

The Guide also does not attempt to duplicate or replace the extensive range of other ESG performance or disclosure standards and frameworks that have been prepared and published by other organisations. These standards and frameworks have been prepared largely in response to investor and societal demands for the mining industry to act responsibly and to provide information necessary to support investor decision-making. There are various types of standards and frameworks, the application of which is complementary to this Guide. These include:

- *Disclosure standards and frameworks* – the objectives of these are to provide companies with metrics to guide their disclosure of ESG-related information. The information gathered by companies to support these disclosures is relevant to and can inform the identification of ESG Factors for the purposes of Public Reporting. Examples of these include:
 - Global Reporting Initiative (GRI)
 - International Finance Reporting Standards S1 and S2 standards (published by the International Sustainability Standards Board - ISSB)
 - European Sustainability Reporting Standards (ESRS) as mandated by the Corporate Sustainability Reporting Directive (EU CSRD)
 - CDP (initially the Carbon Disclosure Project)
 - Taskforce on Climate-related Financial Disclosures (TCFD, now incorporated under the ISSB)
 - Taskforce on Nature-related Financial Disclosures (TNFD)
- *Responsible mining standards and guidelines* – these provide organisations with requirements and guidance on levels of performance that are considered industry best practices. Some standards require self-assessment or validation of conformance to the requirements, whereas others require independent audits / assurance to confirm a company's conformance with the requirements. Examples of these include:
 - International Finance Corporation Performance Standards on Environmental and Social Sustainability
 - Supply chain driven consumer responsible performance standards such as the Responsible Gold Mining Principles, CopperMark, IRMA etc.
 - Industry-led performance standards including the International Council on Mining and Metals (ICMM) Principles and Performance Expectations, Towards Sustainable Mining (TSM) Standards

Within the CRIRSCO universe, there are two guidelines specific to ESG integration into mineral reporting that have been prepared and published. These are the Canadian Institute of Mining's (CIM) Environmental, Social and Governance Guidelines for Mineral Resource and Mineral Reserve Estimation (2023) and the South African Guideline for the Reporting of Environmental, Social and Governance Parameters within the Solid Minerals and Oil and Gas Industries (the SAMESG Guideline, 2017).

The CIM ESG Guideline (2023) includes a detailed list of international standards and guidance that have application in the ESG arena. The list is grouped into jurisdictional and thematic subheadings.

1.3. Additional terms

This Guide uses terms that are included in the CRIRSCO Template June 2024 (the CRIRSCO Template) as Standard Definitions as well as some terms that are not currently included in the CRIRSCO Template. For the purposes of clarity, these terms are:

- *Modifying Factors* are considerations used to assess and estimate Exploration Targets, Mineral Resources and/or Mineral Reserves. These include, but are not limited to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governance (ESG), and regulatory factors (the CRIRSCO Template Section 4.7).
- *Public Reports* – are reports prepared to inform investors or potential investors and their professional advisers on Exploration Targets, Exploration Results, Mineral Resources or Mineral Reserves. They include but are not limited to company reports, media releases, information memoranda, technical papers, social media announcements, website postings and public presentations (the CRIRSCO Template Section 2.9).
- *Mineral Project* - a defined development or operation which provides the basis for environmental, social, economic and technical evaluation and decision-making. A mineral project is comprised of a defined activity or set of activities, including those related to exploration, which provide the basis for assessing environmental-socio-economic viability, determining technical feasibility and evaluating the degree of confidence in the estimate (adapted from UNECE, 2021¹).
- *Property* – the physical location on which a *project* is being undertaken and which is the subject of a Public Report. A property usually comprises of one or more boundaries with specific cadastral co-ordinates.

¹ United Nations Economic Commission for Europe (UNECE), 2021. Supplementary Specifications for the Application of the United Nations Framework Classification for Resource to Minerals

- *Risk* - the effect of uncertainty on objectives. Risks can be potential opportunities and or threats. Risk applies to situations where one does not know the outcome of a given situation but can estimate this with a certain level of accuracy. Risks apply to all Modifying Factors and are typically managed in an integrated fashion (adapted from PERC Standard, 2021).

2. ESG DEFINITIONS

This section presents the definitions of ESG Factors in relation to how they should be used in Public Reports. These may differ in nuance from definitions used in other business contexts. After each definition, guidance on how the definition should be interpreted and examples of possible factors that may need consideration by the CP and supporting specialist are provided.

1.4. Environmental, Social and Governance (ESG) Factors

Definition

ESG is the acronym referring to Environment(al), Social and Governance. Each of these areas are unique disciplines themselves, however there are many aspects that overlap, and it is often this inter-relationship that drives risk (threat and opportunity).

Guidance

In this Guide the term 'ESG Factors' is used to describe the combined environmental, social and governance factors applicable to a project.

ESG includes all aspects of (and is often used inter-changeably with) sustainability. ESG Factors can affect shareholders and stakeholders; investor and corporate assessments and decision-making; employees and contractors; obtaining and maintaining regulatory permits; human rights; the receiving environment; global impacts (such as climate change) and a social licence to operate from host communities including land users / owners.

Material ESG Factors can influence the success or failure of a project, including through: impacts to social and environmental receptors, progression of the project, continuity of operations, alterations to project design, and the likelihood of economic extraction of a deposit or realisation of its economic value.

ESG Factors would typically include considerations that are directly or indirectly associated with the project, including linear infrastructure, housing developments, project specific ports etc. Cumulative impacts, which consider the project's impacts in addition to known or potential impacts by other activities or developments in an area, should typically also be considered. In some contexts, transboundary impacts may also be relevant – for example water courses that traverse regional or national boundaries, and carbon emissions which have global impacts.

As with all disciplines relevant to mineral reporting, knowledge of applicable ESG Factors, and the potential impacts on a project, evolves in line with the lifecycle phases. The level of detail expected for disclosure of Exploration Results is therefore significantly less than that expected for Mineral Reserve declarations.

The definition highlights the inter-relationship of the E, S and G elements of ESG. Examples of how this can be seen in practice are given in Box A below.

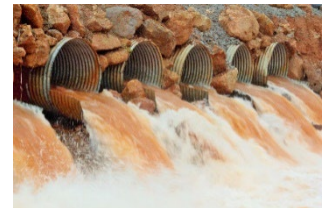
1.5. Environmental Factors

Definition

Environment(al) Factors relate to the surroundings in which a property exists. These include the current and anticipated future state of climate, air, water resources, biodiversity, and ecosystem services within the project's environmental zones of influence².

Box A: Subdividing ESG into its components is somewhat artificial - examples

Example 1: Although a discharge of mine effluent to a river might be an environmental issue, the potential harm it may cause downstream could impact on other water users' human rights for a healthy environment and their ability to earn a livelihood. It may also lead to breaches in permit conditions and corporate management system requirements, which are governance issues. Management of such impacts therefore involves elements of E, S and G.



Example 2: In the past, indigenous people may have been considered as a 'social' matter. The reality is they often have their own governance structures that need to be respected and engaged with, and they have tangible and intangible social heritage that needs to be preserved and an extremely close bond to the environment that sustains them. It is understandable that they have expectations around decision making on projects that occur in their area of influence. Thus, there are elements of E, S and G that need considering when addressing this in mineral reports.

Example 3: Tailings management has also been traditionally handled as an environmental matter. With new global practices placing a heavy emphasis on tailings governance and understanding potentially affected people that could be impacted by the facility, the consideration of tailings is now firmly an E, S and G matter.



² A zone of influence is 'the area within which the [mineral] project has or can have material impacts or can influence impacts due to its activities, products or services. Typically, the zone of influence is unique to each [mineral] project, is larger than the actual project footprint, and encompasses': areas directly disturbed, areas directly affected and areas affected by secondary, induced or cumulative impacts. (Appendix 1, SAMESEG Guideline (2017)).

Guidance

Environmental Factors are identified through a process of analysing and evaluating the bio-physical context within which the property is located, engaging with stakeholders, predicting potential project-induced impacts that may arise and identifying risks that could influence the ability of the company to responsibly explore for, develop, operate, and close the project.

Environmental factors are typically considered within zones of influence, which are determined based on the reasonable maximum extents within which one or more of a project's direct, indirect, and cumulative impacts may be experienced.

Box B provides some examples of the types of environmental factors that should be considered during the assessment of a mineral project by the CP and supporting specialists. The list is not exhaustive and many of the factors listed are inter-related, both with other environmental factors (as shown in Box A above), and with other elements of ESG. For example, responsible resource use is considered under the umbrella of both water stewardship and material stewardship, and there are strong links between pollution prevention and responsible waste management. The box does, however, highlight current terminology and concepts that have evolved from the more traditional environmental protection paradigms set out in early reporting codes.

Box B: Examples of possible environmental factors

- Nature – including biodiversity and ecosystem services, species of conservation importance, proximity to sensitive or protected habitats, deforestation and the concepts of 'no net loss' and 'nature positive'
- Water stewardship – surface and groundwater drainage and catchments, other water users, catchment-wide issues or initiatives
- Pollution prevention – including air, water, noise and vibration emissions
- Handling and disposal of tailings, mineral waste and non-mineral waste – characterisation (geochemical, physical, and radiological), generation, storage and management of wastes (waste rock, stockpiles, tailings, process wastes, domestic wastes and hazardous wastes)
- Climate adaptation and response – understanding climate change scenarios, physical and transitional risks
- Decarbonisation – quantification of greenhouse gas emissions and reduction targets
- Pre-existing environmental liabilities and remediation considerations,
- Existing and anticipated land use/s – over project properties and adjacent areas
- Responsible decommissioning, rehabilitation, and closure – including planning, financial provisioning and asset transitioning to agreed post-mining land use/s
- Responsible resource use - energy, water and material consumption and efficiency
- Material stewardship – procurement, storage, and disposal of raw materials

1.6. Social Factors

Definition

Social Factors relate to the lives, livelihoods, social organisation, cultural heritage, and health, safety, and well-being of internal (employees) or external (communities) people who live and work within the project's social zones of influence.

Guidance

Social Factors are identified through a process of analysing and evaluating the social, labour, socio-economic and cultural heritage context within which the property is located, engaging with stakeholders, predicting potential project-induced impacts, and identifying risks that could influence the ability of the company to responsibly explore for, develop, operate, and close the project.

Social Factors are considered within zones of influence which are determined based on the reasonable maximum extents within which one or more of the project's direct, indirect, and cumulative impacts on social receptors may be experienced. It also includes areas that may be geographically removed from the property but where socio-economic impacts (positive or negative) may be experienced.

Box C provides examples of possible social factors³ that should be considered during the assessment of a mineral project by the CP and supporting specialists. As with environment, many of these are inter-related.

³ Note the UNESCO definition of cultural heritage applies to heritage resources mentioned in Box C below:
<https://uis.unesco.org/en/glossary-term/cultural-heritage>

Box C: Examples of possible social factors

- Human rights and the protection of vulnerable groups
- Employee rights, relations, and organizational culture
- Occupational health and safety including employee wellbeing
- Diversity and inclusion
- Human capital, skills availability / development
- Indigenous peoples, territories, rights, vulnerabilities, and free, prior and informed consent
- Socio-economic contributions / value sharing / community development
- Employment and livelihood creation / wealth creation,
- Physical resettlement and economic displacement (loss of livelihoods)
- In-migration and changing land uses
- Community health and safety - communicable diseases, emergency response, pollution-related impacts, physical threats (transport, equipment, mine voids, tailings failures)
- Economic and / or social dependencies
- Social aspects of climate change vulnerabilities.
- Artisanal and small-scale mining (legal and illegal)
- Culture heritage values, including tangible and intangible resources³, and, where protected by law, palaeontological resources
- Social aspects related to mine closure and transitioning

1.7. Governance Factors

Definition

Governance Factors relate to the company's leadership, strategies, policies, and systems aimed at driving compliant and ethical business practices in pursuit of sustainable development. It specifically includes mechanisms to enable the company to effectively implement, verify, and report on the management of business risks. Governance strategies, policies and systems are typically developed by the company for implementation by the project with due cognisance of context-specific circumstances.

Guidance

Governance Factors are identified through a process of analysing and evaluating the status of implementation of governance requirements established by the company, engaging with stakeholders and identifying risks that could influence the ability to responsibly explore for, develop, operate, and close the project.

Many aspects of corporate governance are the purview of the Board of Directors. Disclosure on these aspects is typically governed by jurisdictional, company, and stock exchange listing legislation. CPs are not expected to comment on such aspects and are rather encouraged to direct readers of their Public Reports to the location of corporate reports that disclose this information, where those reports exist.

During the assessment of a mineral project by the CP and supporting specialists, alignment of the project with corporate objectives and publicly stated constructive obligations⁴ should be undertaken. This should include the extent to which human and financial resources have been allocated in the economic model to ensure achievement of these objectives.

Box D provides examples of possible governance factors that could influence projects, and thus should be considered during the assessment of a mineral project by the CP and supporting specialists.

Box D: Examples of possible governance factors

- Top level commitment – evidence of corporate oversight and assurance processes that track project level compliance with corporate policies and standards
- Ethical business - processes to ensure integrity and prevent bribery and corruption including during procurement activities
- Compliance – evidence to show the progress of alignment with laws, community agreements, contracts, conditions of approval and constructive obligations
- Project decision-making - accountability of decision-makers
- Project ESG strategy – alignment of the project with the overarching Company strategy and priorities
- Risk (threat and opportunity) management – identification, tracking and controls at the project level
- Project budgeting and resourcing
- Management systems – linkages to environment, social, energy, quality, health & safety systems
- Emergency preparedness and response
- Proactive and respectful stakeholder engagement - identification, analysis and inclusion in project-decision making processes
- Grievance mechanisms - internal and external
- Disclosure of sustainability metrics
- Ethical sourcing opportunities and supply chain due diligence
- Resource stewardship and the circular economy
- Human rights – assessment and due diligence
- Market access for artisanal miners
- Independence of external auditors and oversight of geopolitical stability

⁴ The term 'constructive obligation' is used to describe the range of public commitments that organisations may make, particularly in relation to ESG or sustainability performance. Companies are expected to be able to demonstrate that these commitments are legitimate ones that the organisation is actively pursuing. A failure to be able to demonstrate this, and progress to achieving these commitments, could result in legal action being taken against the company citing a case of greenwashing.

3. REPORTING PRINCIPLES AND MATERIALITY

The reporting principles that govern the application of the CRIRSCO Template apply equally to the disclosure of ESG Factors in Public Reports.

Materiality

Public Reports should focus on and discuss ESG Factors that are material to the scope of the Public Report. In the CRIRSCO Template (Section 2.6), materiality requires *‘that a Public Report contain all the relevant information which investors and their professional advisers would reasonably require, and reasonably expect to find in a Public Report, for the purpose of making a reasoned and balanced judgement regarding the Exploration Targets, Exploration Results, Mineral Resources and/or Mineral Reserves being reported’*.

A simpler definition of materiality that is often practically applied is ‘information that, if omitted, misstated, or obscured could reasonably be expected to influence the decision making of users of that information’.

In alignment with other international sustainability standards, materiality in relation to ESG Factors should be determined by applying the concept of ‘double materiality’. This considers:

- the effect an ESG Factor may have on a project, often from a financial perspective. Examples may include restricted water resource availability requiring expensive engineering to access an alternative water resource, increased capital requirements to implement pollution control systems, or adopting more conservative design assumptions to robustly mitigate climate risks, and
- the impact the project may have on an ESG Factor, for example emission of greenhouse gases contributing to the climate crises, a resettlement impacting on the people who are moved to new areas or impacts to species of conservation importance arising from disturbance of protected areas.

These impacts often overlap and interact, such that avoidance of an environmental or social impact may result in a financial impact to the project. A focus on only one element of materiality therefore may result in unexpected or unintended impacts.

In determining whether an ESG Factor is potentially material, the following screening criteria may be used, with the consequences assessed over the short, medium, and long-term:

- Could the ESG Factor affect the continuity of the project including temporary or permanent project stoppages?
- Could the ESG Factor result in significant costs for the project, including those related to significant design changes?

- Could the ESG Factor pose significant reputational risks or affect the social licence to operate for the project?

Examples of ESG Factors that might be material to a project are provided in Box F below.

Box F: Materiality of ESG Factors should consider if the identified factor could:		
<i>Stop the project or affect continuation of operations</i>	<i>Result in significant redesign and/ or cost implications</i>	<i>Pose significant reputational risks or affect the social licence to operate</i>
<ul style="list-style-type: none"> • Permitting delays or rejections • Negotiation of required agreements • Non-compliance with obligations (regulatory, social or constructive obligations) • A major accident and/or incident • Security of water or energy supply • Land availability • Weak social licence to operate • Socio-political influences 	<ul style="list-style-type: none"> • Meeting compliance obligations • Weak knowledge base resulting in need for more studies • Resettlement and economic displacement • Decarbonisation or carbon taxes • Changing standards and the need for new control measures • Potential for natural disasters • Loss of production due to strikes or community protests • Remedy following major incidents or accidents • Contamination, rehabilitation and closure liabilities 	<ul style="list-style-type: none"> • Perceived or real impacts on people and the resources they depend on (natural, cultural, built ...can become human rights impacts) • Perceived or real impacts on nature including ecosystem services and sensitive features • Poor consideration or execution of value add (local content, community development, remedy of historical inequalities etc) • Failure to comply with corporate objectives

Transparency

The CRIRSCO Template defines transparency as requiring *‘that the reader of a Public Report is provided with sufficient information, the presentation of which is clear and unambiguous, so as to understand the report and not to be misled’*.

To apply this to the disclosure of ESG Factors, all ESG information and data should be assessed, and the factors identified as material then disclosed in the Public Report. Information disclosed in the report should reflect the current level of understanding of the ESG Factors, be unambiguous, and disclosed in sufficient detail for users of the information to make informed decisions.

Some jurisdictions require that disclosures in respect of Table 1 are made on an ‘if not why not’ basis. In such instances the transparency principle would be demonstrated by the inclusion of clear statements on why no material ESG Factors have been identified if that is

the conclusion of the CP together with the relevant specialist.

The need to ensure transparency should not result in companies repeating information that may be disclosed elsewhere in the public domain, thereby over burdening the authors and readers of Public Reports. Where information is available elsewhere, authors are encouraged to include cross-references to the relevant location of such information to assist readers in locating the source information. Examples might include documentation related to environmental and social impact assessments, sustainability reports and/or permitting processes and corporate governance reports.

Competency

Evaluation and interpretation of ESG information may require CPs to engage with environmental, social, and / or governance (or other) experts or specialists⁵ who are suitably qualified and experienced on the matters in which they will be providing input to the Public Report. Where specialists contribute to Public Reports, the CP should agree to the inputs provided and sign-off on these as they would for any other input. Best practice would be for the Public Report to include a table detailing all contributors to reports, their applicable experience and professional registration status (where appropriate).

According to the CIM ESG guidelines (2023), 'a wide breadth of disciplines and local experts should be engaged to fully understand the environmental and social conditions, legal frameworks, context, risks, and opportunities for a property. These experts should have appropriate levels of education and experience in their respective areas of work. It is essential to include multiple disciplines and areas of expertise in project management, project planning and implementation to appropriately address environmental and social aspects of a property'.

The SAMESG Guideline uses the term 'Technical Specialist' and defines this as a person who holds an applicable academic qualification and has a minimum of five years' relevant ESG experience. It is, further, recommended that he/she is also registered with an appropriate professional/statutory body or relevant Recognised Professional Organisation ("RPO").'

Specialists should collaborate with the CPs as a team to ensure the information reviewed, analysed, and ultimately disclosed in the Public Report aligns with the principles of materiality and transparency. Specialists should meet the competency requirements that may be specified by the relevant NRO (or professional organisation for their speciality area), have a minimum of five (5) years' experience in the area of work they're undertaking and be able

⁵ The ESG Working Group notes that different terms may be used to describe professionals from a range of disciplines that contribute to Public Reports. Such terms might include 'specialists', 'experts', 'subject matter experts', 'competent persons', or 'qualified persons'. It is expected that each NRO will adopt terminology suitable to their jurisdiction and preferences. This Guide has adopted the term 'specialist'.

to defend their contributions to their peers. As required by the CRIRSCO Template (Table 1), the CP must be confident of the input provided by the specialists and take steps to verify the information provided.

In the case of disclosure of ESG Factors, competencies may encompass (adapted from Centre for Social Responsibility and Mining Sustainable Minerals Institute, August 2021):

- Technical competency (individually or collectively) in relevant disciplines;
- Adequate level of knowledge of the entity being assessed and the context in which it operates;
- Experience in conducting audits/assessments/reviews;
- Ability to analyse and interpret data: quantitative and qualitative;
- Engagement and listening skills;
- Ability to work in teams; and
- The ability to identify and address threats to impartiality.

4. APPROACH TO INTEGRATION OF ESG FACTORS IN PUBLIC REPORTS

The CRIRSCO ESG Working Group undertook a side-by-side comparison of the ESG requirements of the latest versions of the National Reporting Standards (as of 31 December 2023). This review was used to distil a set of common and best practice requirements for ESG disclosures in Public Reports. The requirements were then analysed to develop a procedural approach that can be applied by CPs and specialists when preparing to integrate consideration and disclosure of ESG Factors in Public Reports. The approach can be applied to the reporting of Exploration Targets, Exploration Results, Mineral Resources and Mineral Reserves. The procedural approach presented below may be equally applicable to the integration of other Modifying Factors into Public Reports such as those relating to processing, infrastructure, or mining.

A key component of this approach is the emphasis on considering ESG Factors from the earliest opportunity during project conceptualisation. This aligns with the definition of Modifying Factors approved at the CRIRSCO 2023 AGM. It also picks up on similar themes to the key questions raised in the introduction to the CIM ESG guidelines (2023).

The process comprises four specific activities and is represented conceptually in **Figure 2-1**:

1. **Establish context** – assessment of the corporate, legal (incl. permitting), environmental and social context within which the project is or will be developed. The geographical location of the project’s properties is used as the basis of the assessment process. The level of detail considered needs to be commensurate with the project’s development stage, the availability of information and the maturity of the company’s corporate commitments.
2. **Assess risks and materiality** - drawing on the skills of the CP and other specialists, in line with the reporting principles and, (ideally) based on a company approach to risk and **materiality** assessment, the ESG factors for that project are identified. These factors are based on the context and the current and anticipated future project activities. Recognising that ESG factors are drivers of project risks and impacts, the assessment will then evaluate which ESG factors pose potential material risks and impacts. Once potential material ESG factors are identified, the possible consequences for the project can be evaluated. Any knowledge gaps relating to the project’s understanding of the risks and impacts can also be noted, along with the measures needed to improve confidence in the knowledge base.
3. **Respond to material ESG factors** – the project assessment team addresses the identified potential material ESG factors (risks and impacts) through quantitative and / or qualitative mechanisms. These might include quantitative adjustments to Mineral Resources and/or Mineral Reserves, changes of design or life of mine plan, cost or schedule adjustments within the financial model. The response may also be qualitative articulation of risks and anticipated consequences. The balance between quantitative adjustments and qualitative risks will change as a project moves from exploration through to the operational and closure phases, but even where quantifiable adjustments are made, there may still be a need to articulate unquantifiable risks.
4. **Interpret for disclosure** – the outputs of the previous three steps are captured in the Public Report, including the completion of Table 1 and the supporting Technical Report/s.

The CIM ESG guideline (2023) highlights that, unlike other technical aspects of mining projects, ESG risks may be difficult to assess using strict quantitative scientific or knowledge-based considerations since they may be dependent on the perception of the different rights holders, stakeholders, and regulatory agencies. These challenges notwithstanding, it is of prime importance for a company to provide reasonable clarity on these risks and how they are managed.

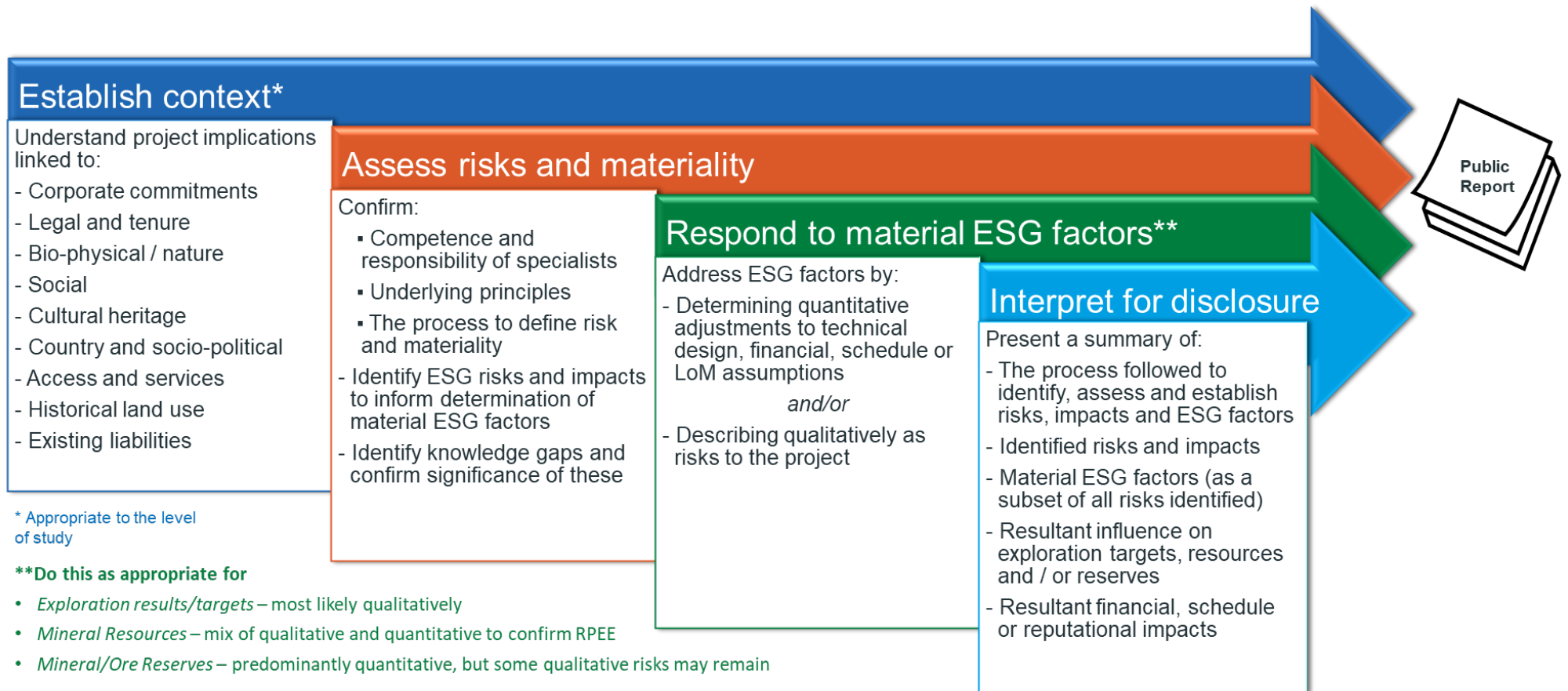


Figure 2-1: An example of a procedural approach to the consideration and integration of Environmental, Social and Governance Factors into Public Reports⁶

⁶ LoM means 'life of mine' and RPEE means 'reasonable prospects for economic extraction'

5. CONCLUSION

This ESG Definitions Guide provides a reference for CPs and their supporting ESG specialists on the interpretation and application the ESG Factors definitions adopted at the 2023 CRIRSCO AGM. The document recognises that improved ESG disclosures in Public Reports will rely on collaboration between ESG specialists and CPs in a manner that has not previously been consistently undertaken by all authors.

The Guide will be updated in parallel with the updates to the CRIRSCO Template when these are undertaken.

The content of Section 13 of the CRIRSCO Template will be updated in due course to facilitate reference to this ESG Definitions Guide.

6. REFERENCES

This section presents links to other documents mentioned in this Guide. The URL's provided were correct at the time of publication. Users of the Guide are encouraged to check that any links used refer to the same information discussed in this Guide.

- Canadian Institute of Mining, Metallurgy and Petroleum (CIM) ESG Guidelines: https://mrmr.cim.org/en/practice-guidelines/environmental-social-and-governance/?utm_medium=banner&utm_source=Home+page&utm_campaign=Oct23
- CDP: <https://www.cdp.net/en>
- CRIRSCO: <https://crirSCO.com/> (links to national reporting codes via this website)
- European Sustainability Reporting Standards (ESRS) as mandated by the Corporate Sustainability Reporting Directive (EU CSRD): https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en#legislation
- Global Reporting Initiative (GRI): <https://www.globalreporting.org/>
- International Finance Reporting Standards S1 and S2 standards (published by the International Sustainability Standards Board - ISSB): <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/>
- South African Mineral Reporting Codes (SAMCODES) SAMESG Guideline: <https://www.samcode.co.za/samcode-ssc/samesg>
- Taskforce on Climate-related Financial Disclosures (TCFD, now incorporated under the ISSB): see <https://www.ifrs.org/sustainability/tcfdf/>
- Taskforce on Nature-related Financial Disclosures (TNFD): <https://tnfd.global/>