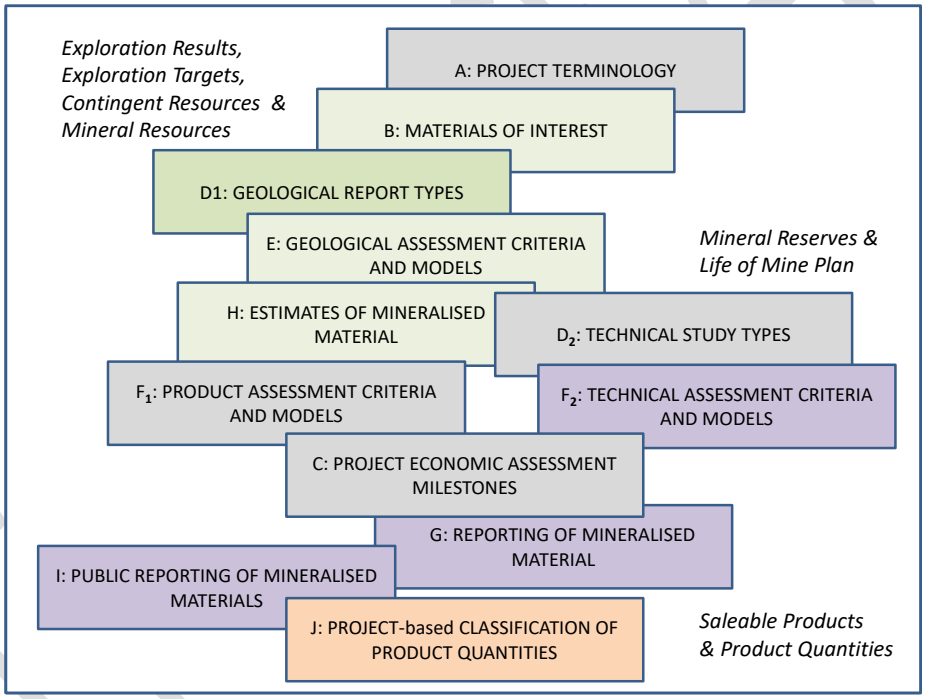
Pan-European Reserves and Resources Reporting Committee

An Integrated Approach to Mineral Projects:

Internal Mineral Company reporting, Non-public reporting and Public Reporting under the PERC Reporting Standard

APPENDIX 1: Quick Guide Glossary of 'An Integrated Approach to Mineral Projects' (AIA) Terminology



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Introduction

'An Integrated Approach to Mineral Projects: Internal Mineral Company reporting, Non-public reporting, and Public Reporting under the PERC Reporting Standard' is a Reference Source to a comprehensive overview of an approach for the assessment of Mineral Projects from the early stages of a Mineral Exploration Project, through a Mineral Development Project to a producing Extraction Operation. The complete ***An Integrated Approach*** document offers an extensive discussion of commonly used terminology, detailing each term and its use in the context of Mineral Estimate Reporting, with cross-references to the **PERC Reporting Standard 2021** [PERC 2021]. Additional terms are defined, where appropriate, to provide a comprehensive and integrated approach to Mineral Estimate Reporting, from Mineral Deposits, to Mineral Resources and Mineral Reserves. The *An Integrated Approach* document provides a guide to Internal Mineral Company reporting requirements to ensure that all Exploration and Mineral Project evaluation is undertaken in a professional manner, in addition to the mandated Public Reporting requirements of the **PERC Reporting Standard**. New techniques are presented to integrate a systematic approach to all Mineral Estimate Reporting, ensuring transparency and competency in decision-making for professionals, company executives, investors, potential investors, and their professional advisors throughout the Mineral Project assessment cycle. The terminology aligns with that used by the CRIRSCO International Reporting Template (CRIRSCO, 2024) and the UNFC Framework Classification system for Mineral Projects (UNFC, 2019), and guidance is provided on the preparation of Non-public reports.

The terminology used in the '*An Integrated Approach'* document is also presented in this Appendix as an alphabetical list of all terminology discussed in the AIA. This list of terms is cross-referenced to the main *An Integrated Approach* document (Parts III to X), where the terms are defined and their relevance discussed in relation to the reporting of estimates of Quality and Quality of Mineralised Material for =Internal Company Reports, Non-public reports and Public Reports. *An Integrated Approach* should be used as a Reference to provide Best Practice in the estimation, classification and reporting of Mineralised Material from Early Exploration Projects, through Mineral Development Projects, to Extraction Operations and Extractive Waste Recycling Projects/Operations. Extensive cross-referencing is also provided to the relevant Clauses in the **PERC Reporting Standard 2021** for Exploration Results (including Exploration Targets), Mineral Resources and Mineral Reserves (PERC, 2021).

The '*An Integrated Approach'* document also provides additional guidance on the terminology used by the **PERC Mineral Project Evaluation Report Template** [*PERC MPER, 2025*].

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QUICK GUIDE TO COMBINED STANDARDISED TERMINOLOGY and ADDITIONAL TERMS

Quick Guide to the Combined Glossary of Standardised AIA Terminology and Additional AIA Terms included in the Full AIA Text discussion paragraphs (SECTION B: Parts III to X), presented in alphabetical order, and cross-referenced to the appropriate AIA Main Paragraphs using the appropriate **Paragraph Reference Number** in square brackets **[**i.e**. XX.]**

Guidance: The numbers attached to the specified terms in the headings - the first term relates to the sequential number in the Glossary of Standardised AIA Terminology (SXX) while the number in square brackets followed by a dot [XX.] at the end of the term refers to the respective Paragraphs in the Main Text part of the document titled 'An Integrated Approach to Mineral Projects: Internal Mineral Company reporting, Non-public reporting and Public Reporting 2025' (this document) (e.g. G04 Aggregated Geological Confidence [22 .]:).

SEARCH OPTIMISATION: Users of the Glossary of Additional AIA Terms are advised to look for the term of interest in the Index of Terms and then search using the **Paragraph Reference Number** in the Main Text of the AIA document (Parts III to X). To optimise the search, the Reference Number two digits should be followed by a dot (i.e. "**XX**." or "**0X**.") (*Range from "***01."** to "**80."**). These Reference Numbers can also be used to search for the relevant terminology in other parts of the AIA document. The appropriate description of the Terminology is also provided in summary form in the *Glossary of Standardised AIA Terminology* ("**S**" prefix) in Theme Order, and additional Terms presented in this *Glossary of Additional Terms* ("**G**" prefix) in Alphabetical Order.

	Ref.
Active	
Active means that one or more of the 'activities and facilities', both on-site and off-site, required to progress a Mineral Project are currently taking place, or are expected to take place in the near future, in a continuous or episodic manner, including regulatory or financial activities.	**04.**
Actual Yield	
The Actual Yield is the net recovery of the Saleable Product, based on the measured quantity of the Saleable Product at a defined quality or purity, at the point of sale, transfer, or use Reference Point, compared to the measured Feed to the Processing Plant quantity, for the same production period, expressed as a percentage.	**21.**
Advanced Mineral Exploration Project	
An Advanced Mineral Exploration Project is a Mineral Project at the Mineral Resource Delineation stage of Mineral Asset Development required to determine the economic potential and level of confidence of the estimates of the Mineralised Material with Target Mineral Products of 'potential economic interest' (see below), through the collection of valid Exploration Results and any addition preliminary technical investigation to ensure that reasonable expectation of extraction can be met so that Mineral Resources can be declared.	**02.**
Advanced Exploration Works Programme	
Advanced Exploration Works Programme is an Exploration Works Programme and other technical activities, including Geological Model construction, and the estimation of Quantity and Quality and associated Geological Confidence, that may include Scoping Study level Technical Studies, with sufficient valid Exploration Results to assess and evaluate the Quantity and Quality of the Mineralised Material with the potential for Target Mineral Product(s) with the 'possible economic extraction'.	**02.**
Aggregated Geological Confidence	
Aggregated Geological Confidence is the adjusted average or aggregated Project-basis Geological Confidence assessment based on the weighted average, or aggregated level of confidence of all identified	**22.**

Categories of Mineralised Material modelled in the Validated Geological Model, including all such Mineralised Material classified as Contingent Resources and/or Mineral Resources.	
Agro-Minerals	
Agro-Minerals (also known as stone bread or petrol fertiliser) are minerals that occur naturally or can be processed to be used as an alternative fertiliser or soil amendments that provide essential plant nutrients in the agriculture and horticulture industries. Agro-minerals include (but are not limited to) natural phosphate rock, multi-nutrient rock fertilisers, and other raw materials, including apatite, carbonate, malachite, scoria, and zeolite.	**10.**
Audit	
Audit is a systematic and detailed examination by a person competent to do so, of the estimation processes and components, (including geological, geotechnical, mine planning, mineral processing, metallurgical processing and economic and financial models, permitting and tenure aspects), assumptions and conclusions undertaken in order to validate the appropriateness of the various components which contribute to the Mineral Resource and Mineral Reserve estimates. An Audit includes a detailed examination of a representative sample of the base data (in the order of 10%) and the validation of the Mineral Resources and Mineral Reserve estimates by an independent consultant or a person qualified to do so.	**18.**
Beneficiation	
Beneficiation represents the physical and/or chemical separation of constituents of interest from a larger mass of material, and the methods employed during mineral processing and or metallurgical processes to prepare a final Marketable or Saleable Product from the Mineralised Material as mined, such as screening, flotation, magnetic separation, leaching, washing, roasting, smelting and refining, etc.	**33.**
Bulk Density	
Bulk Density is the ratio of the mass of loose particles and the intervening voids to that of an equivalent volume of water, typically in the cases of bulked Mineralised Material loaded on a truck or wagon, or placed in a stockpile, dump or tailings pond.	**20.**
CECJ 'continued extraction is commercially justified'	
'Continuous extraction is commercially justified' (CECJ) is a detailed assessment of Mineralised Material with Mineral Product(s) of economic interest in an Active Extraction Operation where the associated Saleable Product(s) are commercially extractable at the time of the assessment without the injection of significant capital following an evaluation of all the Modifying Factors, and any other issues likely to influence 'economic extraction', at least at the level of an Operational Study Report, with a Life of Mine Plan that has demonstrated Technical feasibility, ESG viability and Economic viability.	**66.**
Cement Feed Materials	
Cement Feed Materials are the raw materials in cement required to provide the calcareous content (including limestone, sea shells, marl, or chalk), the material to provide the silica and alumina content (including clay, shale, slate, or sand), and the material to provide the iron content (including iron ore, mill scale, or similar material), in proportion to the composition and the type of cement being manufactured.	**11.**
Commercially justified	
'Commercially justified' means that a Saleable Product(s) derived from the Marketable Mineral Reserve contained within the Life of Mine Plan, have been demonstrated to be marketable, legally permitted, Technically feasible, ESG viable and Economically viable, through an existing Active Extraction Operation.	**66.**
Competence	
Competence represents the combination of knowledge, training, skills, and experience acquired by a person, and their ability to apply these qualities to perform a task or specific activity successfully, efficiently and ethically.	**77.**
Competent Person*	
A Competent Person* is a Minerals industry professional, defined as a professional member, registrant or licensee of a Recognised Professional Organisation (RPO) in the list of accredited professional organisations, with enforceable disciplinary processes, including the powers to suspend or expel a member. A Competent Person must have a minimum of five years of relevant experience in the style of	**77.**

Mineralised Material or type of Mineral Deposit under consideration and in the activity that the person is undertaking.	
Competent Person's Report (CPR)	
A Competent Person's Report (CPR) is a Public Report for the purposes of informing investment decisions on the Scientific merit, Technical feasibility, ESG viability and Economic viability of a Mineral Project, Mineral Development Project, or Extraction Operation prepared by a Competent Person in accordance with the recommendations and guidelines in the PERC Reporting Standard.	**29.**
Conceptual Exploration Target	
A Conceptual Exploration Target is a statement or estimate of a hypothetical Undiscovered Source of Mineralised Material based only on indirect evidence from Exploration Information, and where the presence of such Mineralised Material has not yet been confirmed by the Mineral Company searching in a specific region for sources of Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest' within a defined geological setting. The statement and range estimate follow an initial assessment of all scientific and geological factors based mainly on a 'Mineral Deposit Model', as well as any other issues likely to influence future 'economic extraction'. A Conceptual Tangible Exploration Target is presented as a conceptual range of Quantity and a conceptual range of Quality.	**46.**
Conceptual Geological Model	
A generic model, often constructed from non-spatial Exploration Information only, which can be used to assess the scope and scale of an Exploration Target. The Conceptual Geological Model is used to estimate the range of quantity and the range of quality of the Mineralised Material for a Tangible Exploration Target.	**19.**
Confidence in the estimates of the Quantity and Quality	
Confidence in the estimates of the Quantity and Quality of the Mineral Product is an assessment of the level or degree of understanding or determination in all the factors that contribute to the estimation of the final Saleable Product at the point of sale, transfer of use Reference Point, and the probability of achieving the forecast production; including but not limited to the level of Geological Confidence, the degree of confidence in the Modifying Factors, and the level of confidence in the results of the Risk Assessment.	**07.**
Consistent Reporting, Conversion, Mapping and Classification	
Consistent Reporting, Conversion, Mapping and Classification of the various 'categories' of estimated Quantity and Quality of Mineralised Material with Mineral Products of 'potential economic interest' made in compliance with the PERC Reporting Standard (as aligned with the CRIRSCO Reporting Template) is required prior to converting the associated Quantity and Quality estimates of Product Quantity in terms of the UNFC Classification system, irrespective of whether they are reported on an individual Category-basis or on an aggregated Project-basis.	**80.**
Construction Raw Materials	
Construction Raw Materials (Construction Minerals) or construction aggregates, are crushed stone and/or sand and/or gravel (often sold on the basis of the size analysis), used as an essential part of the construction industry.	**11.**
Contained Metal or Mineral Content or Metal Equivalent or Contained Multi-Products:	
The contained metal content, contained mineral content, metal equivalent, or contained multi-products is the multiplicative combination of the 'quantity' estimate and the 'quality' estimate of the Target Mineral Product(s) contained within the Quantity and Quality of the estimates of the Mineralised Material made at an intermediate point of estimation Reference Points, and adjusted to the point of sale, transfer or use Reference Point using appropriate Discount Factor(s) and Conversion Factor(s), based on estimates of the combined effect of all relevant geological, mining, mineral processing, metallurgical, marketing Modifying Factors, change in reporting basis, and any change in the constituent components.	**24.**
Contamination material	
Contamination material is a mass of non-mineralised or poorly-mineralised material that is unintentionally added to the Quantity and Quality of the selected practical mining horizon of the Mineralised Material during the mining/extraction recovery processes, based mainly on the geometry of the Mineral Deposit and the selectivity of the mining/extraction equipment.	**15.**

Contingent Resource	
A Contingent Resource is a discrete estimate of the Quantity and Quality of Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest' that is considered to be potentially recoverable from a known Mineral Deposit, but which is not considered to meet the requirements of 'reasonable prospects for economic extraction' at the time of the assessment.	**53.**
Continuous extraction	
'Continuous extraction' means that the exploitation of the declared Mineral Reserve is included, or is expected to be included, in the current Life of Mine Plan of an existing Extraction Operation, such that there is no hiatus or cessation of production from the current extraction and beneficiation operation.	**66.**
Conversion Factor	
A Conversion Factor is a numerical factor required by the Mineral Product Assessment Model to adjust the Quality estimate (and at times the simultaneous adjustment of the Quantity estimate) of the Mineralised Material at an 'intermediate point of estimation' Reference Point to the estimate of the designated quality of the Mineral Product at the 'point of sale, transfer or use' Reference Point, in part derived from the change in the reporting bases of the Quality estimates of the Mineralised Material and Mineral Product between the two defined Reference Points.	**28.**
CRIRSCO Template Aligned Reporting	
The CRIRSCO Template Aligned Reporting methodology focuses on the Public Reporting of Exploration Results (including Exploration Targets), Mineral Resources and Mineral Reserves, defined as incremental accumulations of Mineralised Material with Mineral Products that make up the basis for a Mineral Project. The Scientific merit, Geological confidence, Technical feasibility, ESG viability and Economic viability of the Mineral Project are determined through the assessment and evaluation of the Modifying Factors in appropriate Technical Studies that allow for estimates of the Quantity and Quality of Mineralised Material at different intermediate point of estimation Reference Points to transition progressively from one 'Mineral Reporting Class' and associated CRIRSCO Template-defined Mineral Reporting Category to another.	**79.**
Cut-off grade/quality	
Cut-off grade/quality is the minimum grade, or quality attribute, of Mineralised Material that is considered economically mineable, and is considered for planned extraction, in a given Mineral Deposit. It may be defined on the basis of economic evaluation or on physical, mineralogical or chemical attributes that define an acceptable Mineral Product.	**15.**
Diamonds and Other Gemstones	
Diamonds and Other Gemstones ('Diamonds') require special consideration due to their particulate nature, the sporadic or scattered distribution within a host rock, the specialised requirement for valuation, and the inherent difficulties and uncertainties in the estimation of the Mineral Products, the particulate nature of the gemstones, the lower cut-off size, and the correlations between the frequency of occurrence of micro-diamonds and commercial sized stones. In Diamond Deposits, the term 'quality' should not be substituted for 'grade,' since 'quality' is a term applied to individual stones.	**10.**
Dilution material	
Dilution material is a mass of non-mineralised or poorly-mineralised material (below the cut-off grade/quality) that is intentionally included within the Quantity and Quality of defined zones of Mineralised Material as part of the planned mining unit to obtain a practical mining height, based on geological, geotechnical and mining engineering assessments, prior to the mining/extraction process, in order to maximise the recovery of the Mineralised Material, or for specific geotechnical or mining safety reasons.	**15.**
Dimension Stone	
Dimension Stone is a technical and /or commercial term that includes all Natural Rock Source Materials which fulfil both structural and decorative architectural functions that can be quarried in blocks of different dimensions, and that possess the special qualitative features, technical and aesthetic properties required for their use in the building and construction industries. Dimension Stone is quarried for the purpose of obtaining blocks or slabs that meet specifications as to size (width, length, and thickness) and shape, and colour, grain texture and pattern, and surface finish. Dimension Stone of all forms is generally	**11.**

sold on the basis of technical (geological and/or mining) product specifications, quality and market acceptance.	
Discount Factor	
A Discount Factor is the numerical representation of the Modifying Factors required by the Mineral Product Assessment Model to adjust the quantity estimate of the Mineralised Material at an 'intermediate point of estimation' Reference Point to an estimate of the Quantity of the Mineral Product(s) of 'potential economic interest' at the 'point of sale, transfer or use' Reference Point.	**28.**
Discovery	
Discovery represents the point at which there is sufficient physical evidence and confidence in collected Exploration Results to identify the existence of a Mineral Deposit, and to construct a Geological Model to provide an estimate of the Quantity and Quality of the identified Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest', such that the Mineral Deposit is of 'potential economic interest' under the most favourable conditions.	**49.**
Dormant	
Dormant is when there are no 'activities and facilities' both on-site and off-site required to progress a Mineral Project, and the Mineral Company has relinquished the rights to the Mineral Asset and has been granted a 'closure' certificate by the Regulatory Authority, and is taken as the point where the Mineral Company abandons all of its rights to the Mineral Asset.	**04.**
Due Diligence	
Due Diligence is a thorough investigation conducted through Audit or Review to verify facts and details of a Mineral Project to facilitate a business development decision, which involves researching and analysing information to assess the Risks, ensure compliance, and confirm the accuracy of the representations, in order to avoid potential problems or liabilities.	**18.**
Early Mineral Exploration Project	
Early Mineral Exploration Project is a Mineral Project at the Mineral Deposit Identification stage of Mineral Asset Development required to determine the economic potential of the Mineralised Material and the identification of the Target Mineral Products of 'potential economic interest', through the collection of valid Exploration Results.	**02.**
Early Exploration Works Programme	
Early Exploration Works Programme is an Exploration Works Programme and other technical activities, including desktop studies and with limited valid Exploration Results that identify a source of Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest'.	**02**
Economic and Financial Model	
An 'Economic and Financial Model' evaluates the economic and financial aspects of the Mineral Development Project or Extraction Operation based on a technically sound and achievable Life of Mine Plan using 'reasonable financial assumptions' to confirm that the Mineral Project can achieve an acceptable return on the capital invested, and that the associated returns to investors and potential investors are competitive with alternative investments of comparable risk. The assessment must include an economic and financial analysis based on the appropriately detailed assessment of the Modifying Factors and the associated costs and revenues, and the evaluation of any other relevant factors needed to determine that 'economic extraction is reasonably justified' or that 'continued extraction is commercially justified', and that the Mineral Project has been shown to have Technical feasibility, ESG viability and Economic viability.	**37.**
Economic extraction	
Economic extraction is the exploitation of the Mineralised Material with Mineral Product(s) of 'potential economic interest' that results in, or is expected to result in, financial gain or other advantage accruing from the Mineral Asset through the sale, transfer or use of the associated Mineral Product(s).	**03.**
Economic viability	
Economic viability (syn. Economically viable) is an assessment of the financial and business factors that may contribute or influence the cost to exploit, the associated value creation to the business and any other economic effects through the marketing of the Mineral Products; including but not limited to Saleable	**07.**

Product assessment, cost analysis, global economics (Commodity price-exchange rate), and market analysis	
EERJ 'economic extraction is reasonably justified	
'Economic extraction is reasonably justified' (EERJ) is when the Mineral Development Project or Extraction Operation has been shown to have Technical feasibility, ESG viability and Economic viability, and demonstrated that the Mineral Product(s) are economically extractable at the time of the assessment, following a detailed assessment of Mineralised Material with Mineral Product(s) of economic interest, such that the level of Geological Confidence in the Quantity and Quality estimates must meet, at the minimum, the Moderate confidence category.	**63.**
Energy Minerals	
Energy Minerals are solid, gaseous, or liquid mineral resources that occur naturally on the surface or under the ground formed directly by the geological processes, and have an energy value available in the present or in the future, including conventional energy sources such as (1) solid energy minerals, such as coal, tar and oil shale; (2) gas energy minerals, such as natural gas and coal-generated gas, including combustible ice; (3) liquid energy minerals, such as oil and natural asphalt; (4) radioactive minerals, and (5) geothermal energy 'minerals', including underground hot water geothermal energy sources that may contains dissolved minerals in brines, and hot dry rock resources. Energy Minerals excludes unconventional energy sources such as wind, solar, and tide.	**10.**
Environment, Social and Governance (ESG) Factors	
Environmental, Social and Governance (ESG) Factors refer to the three separate but interrelated aspects of the Modifying Factors that, in the context of Mineral Reporting, must be considered during the progressive stages of assessment to establish the Environmental, Social and Governance viability of a Mineral Project.	**35.**
ESG viability	
ESG viability is an assessment of the Environmental, Social and Governance factors that contribute or influence the permission to extract and beneficiate without compromising the sustainable legacy of generations to meet future needs; including but not limited to environmental stewardship and responsibility, social and community harmony and contribution to wealth creation, legal access, corporate and business best practice.	**07.**
Evaluation Target	
Evaluation Target is an area of interest, or a specific site for further investigation, that represents a limited area or specific locality that warrants further investigation through geological exploration, including geological mapping, drilling, sampling and analysis, in an Early Mineral Exploration Project.	**45.**
Exploration criteria	
Exploration criteria are those features and characteristics specific to the chosen 'Mineral Deposit Model' that, whilst in themselves may not be diagnostic, when combined, form a unique and specific set of criteria that can be used to postulate the location of an Undiscovered Source of Mineralised Material for a particular class of Mineral Deposit types through an Exploration Works Programme.	**44.**
Exploration Information	
Exploration Information includes data and information, and other results of scientific merit, generated by mineral Exploration Works Programmes, or estimated or interpreted from specific evidence derived from geological (including geological mapping), geochemical, geophysical, geotechnical, remote sensing, and hyperspectral data and other knowledge where the quantity and/or quality of the available data is insufficient to allow any reasonable estimates of the Quantity and Quality of the identified Mineralised Material of potential economic interest.	**16.**
Exploration Results*	
Exploration Results* include data and information generated by a Mineral exploration programmes that might be of use to investors or potential investors and their professional advisers, that include valid exploration data, information, and other results of Scientific merit collected at Points of Observation, or generated from the geological interpretation of the data, that provide the basis for evaluating the physical geometry, Quantity and Quality of the Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest'. Exploration Results must not form part of a declaration of Mineral	**18.**

Resources or Mineral Reserves.	
Exploration Target*	
An Exploration Target* is a statement or estimate of a Known Source of Mineralised Material in a defined geological setting, presented as a range of Quantity and a range of Quality that contains Target Mineral Product(s) of 'potential economic interest', identified by direct evidence based on valid Exploration Results and other Exploration Information obtained through exploration activities, relates to Mineralised Material for which there has been insufficient exploration to estimate Mineral Resources [CRIRSCO, 2024].. The declaration of an Exploration Target follows the completion of a Geological Report, which follows an initial assessment of all Modifying Factors and any other issues likely to influence possible 'economic extraction' in the future, such that a declaration of 'potential future economic extraction' can be made. of all Modifying Factors, which has shown the Mineral Project has Scientific merit, Technical feasibility, ESG viability and Economic viability, and has identified any other issues likely to impact 'economic extraction'. An Exploration Target is presented as a conceptual range of Quantity and a conceptual range of Quality.	**45.**
Exploration Works Programme	
Exploration Works Programme is a planned, scheduled and costed programme of investigation of a Mineral Exploration Project as part of the Opportunity Identification phase of Mineral Asset Development, designed to discover or delineate a Mineral Deposit. An Exploration Works Programme comprises investigative activities including, but not limited to: land survey, topographical surveys, geological mapping (including regolith-surficial deposits), geochemical sampling (soil, rock chip, trenching), geophysical surveys (airborne and ground surveys of magnetic, electromagnetic, radiometric, gravity, electrical, seismic, and ground penetrating radar), remote sensing & hyperspectral surveys, structural studies, mineralogy and petrology, geotechnical and rock mass characterisation, geohydrology and initial mineral processing or geo-metallurgical test work.	**02.**
Extraction Operation	
An Extraction Operation means the 'activities and facilities' required in the mining/extraction, beneficiation and/or removal of Mineralised Material from its natural occurrence in the Earth or on affected land, and the production of a Mineral Product(s) within the limits of a permitted and legal site.	**03.**
Extractive Waste Material	
'Extractive Waste Material' is any material that the permit holder temporarily stores in stockpiles for recycling or further processing, or that the permit holder discards, intends to discard, or is required to accumulate in residues, dumps, or tailings ponds, that is not considered to have any immediate saleable or other potential economic value at the time of extraction, or as current or future mining, processing or metallurgical waste or tailings, from mining, mineral processing or metallurgical recovery operations, or stored in a suitable facility.	**12.**
Extractive Waste Recycling Project/Operation	
Extractive Waste Recycling Project/ Operation is a Mineral Development Project or Extraction Operation associated with re-processing of 'Extractive Waste Material' stored in stockpiles, dumps or tailings ponds derived from previous extraction activities to produce a Mineral Product(s), on Mineral Assets that have an Active, Suspended or Dormant status.	**12.**
Feasibility Study*	
A Feasibility Study* is a detailed and comprehensive Technical Study of the selected development option for a Mineral Development Project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed economic and financial analysis that are necessary to demonstrate at the time of reporting that 'economic extraction is reasonably justified'. The results of the Feasibility Study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the Mineral Development Project. The confidence level of the Feasibility Study is higher than that of a Pre-Feasibility Study. of the level of Geological Confidence, confirmation of the Scientific merit, Technical feasibility, ESG viability, and Economic viability of the selected development option for a Mineral Project that includes appropriately detailed assessments of all Modifying Factors together with any other operational factors and detailed economic and financial analysis using 'reasonable financial assumptions', that are necessary to demonstrate at the time of reporting that 'economic extraction is reasonably justified', and that all or	**65.**

part of the Mineral Resource may be converted to a Mineral Reserve. The results of the Feasibility Study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the Mineral Project. The Feasibility Study requires a higher level of understanding and detail than a Pre-feasibility Study.	
Functional Status	
The 'Functional Status' is an assessment of the degree of activity or inactivity on a Mineral Project, Mineral Exploration Project, Mineral Development Project or Extraction Operation, and is classified as Active, Suspended, or Dormant.	**04.**
Geological Confidence	
Geological Confidence is an expression of the level of confidence, or overall uncertainty, in the geological evidence, information, knowledge and data derived from reliable exploration, sampling and testing of Mineralised Material identified through valid and appropriately distanced Exploration Results. The evaluation of the geological data, information, knowledge, sampling, testing, the assessment of the scientific merit, and the distribution and associated continuity of that data between Points of Observation, must be based on independent assessments of both the geological physical continuity between physical Points of Observation and the related quality continuity between the quality Points of Observation. The Geological Confidence provides a means of classifying estimates of Quantity and Quality into different confidence levels.	**22.**
Geological Domain	
Geological Domain represents a subdivision that has similar characteristics or criteria defined by geological, rock-type, mineralogical, alteration, structural, geo-metallurgy, statistical, geostatistical, etc. features, or a combination thereof, defined by recognisable, defined or transient boundaries.	**19.**
Geological Loss	
Geological Loss is a Discount Factor (positive or negative) applied to the modelled In-situ tonnage or volume to account for observed and as yet unobserved geological features that are likely to inhibit mining/extraction between Points of Observation, and which reflects the natural variation of the Mineralised Material with potential for Target Mineral Products that is observable in the field but cannot be adequately accommodated by the geological modelling techniques.	**19.**
Geological Model	
A Geological Model is a representation (in two or three dimensions) of a Mineral Deposit and, in some instances, adjacent 'Mining Waste', based on all available Exploration Information, geological data, drill hole data, and sampling and analytical data collated from valid Exploration Results. The Geological Model is created by appropriate construction or computer modelling software to represent, in sufficient detail, the physical form, quantity and the associated quality characteristics of the Mineralised Material contained in the Mineral Deposit.	**19.**
Geological Model Report	
A Geological Model Report is a summary of the Geological Model output and the details of the computational methodology and rationale used in the construction and validation of a three-dimensional representation of the definition and delineation of both the Quantity and Quality components of the Mineralised Material within the Mineral Deposit of interest, as well as the associated Target Mineral Products.	**30.**
Geological Report	
A Geological Report is an appropriately detailed report on an area containing Mineralised Material, prepared following the completion of a specific stage in the prospecting, exploration, resource delineation and evaluation activities, that is comprised of an assessment of all relevant geological (including geological mapping), geophysical, sampling, analytical, hydrological, geo-engineering, mineral processing and metallurgical data and information, including the construction and assessment of an appropriate Geological Model, and any other information regarding the exploration for, and evaluation of the Mineral Deposit. A Geological Report is required for the declaration of Exploration Results, Exploration Target or Mineral Resource, and at an appropriate level of detail to support any associated Technical Study.	**30.**

Grade	
Grade is any physical or chemical measurement, or an assessment of the characteristics of the Mineralised Material of interest.	**20.**
Historical or Previously Reported Estimate	
Historical or Previously Reported Estimates for a Mineral Project are geological information and data, including legacy data, assessments of the Modifying Factors, estimates of Mineralised Material, and previous production data, recognised within the historical record due to past prospecting, extraction, and beneficiation activities. The Functional Status (whether Active, Suspended or Dormant) of the Mineral Project in part defines the level of confidence attached to any historical data, information or prior evaluation work, including any assessments undertaken on the historical Modifying Factors.	**73.**
Historical Production	
Historical Production is the accumulation of all production of Mineral Product(s) (including metals, Minerals, Metals, Mineral Raw Materials, Natural Stone/ Rock Source Material, etc.) from a specific Extraction Operation, quoted in terms of the Quantity and Quality of the Saleable Product (whether raw mineral material, concentrate, metal, mineral product or chemical product), between a defined start date to a defined end date.	**73.**
In-Situ Mineralised Material	
Mineralised Material that remains in its original location following the mineralisation process, and which has not been relocated or otherwise moved for whatever purpose by anthropological activity.	**13.**
Indicated Mineral Resource*	
An Indicated Mineral Resource*is that part of a Mineral Resource for which Quantity, Quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support detailed production planning and evaluation of the Economic viability of the Mineral Deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing, and is sufficient to demonstrate geological and quality continuity between Points of Observation. An Indicated Mineral Resource has a Moderate level of Geological Confidence. An Indicated Mineral Resource may only be converted to a Probable Mineral Reserve after appropriate application of the Modifying Factors.	**60.**
Industrial Minerals	
Industrial Minerals are any rock, mineral, or other naturally occurring substance of potential economic value, exclusive of metal ores, mineral feeds, fuel minerals or mineral fuels, and gemstones (where the latter has industrial applications, such as diamond), used in industry based on their physical and/or chemical properties in their natural state or after beneficiation, either as raw materials or as additives in a wide range of applications.	**10.**
Inferred Mineral Resource*	
An Inferred Mineral Resource* is that part of a Mineral Resource for which Quantity and Quality are estimated on the basis of limited geological evidence and sampling, which is sufficient to imply but not demonstrate geological and quality continuity between Points of Observation. An Inferred Mineral Resource has a lower level of Geological Confidence than that applying to an Indicated Mineral Resource. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. An Inferred Mineral Resource must not be converted to a Mineral Reserve.	**60.**
Inferred Mineral Resources In the Mine Plan	
'Inferred Mineral Resources In the Mine Plan' is an estimate of Inferred Mineral Resources incorporated within the limits of the defined practical mineable boundary(ies) of the scheduled mine design that constitutes the Life of Mine Plan expected to cover the productive Life of Mine of a planned mining or extraction, and beneficiation operation of a Mineral Development Project or Extraction Operation. The 'Inferred Mineral Resources In the Mine Plan' cannot be converted to Mineral Reserves (see below), and must not be portrayed as such in a Public Report.	**62.**
Integrated Risk Management	
Integrated Risk Management is the process of identifying Project Risks and facilitating the implementation of associated risk mitigation to control or avoid loss, maximise the potential for success of a Mineral	**38.**

Project, and enable the coordination of the decisions needed to mitigate residual Project Risks	
Intermediate Point of Estimation	
A specified logical point in the mineral evaluation and exploitation chain of a Mineral Project at which the reported Quantity and Qualities are measured, assessed or estimated for Mineralised Material or its derivatives, in whatever form or composition. The 'intermediate point of estimation' is typically an intermediate stage that is not the point of sale, transfer or use Reference Point, where the reported Quantity and Qualities account for losses and adjustments prior to, but not subsequent to, the defined point of estimation.	**23.**
Internal Mineral Company Report	
An Internal Mineral Company Report is a documentation and /or reports which contains information, data and estimates of the Quantities and Qualities of Mineralised Material and associated Mineral Products for specific Mineral Company purposes, including the preparation of reports and Mineral Asset Management, which are typically used to prepare estimates of Exploration Results, (including Exploration Targets), Mineral Resources and Mineral Reserves for Public Reporting using the PERC Reporting Standard.	**75.**
Known Source	
'Known Source' is a source of Mineralised Material that has been demonstrated to exist by direct evidence derived from valid Exploration Results, typically following the identification of an accumulation or concentration of Mineralised Material with Target Mineral Products of 'potential economic interest'.	**13.**
Leach Pad	
Leach Pad (or Heap Leach Pad**)** is an industrial extraction process through the leaching of surface accumulations of crushed Mineralised Material using a solvent to extract metals and/or minerals, with the associated collection of the solvent for further mineral processing	**13.**
Lead Competent Person	
Lead Competent Person is a Competent Person who is nominated or appointed to lead a team of experts comprising Competent Persons, Technical Specialists and/or Registered Professionals who have provided specific and identified contributions to a Competent Person's Report or other Technical Report, and for which the Lead Competent Person accepts overall responsibility for those contributions prepared in whole, or in part by others in a team, in accordance with the requirements and guidelines in the PERC Reporting Standard.	**77.**
Legacy data	
Legacy data refers to the historical data that is stored in outdated systems, formats, or technologies, often predating modern best practices.	**73.**
Life of Asset Plan	
A 'Life of Asset Plan' (LOA) is a mining/extraction and beneficiation schedule that covers all potential Mineralised Material with Mineral Product(s) in the total Mineral Deposit(s) within the full mining tenure of the Mineral Project that might conceivably be 'economically viable' in the future.	**57.**
Life of Mine	
The 'Life of Mine' is the maximum period in years between the first and last scheduled mining/extraction of tonnage /volume of the Mineral Reserve from a planned or actual Extraction Operation through the implementation of one or more Life of Mine Plan(s), whether singular or multiple, contemporaneous or consecutive, and excluding any hiatus or cessation of operations for any reason, taking into account any production start-up and wind down periods, as well as any the incremental production expected from the 'Inferred Resources In the Mine Plan' included in the Life of Mine Plan production schedule.	**06.**
Life of Mine Plan (LOMP)	
A 'Life of Mine Plan' (LOMP) is a design, scheduling and economic and financial study of a planned or existing mining or extraction and beneficiation operation in which appropriate assessments have been made of all Modifying and all other issues likely to influence 'economic extraction', including an economic and financial analysis based on an 'Economic and Financial Model' using 'reasonable financial assumptions', which are considered in sufficient detail for the level of Technical Study being undertaken, to demonstrate at the time of the assessment that 'economic extraction is reasonably justified' or 'continued extraction is commercially justified'.	**57.**

Life of Operation Plan	
A 'Life of Operation Plan' is the overall mining/extraction and beneficiation plan for the Mineral Project in cases where there are a number of Sub-Projects with individual discrete 'Life of Mine Plans', and refers to the extraction and beneficiation plans where there are a number of Mineral Resource blocks with Mineral Products of the same Commodity located in separate areas, or Mineral Resource blocks with Mineral Products for different Commodities occurring within the same area, or where the Mineralised Material can be expected to be extracted using more than one primary extraction method, or where a mineral re-processing or recycling beneficiation operation has been initiated for the extraction of additional Mineral Products from 'Extractive Waste Material' on dumps and/or tailing ponds.	**57.**
Manufactured Abrasives	
Manufactured Abrasives are made by heating or chemically treating metals or minerals to give them physical properties needed to abrade, clean, etch, grind, polish, scour, or otherwise remove material by rubbing action (as in a grinding wheel) or impact (pressure blasting). Manufactured Abrasives' most important properties are hardness, toughness (rigidity), grain shape and size, character of fracture, and purity (uniformity). Additional considerations include thermal stability, bonding characteristics, cost, and availability.	**11.**
Marginal Contingent Resource	
A Marginal Contingent Resource is a Mineral Reporting Category of Contingent Resource that has a Geological Confidence at a Low, Moderate or High level of confidence, and where the assessment of the Modifying Factors shows the Mineralised Material with Target Mineral Product(s) of 'potential economic interest' meets the 'possible economic extraction', but that it does not meet the criteria for 'reasonable prospects for economic extraction' at the time of assessment, and where the identified Mineralised Material has a strong likelihood of the 'potential for conversion', at least at a Low, Moderate or High level, to a Mineral Resource in the foreseeable future.	**55.**
Marketable Mineral Reserve	
A Marketable Mineral Reserve is the estimated Quantity and Quality of the beneficiated or otherwise enhanced Mineral Product(s) following modifications due to the mineral processing and metallurgical processing or refining of the Mineralised Material with Mineral Product(s) of economic interest directly associated with the Run of Mine Mineral Reserve of a Mineral Development Project or Extraction Operation, such that the Quantity and Quality of the Mineral Product or Saleable Product (see below) is estimated and reported at the Point of Sale, Transfer or Use Reference Point. The Marketable Mineral Reserve must be reported as appropriate Categories in all Public Reports except when the Saleable Product is declared.[	**71.**
Material Information:	
Material information is any information, associated factor, or constituent relating to the business and affairs of a Mineral Company that results in or would reasonably be expected to result in a significant change in the market price or value of any of the Mineral Company's assets. Material information consists of both material facts and material changes related to the business and affairs of a company with respect to the Mineral Project under consideration. Circumstances are considered material if the omission or misstatement of the associated factor, constituent, or information could influence the economic decisions of users, including investors, potential investors, and their financial advisors. As a rule of thumb, a material difference would be equal to, or exceed, 10% of the particular factor or constituent under consideration.	**77.**
Measured Mineral Resource*	
A Measured Mineral Resource* is that part of a Mineral Resource for which Quantity, Quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed production planning and final evaluation of the economic viability of the Mineral Deposit. The geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and quality continuity between Points of Observation. A Measured Mineral Resource has a Higher level of Geological Confidence than that applying to an Indicated Mineral Resource. A Measured Mineral Resource may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve after appropriate application and consideration of the Modifying Factors.	**60.**

MEI 'Material of economic interest	
'Material of economic interest' (MEI) comprises Mineralised Material that has the potential to provide direct or indirect economic value, financial, or other benefits.	**14.**
Metal Equivalent	
Metal Equivalent is the combined equivalent content of multiple metals within a polymetallic Mineral Deposit expressed as the content of a single primary metal, in a simplified framework for comparing the quality of the Mineralised Material with a mixture a primary metal and multiple secondary metals, co-products and trace elements contained in different polymetallic Mineral Deposits.	**24.**
Metal Product	
A 'Metal Product' is the Commodity expected to be eventually extracted as a single pure metal, or a combination of metals, from the Mineralised Material, expressed as a Mineral Product of defined purity following mining/extraction, mineral processing and metallurgical recovery at the final point of sale, transfer or use Reference Point.	**27.**
Metallic or Non-metallic Minerals Extracted by Solution Mining Methods	
Metallic or Non-metallic Minerals Extracted by Solution Mining Methods ('Solution Extraction') or extracted from mineral-rich brines is any solid Minerals extracted by in-situ dissolution and transfer to the surface in solution, water, steam, or other solvent. The Saleable Product for Minerals extracted by solution mining or from liquid mineral-rich brines should generally be the solid material remaining after crystallisation and the removing or recycling of the solvent.	**10.**
Metallurgical Practical Product Yield	
Metallurgical Practical Product Yield is the predicted yield of a Mineral Product derived due to metallurgical processes or refining operations at a specific Mineral Product quality, with reference to a specific particle size range, after applying the metallurgical processing Discount Factors (efficiency, recovery, purity, metals/chemical compound, amongst others) to the Mineral Processing Theoretical Yield, expressed as a percentage.	**21.**
Metallurgical Process Model	
The Metallurgical Process Model is an estimate of the net efficiency and recovery of the Metal Products(s) or Mineral Products from processed metal, chemical compounds or intermediate processed material derived from the mineral processing circuit through various extractive metallurgical equipment based on the characteristics of the mineral, metal or chemical compound(s) within an existing or anticipated metallurgical process plant or refining facility.	**33.**
Mine Planning Model	
A Mine Planning Model is a representation in two or three dimensions of a Mineral Resource with included adjacent 'Mining Waste', based on a Validated Geological Model, such that an optimised mining/extraction schedule of the estimated Quantity and Quality of the Mineralised Material and associated Mineral Product quantities can be generated over the defined Life of Mine Plan.	**33.**
Mineral	
A Mineral is any substance occurring naturally in or on the Earth, in brines, in or under water, or in stockpiles, or as residues, or in dumps or tailings ponds, having been formed by or subjected to geological processes, but excluding water, oil, gas and geothermal resources.	**10.**
Mineral Asset	
A Mineral Asset is any enforceable tangible or intangible right controlled by the Mineral Company that currently exists related to any potential Mineralised Material that gives the Mineral Company the right to access, or to deny access to, the future economic and other benefits that are expected to flow to the entity through the existing or future 'economic extraction' of the Mineral Product(s) from a Mineral Project.	**01.**
Mineral Commodity	
A Mineral Commodity is a mineral, mineral raw material, or material derived from Mineralised Material of all forms, in an original or processed state, where the material is capable of being delivered, sold, transferred or used.	**08.**

Mineral Commodity Groups	
A Mineral Commodity Group represents the grouping of similar Mineral Commodity types, including but not limited to mineral raw material, metals, precious metals, base metals, minerals, metalliferous minerals, non-metallic minerals, natural aggregates, construction minerals, industrial (non-construction) minerals, agro-minerals, energy minerals, coal and other hydrocarbons, diamonds and other gemstones, dimension stone, ornamental stone and decorative stone, and oil shales.	**09.**
Mineral Company	
Mineral Company is a group, company or reporting entity (including a State-owned Company or any other entity) whose principal activity is, or is planned to be, the extraction of Mineralised Material classed as Mineral Reserves, which may or may not include exploration for Mineralised Material classed as Mineral Resources.	**01.**
Mineral Deposit	
A Mineral Deposit is a known accumulation of a Mineralised Material with potential for Target Mineral Product(s) of 'potential economic interest', in or on the Earth's crust in the form of one or several bodies, masses, accumulations or aggregates of Mineralised Material considered to have the 'potential future economic extraction' under the most favourable circumstances.	**49.**
Mineral Deposit Model	
A 'Mineral Deposit Model' is a systematically arranged body of information that describes some or all of the essential scientific and geological characteristics of a feature, phenomenon or genesis associated with Mineralised Material in similar Mineral Deposit types. A 'Mineral Deposit Model' represents the idealised condition(s) within which the essential components are distinguished, and from which extraneous components may be recognised and excluded.	**44.**
Mineral Development Project	
A Mineral Development Project is a Mineral Project at the Business Development and Appraisal stage of Mineral Asset Development, where a Technical Study has been initiated to assess and evaluate the Scientific merit, Technical feasibility, Environmental viability and Economic viability of a future Extraction Operation.	**02.**
Mineral Estimate Report	
A Mineral Estimate Report: is a summary that classifies the estimates of Quantity and Quality of Mineralised Material on the basis of Project Economic Assessment Criteria that determine whether the Mineralised Material with Mineral Products of 'potential economic interest' meets the requirements of the 'possible economic extraction', 'reasonable prospects for economic extraction', 'economic extraction is reasonably justified', or 'continued extraction is commercially justified', and classifies the estimates into the appropriate 'Mineral Reporting Class' and Mineral Reporting Category on the basis of the level of the Geological Confidence determined by the continuity between the Points of Observation for both Quantity and Quality, the degree of confidence/uncertainty in the Modifying Factors and the effective Technical Study level, and the associated assessment of the Technical feasibility, ESG viability and Economic viability of the Mineral Project.	**30.**
Mineral Estimate Reporting	
Mineral Estimate Reporting is the process of disclosing appropriately Categorised estimates of Quality and Quality of Mineralised Material following the application of a classification framework, used for the evaluation, classification and disclosure of the Quantity and Quality estimates of Mineralised Material with potential for Mineral Product(s), based primarily on the level of Geological Confidence, the degree of confidence/uncertainty in the Modifying Factors, the effective Technical Study level, and the associated assessment of the Technical feasibility, ESG viability and Economic viability of the Mineral Project.	**80.**
Mineral Exploration Project	
A Mineral Exploration Project is a Mineral Project at the Opportunity Identification stage of Mineral Asset Development required to determine the economic potential and level of confidence of the estimates of the Mineralised Material with Target Mineral Products of 'potential economic interest', and can be subdivided in order of appraisal into a Target Generation phase, a Target Evaluation phase, and a Mineral Resource Definition & Delineation phase.	**02.**

Mineral Inventory	
Mineral Inventory is the collective term for all discovered and quantified Mineralised Material with Target Mineral Product(s) of 'potential economic interest' contained within a defined Mineral Deposit that is potentially available for current or future 'economic extraction'.	**50.**
Mineral Occurrence	
A Mineral Occurrence is an identified concentration, mass, accumulation or aggregation of Mineralised Material with the likelihood of containing Target Mineral Product(s) of 'potential economic interest', scientific or technical interest, that is worthy of further investigation.	**43.**
Mineral Processing Model	
The Mineral Processing Model is a representation of the net efficiency and recovery of the Mineral Product(s) or intermediate processed material from the Mineralised Material within an existing or planned mineral processing plant.	**33.**
Mineral Processing Practical Product Yield	
The Mineral Processing Practical Product Yield is the predicted yield of a Mineral Product or stage Mineral Product derived by gravity separation or size separation (or both) in response to mineral processing operations at a specific Mineral Product quality or a specific cut-point density, with reference to a specific particle size range, after applying the mineral processing Discount Factors (amongst others liberation, organic efficiency, fines loss, dilution and contamination) to the Theoretical Yield, expressed as a percentage.	**21.**
Mineral Product	
A Mineral Product is the economically extractable mineral raw material, metal, or mineral-based substance derived from the mining or extraction and beneficiation of Mineralised Material, of economic value, including, products, co-products, and by-products that can be sold or used on the basis of their product specifications, including purity, and market acceptance requirements at the Point of Sale, Transfer or Use Reference Point, based on the estimates of Quantity and Quality of the Mineralised Material with confirmed Mineral Product(s) at an intermediate point of estimation Reference Point.	**27.**
Mineral Product Assessment Model	
The Mineral Product Assessment Model (MPA Model) is a methodology used to convert an estimate or measurement of the Quantity and Quality of the Mineralised Material at a defined 'intermediate point of estimation' Reference Point to an estimate of the Target Mineral Product expected to be produced at the 'point of sale, transfer or use' Reference Point, by applying the appropriate Discount Factor(s) for the Quantity estimates and the appropriate Conversion Factor(s) for the Quality estimates.	**28.**
Mineral Project	
A Mineral Project means any identifiable activity where the Mineral Product quantities, if produced, could be sold, transferred or used, including but not limited to a Mineral Exploration Project, Mineral Development Project, or Extraction Operation, 'Extractive Waste Material' Recycling Operation, closure (decommissioning) or post-closure (remediation) operation, depending on the stage of assessment, evaluation, development, extraction, or closure, which provide the basis for establishing the Scientific merit, Technical feasibility, Environmental-socio-economic (ESG) viability, Economic viability, and Confidence in the estimate(s) of the Mineral Product(s).	**02.**
Mineral Project Evaluation Report (MPER)	
Mineral Project Evaluation Report (MPER) is a report for a Mineral Project at any stage of the Mineral Asset Development process that evaluates, at the time of assessment, the level of knowledge and understanding of the physical nature of Mineralised Material and the current or future technical capability and necessary permissions to extract, beneficiate and produce a Saleable Product, together with an estimate for the realisation of economic value.	**29.**
Mineral Raw Material	
A 'Mineral Raw Material' is the bulk Commodity, typically sourced directly from a mining/extraction operation where the Saleable Product is sold, transferred or used at the Run of Mine (ROM-FTP) Reference Point.	**27.**

Mineral Reporting	
Mineral Reporting is the presentation in any form or context that refers to the estimation, assessment, evaluation, and classification of Mineralised Material, used for defining the level of Project viability based on the Scientific merit, Geological Confidence, Technical feasibility, ESG viability and Economic viability, used for evaluating, classifying and reporting on the 'Mineral Reporting Types', 'Mineral Reporting Classes' and Mineral Reporting Categories of the Quantity and Quality estimates of Mineralised Material with potential for Mineral Product(s) for a Mineral Project, based primarily on the level of Geological Confidence, the degree of confidence/uncertainty in the Modifying Factors, the level of the associated Technical Study, and the Project Economic Assessment Criteria.	**40.**
Mineral Reporting Category	
'Mineral Reporting Category' is part of the defined classification framework, as a subdivision of the 'Mineral Reporting Class', used for classifying the degree of confidence based on the level of Geological Confidence and degree of confidence/uncertainty in the Modifying Factors, for categorising and for reporting the incremental Quantity and Quality estimates of Mineralised Material with potential for Mineral Product(s) for a Mineral Project.	**42.**
Mineral Reporting Class	
'Mineral Reporting Class' is part of the defined classification framework, as a subdivision on 'Mineral Reporting Type', used for classifying the level of economic assessment based on the Scientific merit, Geological Confidence, Technical feasibility, ESG viability and Economic viability, for evaluating, classifying and reporting on the Quantity and Quality estimates of Mineralised Material with potential for Mineral Product(s) for a Mineral Project.	**41.**
Mineral Reporting Type	
'Mineral Reporting Type', as part of the defined classification framework, is determined by the fundamental distinction in the makeup of the information and knowledge of the identified Mineralised Material of 'potential economic interest' with potential for Mineral Product(s), distinguished on the basis of two primary aspects, namely: [1] Exploration Information: representing the fundamental scientific and geological data, including that data derived from valid Point of Observations that are isolated and discontinuous, or [2] Mineral Estimates: representing the derived Quantity and Quality estimates of Mineralised Material based on valid Points of Observation, which have been correlated and modelled to provide an representative estimate of the Quantity and Quality of the Mineralised Material.	**40.**
Mineral Reserve*	
A Mineral Reserve* is the economically mineable or extractable part of a Measured Mineral Resource and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted, and beneficiated, and is the estimated Quantity and Quality of Mineralised Material with Mineral Product(s) of economic interest, such that the level of Geological Confidence of the estimates must meet, at the minimum, the Moderate confidence category and, following the successful completion of Technical Studies at a Feasibility Study (or Pre-feasibility Study) level, with the application of all Modifying Factors, and any other issues likely to influence 'economic extraction', has shown Scientific merit, Technical feasibility, ESG viability and Economic viability, and that at the time of reporting, the Mineral Development Project or Mineral Extraction Operation demonstrate that 'economic extraction is reasonably justified' or 'continued extraction is commercially justified'. Mineral Reserves can be subdivided, in order of increasing levels of confidence, into Probable and Proved Mineral Reserve Categories.	**68.**
Mineral Resource*	
A Mineral Resource* is a concentration or occurrence of Mineralised Material with Target Mineral Products of potential economic interest in or on the Earth's crust in such form, Quantity and Quality that there are 'reasonable prospects for economic extraction'. The location, quantity, quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence, knowledge, and data, including sampling. Mineral Resources are subdivided in order of increasing Geological Confidence into Inferred, Indicated and Measured Mineral Resource categories. The declaration of a Mineral Resource follows the completion of a Geological Report (as a minimum), together with an assessment of all Modifying Factors, which has shown the Mineral Project has Scientific merit, Technical feasibility, ESG viability and Economic viability, and has identified any other issues likely	**59.**

to impact 'economic extraction', such that a declaration can be made that there are ''reasonable prospects for economic extraction'. Mineral Resources are subdivided, in order of increasing Geological Confidence, into Inferred, Indicated and Measured Mineral Resource categories.	
Mineral Resources In the Mine Plan	
'Mineral Resources In the Mine Plan' are the Mineral Resource estimate based only on the Measured Mineral Resources and the Indicated Mineral Resources incorporated within the defined outer-limit mineable boundaries of the scheduled mine design, which constitutes the 'Life of Mine Plan' that covers the expected productive life of a mining, mineral processing and metallurgical beneficiation operation used to define the Mineral Reserves of a Mineral Development Project or Extraction Operation.	**61.**
Mineral Resources Ex the Mine Plan	
'Mineral Resources Ex the Mine Plan' is that portion of a Mineral Resource estimate which, at the time of assessment, has been excluded from the defined outer-limit mineable boundaries of the scheduled mine design, which constitutes the 'Life of Mine Plan' of a Mineral Project, and has thus not been considered for conversion to a Mineral Reserve. At the time of the assessment, the defined Mineral Resource falls outside the expected productive Life of Mine of a Mineral Development Project or Extraction Operation.	**61.**
Mineralisation	
Mineralisation is the consequence of geological processes that result in the accumulation, aggregation, concentration or deposition of Mineralised Material within the host material as a 'concentration' of Mineral Raw Material, consisting of Mineral(s) or 'Natural Stone/ Rock Source Material'.	**10.**
Mineralised Material	
Mineralised Material is mineral raw material or material derived from minerals of all forms, formed by or subjected to geological processes that resulted in the concentration, deposition, accumulation and/or aggregation of any Mineral(s), 'Natural Stone/Rock Source Material', or 'Extractive Waste Material', irrespective of the type of Mineral Deposit, mode of occurrence, genesis or composition, but excluding water, oil and gas.	**13.**
Mineralised Material in Mine Fill	
Mineralised Material in Mine Fill includes all broken Mineralised Material in mine fill currently used for geotechnical support that may contain Mineralised Material of 'potential economic interest'.	**13.**
Mineralised Material in Pillars, Remnants, and Low-Grade Mineralised Material	
Mineralised Material in Pillars, Remnants, and Low-Grade Mineralised Material includes all potentially economic In-situ Mineralised Material contained within mine pillars or remnants, and low-grade Mineralised Material adjacent to the mine workings, which has yet to be extracted.	**13.**
Mining	
Mining includes all activities related to the extraction of metals, Minerals, Natural Stone/Rock and Gemstones from the Earth, whether from surface or underground, and by any method (e.g., quarries, opencast mining, open-pit mining, underground mining, solution mining, dredging, etc.).	**33.**
Mining Horizon	
Mining Horizon is the mineable unit of Mineralised Material as a selected part of a zone or composite combination of defined geological units that represents the expected practical extraction unit(s), including dilution material, used in the mine planning and mine scheduling software to simulate the production within the planned Extraction Operation.	**33.**
Mining Waste	
'Mining Waste' is derived from the extraction of Mineralised Material and includes materials such as topsoil and overburden, which are removed in surface, open-pit or opencast mining operations, as well as waste rock from underground mining operations, to gain access to the Mineral Reserves.	**15.**
Modifying Factors*	
Modifying Factors* are considerations used to assess and estimate Exploration Targets, Mineral Resources and/or Mineral Reserves. These include, but are not limited to, geological, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governance ('ESG') and regulatory factors, as well as the associated Risk Assessment for each component. Modifying Factors	**32.**

are the considerations that define the Scientific merit, Technical feasibility, ESG viability, and Economic viability of the Quantity and Quality estimates of the Mineral Product(s) at each stage of the Mineral Project's life cycle. The level of detail and understanding of each factor varies with the Technical Study level, associated Technological Maturity, and Project Maturity.	
National Reporting Organisation	
National Reporting Organisation (NRO) is an organisation that represents a country or a group of countries and is responsible for preparing a CRIRSCO-aligned reporting code and/or reporting standard for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves.	**00.**
Natural Aggregates	
Natural Aggregates are any naturally-occurring hard (durable), granular, Natural Stone Source Material utilised with or without the addition of cement, lime or bituminous binders in all forms of infrastructure and are essential for civil engineering construction.	**11.**
Natural Stone and Natural Rock	
Natural Stone and Natural Rock are naturally formed Mineral Raw Materials composed of a combination or aggregate of one or more Minerals, or as a body of undifferentiated Mineral matter.	**11.**
Natural Stone/ Rock Source Material	
Natural Stone/ Rock Source Material is a mass or accumulation of Natural Stone or Natural Rock ("Natural Stone/ Rock") in or on the Earth, in or under water, or stored in stockpiles, or as residues, or in dumps or tailings ponds, as a source of Mineral Raw Material for industrial minerals, cement feed materials, construction raw materials, natural aggregates, crushed stone, dimension stone, ornamental stone, and decorative stone, on the basis of technical (geological, structural), product specification (colour, texture, pattern), quality and market acceptance (including fashion).	**11.**
Net Smelter Return	
The Net Smelter Return (NSR) is the expected financial proceeds from Mineral Products after deductions for off-site processing, refining and distribution costs.	**33.**
Nexus	
'Nexus' represents the group of the most important related Components within the framework, and where a Component represents each individual triangle that describes a group of related Elements, and where each Element represents an individual constituent factor, such as the different Modifying Factors contributing to a single or grouped Component.	**00.**
Non-public report	
A Non-public report is a report which contains information on estimates of Mineralised Material which is not intended for public disclosure, and which may contain proprietary or strategic information, and estimates of Mineralised Material that cannot be reported publicly under the auspices of the PERC Reporting Standard, or for reports on estimates of Mineralised Material reported under a classification system, or by a person other than that defined by the PERC Reporting Standard.	**76.**
Oil Shales, Oil Sands, and Other Energy Minerals Extracted by Mining Methods	
Oil Shales, Oil Sands, and Other Energy Minerals Extracted by Mining Methods ('Oil Shales') are hydrocarbons extracted by the processing of mined rock, often characterised by specific characteristics or qualities, such as the likely hydrocarbon Target Product specifications after extraction from the host rock matrix, the proximity to markets, and the general Product marketability.	**10.**
On Hold	
On Hold is where activity on a Mineral Project has is an 'On Hold' status due to delayed or has been temporarily halted for either Non-Technical Contingencies or Technical Contingencies. [1] Non-technical contingencies typically involve delays in establishing the terms and conditions applicable to the Mineral Project, and their resolution usually lies in a negotiated compromise over the Mineral Project's outcome. [2] Technical Contingencies are, however, often where Company management has made a cognitive decision, such as utilising a novel technology option that might be a fatal flaw, thereby increasing the likelihood that the Mineral Project could be abandoned.	**04.**
Operational Study Report	
An Operational Study Report is a detailed assessment of the Life of Mine Plan associated with an existing	**67.**

mining or extraction and beneficiation operation that only requires ongoing stay-in-business capital expenditure, without the need for any significant (or expansionary) capital expenditure, following an assessment of the level of the Geological Confidence, and confirmation of the Scientific merit, Technical feasibility, ESG viability and Economic viability that must include an economic and financial analysis based on an 'Economic and Financial Model' using 'reasonable financial assumptions' based on an appropriate assessments of all Modifying Factors, and any other operational factors, considered in sufficient detail to demonstrate that 'continued extraction is commercially justified', and that all or part of the Mineral Resource may be converted to a Mineral Reserve.	
Ornamental and Decorative Stone	
Ornamental and Decorative Stone are any Natural Stone/ Rock Source Material chosen specifically for the ability to enhance the visual interest and character of a space, including sculpted stone pieces, polished river rocks, specially treated terrazzo stones, and decorative boulders that are visually appealing and serve as features of landscape design.	**11.**
Participating Organisation	
A Participating Organisation is a Recognised Professional Organisation (RPO) which supports and is represented on PERC.	**77.**
Possible economic extraction	
'Possible Economic Extraction' (PEE) is an assessment of Mineralised Material with identified Target Mineral Product(s) of 'potential economic interest' based on the location, physical limits, quality cut-offs, and geological continuity, such that the level of Geological Confidence in the Quantity and Quality estimates meets at least the Very Low confidence category, and where reasonable assumptions of the likely mining dimensions, mineral processing and metallurgical beneficiation options, and the assessment of the material Modifying Factors are such that the estimated Mineralised Material can, in whole or in part, meet the requirements of 'economic extraction' in the foreseeable future.	**52.**
Potential economic interest	
'Potential Economic Interest' (PEI) is based on the assessment of an accumulation of Mineralised Material with potential for Target Mineral Product(s) that occurs in such a form or geometry that potential economic value could be derived from the Target Mineral Product(s) or Target Mineral Raw Material(s) that could be extracted in the foreseeable future.	**25.**
Potential future economic extraction	
'Potential Future Economic Extraction' (PFEE) is an assessment of the Mineralised Material with potential Target Mineral Product(s) of 'potential economic interest', which, in whole or in part, has the potential to meet the requirements for 'economic extraction' in the foreseeable future, based on limits set by physical and grade/quality cut-offs, and other constraints, in conjunction with the assumptions (or assessments) of the Modifying Factors.	**51.**
Physical Point of Observation	
Physical Point of Observation is a survey-coordinated location from which accurate measurements of the thickness and/or orientation of the Mineralised Material can be recorded, and from which an interpretation of the structural continuity of the Mineral Deposit(see below) can be made.	**17.**
Point of Observation	
Point of Observation is a survey-coordinated location that can be used for the characterisation of the geological features, physical parameters, and quality characteristics of identified zone(s) of Mineralised Material within a Mineral Deposit	**17.**
Potential for Conversion	
'Potential for Conversion' is the assessment of the likelihood of the conversion of a Contingent Resource to a Mineral Resource must include a consideration of all Modifying Factors that contribute, or are expected to contribute, to the likelihood of meeting the requirements for 'reasonable prospects for economic extraction', including the assessment of the associated Geological Confidence of the Quantity and Quality estimates of the Mineralised Material.	**53.**
Potential Mineral Source	
Potential Mineral Source is an undefined source of Mineralised Material that has not yet been	**13.**

demonstrated to exist, but has been assessed as potentially existing, either as an Undiscovered Source, based only on indirect evidence or Exploration Information, or a Known Source, based on evidence identified from very limited data associated with valid Exploration Results.	
Practical Yield	
The Practical Yield of a Mineral Product is an estimate of the net recovery of a Mineral Product, at a specific quality or purity in response to the practical effects of the mineral processing and metallurgical recovery operations, with reference to a particular size of particle range, after applying the relevant mineral processing and metallurgical recovery and efficiency factors, (amongst others liberation, organic efficiency, fines loss, metal recovery, etc.) to the Theoretical Yield of the Mineral Product, on a diluted and contaminated basis, and reported on a defined moisture reporting basis, expressed as a percentage.	**21.**
Pre-Feasibility Study*	
A Pre-Feasibility Study* is a comprehensive Technical Study of a range of options for a Mineral Project that has advanced to a stage where the preferred methods of extraction and beneficiation have been determined. It includes a comprehensive study of the level of Geological Confidence, and a range of options with respect to the Scientific merit, Technical feasibility, ESG viability and Economic viability alternatives for a Mineral Project based on demonstrated assumptions and assessments of all Modifying Factors, including an economic and financial analysis using 'reasonable financial assumptions', and the evaluation of any other relevant operational factors which are sufficient to determine at the time of reporting that 'economic extraction is reasonably justified' and whether all or part, of the Mineral Resource, may be converted to a Probable Mineral Reserve. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.	**64.**
Probable Mineral Reserve*	
A Probable Mineral Reserve* is the economically mineable part of an Indicated Mineral Resource, and, in some circumstances, a Measured Mineral Resource. A Probable Mineral Reserve is Mineralised Material with Mineral Products of economic interest such that the level of the Geological Confidence in the Quantity and Quality estimates must meet, at the minimum, the Moderate confidence category and, following the successful completion of a minimum of a Pre-feasibility Study with the application of all Modifying Factors and any other issues likely to influence 'economic extraction', has shown Technical feasibility, ESG viability and Economic viability, and demonstrates that at the time of reporting the Mineral Development Project or Mineral Extraction Operation shows that 'economic extraction is reasonably justified' or 'continued extraction is commercially justified'. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.	**69.**
Production Schedule	
Production Schedule is the expected sequenced production of the Mineral Product, accounting for each component of the extraction process, namely mining, mineral processing and metallurgical recovery, such that the schedule of tonnage/volume and quality represents a reasonable estimate of the production of the Mineralised Material and associated expected Mineral Product quantities and qualities over the Life of Mine.	**57.**
Project Assessment Discriminator	
Project Assessment Discriminators are the criteria used for assessment of a Mineral Project including (1) the degree of confidence in the Technology Maturity of the selected technology(s); (2) the appropriate Technical Study level of the selected assessment to establish the combined Geological Confidence, Technical feasibility, ESG viability; (3) the Project Economic Assessment Criteria used to define the stepwise assessment of the potential economic value of a Mineral Project and associated Economic viability, and (4) the Project Maturity assessment of the probability that the Mineral Project Is expected to achieve viable production of the identified Mineral Product(s).	**07.**
Project Development Works Programme	
Project Development Works Programme is a planned, scheduled and costed programme of investigation as part of the Business Development and Appraisal phase of Mineral Asset Development, designed to progress a Mineral Development Project through successive levels of evaluation. A Project Development Works Programme that evaluates a Mineral Deposit with Mineralised Material of 'economic potential', comprises investigative activities including, but is not limited to, but not limited to, additional Exploration Works Programmes, Technical Studies, technology evaluation and testing, trial mining, feasibility of	**02.**

mining/extraction, mineral processing and metallurgical recovery, completion of ESG studies (and associated ESG obligations), ESG viability assessments, Mineral Product development work, economic modelling and financial assessment, application for capital, submission of extraction permits and associated obligations.	
Project Economic Assessment	
The 'Project Economic Assessment' represents a sequential assessment of the potential economic value of a Mineral Project at the different stages of exploration, development, operation, or closure, using the assessment criteria of Scientific merit, Technical feasibility, ESG viability, Economic viability and Confidence in the estimates to examine the opportunity for the 'economic extraction' of the Mineral Product(s) of 'potential economic interest'.	**07.**
Project Forward Works Programme	
Project Forward Works Programme is the immediate component of a set of planned, scheduled and costed investigative works programmes designed to progress the Business Proposition to the next stage of assessment and evaluation.	**02.**
Project Lifetime	
The 'Project Lifetime' is the remaining period of time within which a Mineral Development Project and/or Extraction Operation can be expected to operate, constrained by technical, economic, regulatory or other permit/licence expiry dates. The 'Project Lifetime' is typically constrained by the period for which the exploration licences, mining licences, environmental permits, or other licences may apply to the Mineral Project. The mining licence or permit would typically include the mining/extraction, beneficiation, processing, decommissioning, and remediation stages of the Project life cycle.	**06.**
Project Maturity	
Project Maturity is an assessment that corresponds to the probability that the Mineral Project is expected to achieve viable production and the sales, transfer, or use of the Mineral Product(s), based on the associated actions, including business decisions, access to capital, and government regulatory permits, amongst others, required to progress from a Mineral Exploration Project, to a Mineral Development Project, and eventually to a viable Extraction Operation.	**39.**
Project Risk	
Project Risk represents the unwanted impacts from episodic events, hazards or threats that may affect the Mineral Project from a temporal or spatial perspective. Some Project Risks may be entirely mitigated, while others, stemming from specific events, hazards, or threats, can only be reduced but never eliminated. These Project Risks may, at times, materially impact the business, and thus affect the ultimate delivery of the Quantity and Quality of the Mineral Product(s) from the Mineral Project, as forecast in the Life of Mine Plan.	**38.**
Project Risk Assessment	
A Project Risk Assessment is a qualitative or quantitative assessment of the overall residual Risks to a Mineral Project resulting from the inherent uncertainty or uncertainties in individual factors known, unknown or yet to be resolved, taking into account the maximum impact such an unwanted event, hazard, or threat occurring will have on the Mineral Project.	**38.**
Project Time frame	
A 'Project Time frame' is the expected elapsed time required to undertake all the components necessary or remaining to ensure the required level of Geological Confidence, confirmed Technical feasibility, ESG viability and Economic viability associated Regulatory approvals and financial backing needed to implement the Mineral Development Project, including the financing, construction and scale-up of production of the Mineral Product (up to the official hand over to the Extraction Operation).	**05.**
Project Viability	
Project Viability is an assessment of the key components of a planned or existing mineral Extraction Operation based on the confirmation of (1) the Scientific Merit - the characteristics, features of, and confidence in the Mineral Deposit and associated Mineralised Material, (2) the Technical feasibility - the technical achievability and probability of success, (3) the ESG viability - the mining/extraction and beneficiation without compromising the legacy of generations to meet future needs, and (4) the Economic viability - the associated value creation to the business and any other economic effects through the	**02.**

marketing of the Mineral Product(s).	
Prospective Project	
Prospective Project is a Mineral Project where the existence of a Potential Mineral Source of Target Mineral Product(s) is based primarily on indirect evidence, where the Technical feasibility of the Mineral Project and the degree of Confidence in any associated Quantity and Quality estimates of the conceptual Target Mineral Product(s) have not yet been confirmed.	**02.**
Proved Mineral Reserve*	
A Proved Mineral Reserve* is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve is Mineralised Material with Mineral Products of economic interest such that the level of confidence in the Quantity and Quality estimates must meet the high confidence category and, following the successful completion of a Feasibility Study with the application of all Modifying Factors and any other issues likely to influence 'economic extraction', has shown Technical feasibility, ESG viability and Economic viability, and demonstrates that at the time of reporting the Mineral Development Project or Mineral Extraction Operation shows that 'economic extraction is reasonably justified' or 'continued extraction is commercially justified'. A Proved Mineral Reserve requires a high degree of confidence in the Geological Confidence and the Modifying Factors.	**69.**
Public Report*	
A Public Report* is a report prepared to inform investors or potential investors and their professional advisers on Exploration Results (including Exploration Targets), Mineral Resources or Mineral Reserves. It includes, but is not limited to, company annual and quarterly reports, media releases, information memoranda, technical papers, social media announcements, website postings and public presentations.	**77.**
Quality	
Quality is the distinctive characteristic of Mineralised Material or Natural Stone / Source Material to which value is ascribed. Quality is expressed as an estimate or measurement of the composition or characteristics of the Mineralised Material with Mineral Product(s) of 'potential economic interest' together with the constituent components, the type of material, mode of occurrence, chemical composition, purity or other characteristics of the Mineral Product, measuring basis, reporting basis of the disclosed compositional element(s), and the Reference Point at which the quality estimate or measurement is made. Where appropriate, the relevant Discount Factor(s) and Conversion Factor(s) must be applied to adjust the quality estimate or measurement from the 'intermediate point of estimation' Reference Point to the Reference Point used for reporting the estimate or measurement.	**20.**
Quality Point of Observation	
Quality Point of Observation is a survey-coordinated location from which accurate sampling is undertaken and appropriate analyses of the Mineralised Material are carried out, and where the data are separated into appropriate groupings of Quality Points of Observation, based on the type of sampling, sample recovery, sample preparation, method of analysis and the components of the analysis undertaken	**17.**
Quantity	
Quantity is expressed as an estimate or measurement of tonnage or volume. The nature of the quantified Mineralised Material and the method of the quantification may change as determinations are made at different 'intermediate point of estimation', Reference Points within the mineral evaluation and exploitation chain of a Mineral Project. The nature of the quantified Mineralised Material, the method of quantification, the measuring basis of the reported quantity, the reporting basis of the reported quantity, and the Reference Point at which the quantity estimate or measurement is made must be provided. Where appropriate, the relevant Discount Factor(s) and Conversion Factor(s) must be applied to adjust the quantity estimate, or measurement, from the 'intermediate point of estimation' Reference Point to the Reference Point used for reporting the estimate or measurement.	**20.**
Quantity and Quality of Mineralised Material	
Quantity and Quality of Mineralised Material is estimated or measured by an independent assessment of the quantity and the quality of the Mineralised Material, and any contained potential Target Mineral Product(s) or Mineral Product(s). The quantity estimates and quality estimates of the Mineralised Material with Target Mineral Product(s) of 'potential economic interest' are made at various Reference Points in the mineral evaluation and exploitation chain of a Mineral Project.	**20.**

Reasonable financial assumption	
'Reasonable financial assumptions' are considered and well-researched inputs to the 'Economic and Financial Model' made by Mineral Companies that provide the required economic inputs, including but not limited to the Commodity price, exchange rate, interest rate, taxation, royalty(ies), cost of capital, etc., and the financial inputs, including but not limited to the cost of labour, operating costs, capital costs, environmental liability provision costs, etc., which on peer review would be considered reasonable at the time of the assessment, taking into consideration such factors as historical performance, operational strategy, market conditions, industry projections, etc., over the Life of Mine Plan of the expected Extraction Operation.	**36.**
Re-assess	
'Re-assess' means remaining in the same Stage rather than proceeding to the next Stage.	**00.**
Recognised Professional Organisation	
A Recognised Professional Organisation (RPO) is an organisation or association which is recognised for the purposes of the PERC Reporting Standard as providing the professional qualifications or registration required for a person to act as a Competent Person.	**77.**
Reconciliation	
Reconciliation is a process in which two distinct versions of an estimate or measurement are compared at various points of observation and/or timeframes, and the observed differences are explained through a series of stepwise comparisons, with the objective of using the differences to improve future Mineral Estimates or Production efficiencies.	**77.**
Recovery	
Recovery is the percentage of material of initial interest that is extracted during mining/extraction and/or mineral processing and metallurgical processing. A measure of mining/extraction efficiency and/or beneficiation efficiency that can be measured individually, or as the overall or net recovery.	**33.**
Reference Point	
The Reference Point is a specified logical point in the mineral evaluation and exploitation chain of a Mineral Project at which the reported Quantity and Qualities are measured, assessed or estimated for Mineralised Material or its derivatives, in whatever form or composition, including the associated Target Mineral Product(s) or Mineral Product(s). The Reference Point may be the point of sale, transfer or use for the Saleable Product, or it may be an intermediate stage, where the reported Quantity and Qualities account for the losses and adjustments prior to, but not subsequent to the intermediate point of estimation, such as the in-situ (or "in-place") intermediate point of estimation, or the ROM-FTP feed to the mineral processing plant (or "as mined") intermediate point of estimation, or the marketable (or "as produced") intermediate point of estimation.	**23.**
Registered Professional	
A Registered Professional, an expert who is not a specialist in the Minerals Industry, provides a contribution at the discretion and nomination of a Lead Competent Person as part of a team in the preparation of a Competent Person's Report or other Technical Report, who is registered or accredited, and in good standing with, an organisation of relevance or requirement to the pursuit of their profession, and provides specialist input, is identified with, and provides sign off for, their specific individual contribution to the report.	**77.**
Regulatory Factor	
Regulatory Factors form part of the Modifying Factors, and include external governmental and other regulatory factors, whether specified by national, regional or local governments, or by other regulatory authorities or agencies, including stock exchange regulators. Regulatory factors include the fiscal regime, applicable legislation, legislation on production sharing, royalties, limits on the employment of expatriates, infrastructure use agreements, and terms and conditions applied to licences for exploration and mining, etc.	**74.**
Regulatory Permissions	
Regulatory Permissions include all required documentation, permits, licences and any other form of entitlement, to retain, to prospect for, or to extract Minerals, Metals or Mineral Raw Material from a Mineral Asset, including all ongoing reporting requirements, and financial or rehabilitation insurance	**74.**

obligations.	
Relative Density	
Relative Density is the ratio of the mass of a material with respect to the mass of an equivalent volume of the reference material, typically water, mass per unit volume of a material, typically associated with in-situ Mineralised Material.	**20.**
Reporting of Exploration Results	
The Reporting of Exploration Results includes data and information generated by Exploration Works Programmes that might be of use to investors or potential investors and their professional advisers, but which does not form part of a declaration of a Contingent Resource, Mineral Resource, or Mineral. Any Reports on Exploration Results must contain sufficient information to allow a considered and balanced judgement of their significance.	**47.**
Responsible Person	
Responsible Person is a person working for or nominated by a Mineral Company other than a contributing person defined by the competency requirements of the PERC Reporting Standard, working within a corporate or business structure and responsible for the review of a Technical Report of whatever nature, the consolidation of mineral estimates from multiple Mineral Projects where appropriate or necessary, and the facilitation of Public Reporting of those estimates of Mineralised Material.	**77.**
Review	
Review is a formal inspection or examination of any number of elements of the Mineral Resource and Mineral Reserve estimation process, that is undertaken in order to validate the adherence to standards and procedures, including examination of the procedures used to collect, compile, and manipulate data (possibly including a detailed examination of the base primary data), in order to identify material errors and/or omissions or improvements, by a person competent to do so.	**18.**
Risk	
Risk is the effect of uncertainty on attaining defined objectives and which represent potential threats or opportunities. Risk applies to situations where the outcome of a given situation is uncertain, but can be estimated or measured to a certain level of confidence. Risks apply to all Modifying Factors and include scientific, geological, technical, ESG, and economic potential threats and opportunities, which are typically managed in an integrated manner.	**38.**
Risk Rating	
The Risk Rating is the quantified assessment of a recognised unwanted event, hazard, or threat through the consideration of the magnitude of the potential loss should it occur (“loss consequence”), as well as the probability that the identified Risk is expected to occur (“probability of occurrence”).	**38.**
RPEE reasonable prospects for economic extraction	
'Reasonable prospects for economic extraction' (RPEE) is a realistic assessment of Mineralised Material with Target Mineral Product(s) of 'potential economic interest', such that the level of Geological Confidence in the Quantity and Quality estimates must meet, at the minimum, the Low confidence category, and which, under reasonably assumed and justifiable Modifying Factors, and any other issues likely to influence ‘economic extraction’, must demonstrate Technical feasibility, ESG viability and Economic viability of the Target Mineral Products, which may, in whole or in part, become economically extractable in the foreseeable future.	**56.**
Run of Mine Mineral Reserve	
A Run of Mine Mineral Reserve (or ROM Mineral Reserve) is the estimated Quantity and Quality of the extracted but un-beneficiated Mineralised Material with Mineral Product(s) of economic interest directly associated with the Mineral Reserve of a Mineral Development Project or Extraction Operation, such that the Quantity and Quality of the Mineralised Material (contaminated and diluted) is estimated and reported at the Run of Mine (ROM-FTP) Intermediate point of estimation Reference Point. The Run of Mine Mineral Reserve must be reported as appropriate Categories in all Public Reports.	**70.**
Saleable Product	
A Saleable Product is the estimated Quantity and Quality of the final Mineral Product following modifications due to the mining or extraction, mineral processing and metallurgical recovery or refining	**72.**

of the Mineralised Material with Mineral Product(s) of economic interest, associated with a Mineral Development Project or Extraction Operation, such that the reported Quantity and Quality represents the final form of the Mineral Product as sold or used, at the Point of Sale, Transfer or Use Reference Point.	
Scientific merit	
Scientific merit is a measure of how well a study upholds scientific principles, methodologies, and the impact it has on advancing knowledge. Scientific merit is an assessment of the characteristics that may contribute to or influence the recognition, delineation, disposition, or exploitation of a Mineral Deposit in its natural state, and the associated factors that may have an impact on future potential value creation through exploitation, including but not limited to, geological description, mineralogical composition, and geographical (spatial) location.	**07.**
Scoping Study*	
A Scoping Study* is an order of magnitude Technical, Study of the potential viability of Mineral Resources that includes appropriate assessments of all Modifying Factors together with any other operational factors that are necessary to that are necessary to establish the Scientific merit, Technical feasibility, ESG viability and Economic viability of a proposed Mineral Project, to present a business case through a high-level economic and financial analysis using 'reasonable financial assumptions' to demonstrate 'reasonable prospects for economic extraction' and to provide justification for further investigation and technical work on the Modifying Factors in a more comprehensive technical studies Pre-feasibility Study to identify the preferred option for future 'economic extraction'. A Scoping Study is at a lower confidence level than a Pre-Feasibility Study.	**58.**
Short Form Competent Person's Report	
Short Form Competent Person's Report is a summary extract from a Competent Person's Report that provides all material data, opinions and recommendations of the Lead Competent Person, or with appropriately considered releases of Exploration Results, Mineral Resources and Mineral Reserves, that can be understood by investors or potential investors and their professional advisors, as well as Securities Exchange technical personnel.	**29.**
Social Licence to Operate	
Social Licence to Operate (SLO) refers to the ongoing acceptance of a Mineral Company or industry's standard business practices and operating procedures by its employees, stakeholders, and broader society, including land claims, legislated social management programmes, mandated labour agreements, etc.	**74.**
Stage	
'Stage' represents the various step-wise changes in the Mineral Asset Development, from an Exploration Target through an Exploration Project, Mineral Development Project, to an Extraction Operation, and Extractive Waste Recycling Operation.	**01.**
Stage Gate	
Stage Gate is a decision-making point to determine whether to Proceed, Re-assess, Suspend or Abandon the works programme of a Mineral Exploration Project or Mineral Development Project, based on an assessment of the level of knowledge and confidence in the Geological Confidence and Modifying Factors, the level of the associated Technical Study, and the envisaged Business Proposition, and thus, whether or not to progress to the next stage of the Forward Works Program.	**01.**
Stockpile	
A Stockpile include all potentially economic Mineralised Material contained within both surface and underground accumulations of broken Mineralised Material that has been mined and stored, and is waiting for processing, including broken 'ore' in stopes, and can consist of Mineralised Material currently in the 'ore' storage system on an Extraction Operation.	**13.**
Submarginal Contingent Resource	
'Submarginal Contingent Resource' is a Mineral Reporting Category of Contingent Resource that has a Geological Confidence in the Very Low or Undetermined level, but where the assessment of the Modifying Factors shows that the Mineralised Material with Target Mineral Product(s) of 'potential economic interest' shows 'potential future economic extraction' but does not currently meet, and is unlikely to meet the criteria for 'reasonable prospects for economic extraction' in the foreseeable future, due to a low	**54.**

'potential for conversion'.	
Sub-Project	
A Sub-Project is a discrete portion of a Mineral Deposit or is a separate Mineral Deposit of the same or different Mineral Commodity with well-defined and specific boundary limits of the Mineral Project that a Mineral Company chooses to develop preferentially, and for which the extraction methodologies, evaluation, assessment, and classification of the Quantity and Quality of the Mineralised Materials can be individually distinguished from the remaining portions of the Mineral Asset.	**02.**
Supporting Documentation	
Supporting Documentation provides information that accompanies or substantiates research, a primary document or a conclusion. Such information would include the primary data, information derived from the data, results of any research or investigation, the analysis or aggregation of such information, and reports that provide updates on the progress, status, and outcomes of a particular research element relevant to the Mineral Project with a high degree of detail, including the specific objectives, methodologies, and outcomes.	**77.**
Suspended	
Suspended is where no 'activities and facilities', both on-site and off-site, required to progress a Mineral Project are taking place, but the legal right(s) to the Mineral Asset remain valid and with the Mineral Company.	**04.**
Tangible Exploration Target	
A Tangible Exploration Target is a statement or estimate of the exploration potential of a Mineral Deposit in a defined geological setting where the statement or estimate, quoted as a range of quantity and a range of quality, relates to Mineralised Material for which there has been insufficient exploration to estimate Mineral Resources. A Tangible Exploration Target is a statement or estimate of a Known Source of Mineralised Material within a defined geological setting that contains Target Mineral Product(s) of 'potential economic interest', identified by direct evidence based on valid Exploration Results and Exploration Information obtained through exploration activities. The statement or estimate follows an initial assessment of all material Modifying Factors and any other issues likely to influence 'economic extraction' in the future, such that a declaration of 'potential future economic extraction' 'can be made. A Tangible Exploration Target is presented as a conceptual range of Quantity and a conceptual range of Quality.	**48.**
Target Evaluation Report	
A Target Evaluation Report is a geological assessment that outlines the results of all, or part of, a defined Exploration Works Programme designed to test the Conceptual Exploration Target and where encouraging Exploration Results provide the basis for declaring a Tangible Exploration Target, in conjunction with the construction of a Conceptual Geological Model.	**30.**
Target Generation	
Target Generation is the process or processes of identifying a mineral source or prospective areas with potential for Mineralised Material with Target Mineral Products consistent with a selected 'Mineral Deposit Model' and an associated postulated Conceptual Exploration Target.	**30.**
Target Generation Report	
A Target Generation Report is a geological assessment that outlines the rationale for the exploration strategy in a specific region to search for a particular type of Mineral Deposit based on the characteristics of a 'Mineral Deposit Model' in combination with any available Exploration Information to generate the Conceptual Exploration Target to meet the objectives of the Mineral Company's strategic planning.	**30.**
Target Metal Product	
A 'Target Metal Product' is the predicted Commodity expected to be eventually extracted as a single pure metal, or a combination of metals, from the Mineralised Material in an identical form to the as analysed metal content(s) of the sampled Mineralised Material in the analytical samples, and which are expected to the produced as a Mineral Product of defined purity following mining/extraction, mineral processing and metallurgical recovery at the final point of sale, transfer or use Reference Point.	**26.**

Target Mineral Product	
A Target Mineral Product is the expected theoretical outcome of a Mineral Product from the proposed extraction and beneficiation of Mineralised Material that is estimated to be produced at the Point of Sale, Transfer or Use Reference Point, based on the estimates of Quantity and Quality of the Mineralised Material with potential for such Target Mineral Product at an intermediate point of estimation Reference Point. The Target Mineral Product Quantity and Quality is reported within an established framework of potential Mineral Product assumptions and objectives expected to be sold on the basis of a set of product specifications, including metal content, technical specifications and quality, the 'as mined' product in all its forms, shapes and dimensions, or as a raw material.	**26.**
Target Mineral Raw Material	
A 'Target Mineral Raw Material' is the predicted bulk Commodity equivalent of a Target Mineral Product, typically sourced directly from a mining/extraction operation where the Mineral Product is sold, transferred or used at the Run of Mine (ROM-FTP) Reference Point.	**26.**
Technical feasibility	
Technical feasibility is an assessment of the tools and knowledge required for the practical exploitation and beneficiation of the Mineralised Material to produce a Mineral Product, based on the level of maturity of the Technical Studies and other commitments necessary that may impact the achievability and probability of success; including but not limited to mine planning, mining/extraction, mineral processing, metallurgical recovery, infrastructure (including transport, utilities, services).	**07.**
Technical Model	
A Technical Model is a mathematical representation of the technical mining/extraction and beneficiation processes, based on the best available numerical design, process efficiency and recovery factors, that is needed to develop an optimised extraction schedule of the estimated Mineral Product(s) quantities that are expected to be produced over the Life of Mine Plan from the estimates of the Quantity and Quality of the Mineralised Material identified on the Mineral Project.	**33.**
Technical Report	
A Technical Report is a document that describes any process, progress, or results of a technical or scientific nature, or the status of any technical or scientific investigation that pertains to all aspects of a Mineral Project, with the primary purpose of disseminating primary source data, or secondary derivative data or interpretative information, or high-level review, opinion, and recommendation (or combination thereof); including the documentation of the ancillary information necessary for interpreting, applying, and replicating the results or techniques of an investigation.	**29.**
Technical Specialist	
A Technical Specialist, a specialist in the Minerals Industry, provides a contribution at the discretion and nomination of a Lead Competent Person as part of a team in the preparation of a Competent Person's Report or other Technical Report, who does not meet the criteria of a Competent Person or Registered Professional in their own right, and provides specialist input, is identified with, and provides sign off for, their specific individual contribution to the report.	**77.**
Technical Study	
A Technical Study is a comprehensive study of the level of Geological Confidence, Technical feasibility, ESG viability, and Economic viability of the development option(s) for a Mineral Project that includes appropriately detailed assessments of all applicable Modifying Factors, together with any other relevant operational factors.	**31.**
Technical Study level	
Technical Study level reflects the scope, degree of understanding, and level of accuracy applied to a formal Technical Study, and may be subdivided into four types, namely a [1] Geological Report, [2] Scoping Study; [3] Pre-Feasibility Study; [4] Feasibility Study; and [5] Operational Study Report. In cases where not all elements of the Technical Study are at the same degree of confidence, the effective (not nameplate) level of such Technical Studies must be assessed, such that the aggregated overall degree of confidence in the results of these studies must be defined as low, moderate, or high.	**31.**

Technology Maturity	
Technology Maturity is an assessment of the level of understanding and associated degree of confidence obtained through appropriate studies and, if relevant, successful demonstration plants, of the required technology (including mining, mineral processing, and/or metallurgical recovery), where the selected technology is expected to contribute to a material degree in the extraction, processing, refining or production of the Mineral Product(s) from the identified Mineralised Material.	**34.**
Theoretical (contaminated) Yield	
The Theoretical (contaminated) Yield of a Target Mineral Product on a diluted and/or contaminated basis is based on the laboratory analytical results from drill hole core samples, channel samples or bulk samples, which have been adjusted for included non-sampled partings and/or added Mining Waste to represent the planned dilution material and expected contamination material included in the raw material that represents the future feed to the mineral processing plant.	**21.**
Theoretical Yield	
The Theoretical Yield of a Target Mineral Product (or Theoretical Yield of a Target Raw Material Product) is an estimate, of the analytically derived net recovery of the Target Mineral Product at a specific Mineral Product quality or purity (and/or in some cases at a specific size cut-point or density cut-point), with reference to a specific particle size range, on an undiluted and uncontaminated basis, typically reported on an air-dried moisture basis, expressed as a percentage.	**21.**
Tonnage	
Tonnage is an expression of the amount of physical material of interest, irrespective of the units of measurement (which should be stated together when the tonnage estimates are reported).	**20.**
Uncertainty	
Uncertainty is the limitation to the degree to which a particular outcome from one or more actions can be predicted.	**38.**
Undiscovered Source	
Undiscovered Source is a conceptual unknown source of Mineralised Material that has been postulated to potentially exist, based only on indirect evidence, typically from Target Generation studies or Exploration Information, and where no Mineralised Material of sufficient quantity has been discovered to date.	**13.**
UNFC Category-basis Classification	
A UNFC Category-basis Classification approach is a framework for reporting estimates in a standardised manner to facilitate the incorporation of the classified estimates of *mineral Product Quantities* based on estimates of the Quantity and Quality of Mineralised Material situated on individual Mineral Projects on a line-item category basis into Mineral Inventory databases held by Government Agencies, national Geological Surveys, Mineral Companies, or other interested parties.	**78.**
UNFC Classification	
The UNFC Classification system, as applied to mineral resources, evaluates the *mineral Product Quantities* derived from estimates of the Quantity and Quality of Mineralised Material from a Project-basis perspective. The UNFC Classification system independently evaluates the Environmental-socio-economic viability of the Mineral Project, the Technical feasibility of the Mineral Project, and the associated Confidence in the estimates of the UNFC *Product Quantity* at the point of sale, transfer or use Reference Point, using a three-digit Numerical Code.	**78.**
UNFC Numerical Code	
UNFC Numerical Code is a three-digit numerical designation corresponding to a Class or Sub-class of resource Quantity as defined in the UN Framework Classification for Resources, given in the consistent order E-F-G, corresponding to the environmental-socio-economic viability (E), technical feasibility (F), and degree of confidence in the estimate (G).	**78.**
UNFC *mineral Product Quantity*	
UNFC *mineral Product Quantity* forms the fundamental cornerstone of the UNFC Classification system and refers to the estimated Mineral Product(s) at a pre-defined quality or content that may be derived from an entire Mineral Project in terms of aggregated estimated quantities.	**78.**

UNFC Project-basis Classification	
A UNFC Project-basis Classification approach is a framework for reporting estimates in a standardised manner to facilitate the evaluation and the classification of the estimates of *mineral Product Quantities* expected to be produced from individual Mineral Projects, to be able to compare and rank multiple Mineral Projects, from early exploration through to mining/extraction, processing, and recycling.	**78.**
Unrecoverable	
Mineralised Material(s) for which there are no Material of Economic Interest with Target Mineral Product(s) of 'potential economic interest' at the time of assessment, based on negative assumptions or assessments of at least one or a combination of the available geological and scientific information, or the Technical, ESG and Economic Modifying Factor Groupings, such that the identified Mineralised Material are regarded as being unexploitable at the time of the assessment.	**25.**
Validated Geological Model	
A specific model constructed using direct evidence collected as spatially located valid Exploration Results to evaluate the relationships between the geological data, sampling and analytical data and other information needed in order to provide a reasonable representation of the three-dimensional space in which the Mineralised Material occurs. A Validated Geological Model, as a representation of the geological data (in two or three dimensions) that can be used as the basis to divide a Mineral Deposit into Geological Domains with different characteristics, and to estimate the Quantity and Quality of Mineralised Material with Target Mineral Products of 'potential economic interest' within each identified domain. A Validated Geological Model is required to be able to estimate Contingent Resources or Mineral Resources by a person competent in the building of Geological Models, and such a Geological Model must be subject to a regular Review and Audit process.	**19.**
Yield	
The Yield is an estimate of the net recovery of the Target Mineral Product(s) or Mineral Product(s) at a specific quality or purity, with reference to a specific particle size range, and specific density cut-point, on a defined moisture basis, in response to the effects or anticipated effects of the mineral processing and metallurgical recovery operations, after accounting for all relevant mineral processing and metallurgical recovery and efficiency factors (amongst others dilution, contamination, liberation, organic efficiency, fines loss, metal recovery, etc.) at a defined Reference Point, expressed as a percentage.	**21.**
Waste	
'Waste' is any material resulting from prospecting, mining/extraction, treatment and storage of Mineralised Material and the working of quarries which the holder discards, or is required to discard.	**12.**

Comment: *The Quick Guide to the AIA Summary Glossary of Reserved Terms and Terminology presented above was prepared to accompany the* ***PERC Mineral Project Evaluation Report Template*** *(MPER Template) [PERC MPER Template 2024].*

*The Quick Guide to the AIA Summary Glossary forms Appendix 1 of the more substantial Reference Document prepared as '****AN INTEGRATED APPROACH TO MINERAL PROJECTYS: INTERNAL MINERAL COMPANY REPORTING, NON-PUBLIC REPORTING, AND PUBLIC REPORTING UNDER THE PERC REPORTING STANDARD****', which should be consulted for additional guidance on the application of the terminology to be used for Internal Company reporting, Non-public reporting and-Public Reporting under the* ***PERC Reporting Standard 2021****. (Available at: www.percstandard.org/perc-standard/).*