

UNFC Mineral Specifications and Guidelines for Minerals

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Application of UNFC to minerals and anthropogenic resources: Sustainable management of raw material resources, 26 August 2020

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The Minerals Working Group (26 members, 18 different countries)

Name	Country	Name	Country	Name	Country
Aaron Johnsen	USA	Harikrishnan Tulsidas	Switzerland	Micha Zauner	Germany
Anke Penndorf	Germany	Hendrick Falk	Canada	Michael Neumann	Germany
Anne Allendorf-Schicht	Germany	Hussein Allaboun	Jordan	Mucella Ersoy	Turkey
Bernd Teigler	Germany	Ibrahima Caoulibaly	Cote d'Ivoire	Rafal Misztal	Poland
Bianca Neumann	Germany	Johann Gotsis	Germany	Ruth Allington	UK
Brenda Lothion	France	Kaj Lax	Sweden	Sandor Mulsow	Chile
Egor Lebedev	Russia	Mark J. Mihalasky	USA	Yoseph Swamidharma	Indonesia
Gerlee Bayanjargal	Mongolia	Markku Illjina	Finland	Yuqin Niu	China
Glenn Gemerts	Surinam	Martin Fairclough	Austria		

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The [Minerals Working Group](#) (MWG) was established to incorporate the UNFC with the SDGs in the exploration and mining environment.

Sustainable material flows are the mainstay of the global economy intimately connected to all other socio-economic activities. Sustainable management of global mineral resources is both critical for ensuring the security of supplies and pivotal for successful delivery of the UN Sustainable Development Goals (SDGs).

UNFC has been bridged to CRIRSCO (Committee for Mineral Reserves International Reporting Standards) Template and to [the National Standard of the People's Republic of China “Classification for Resources/Reserves of Solid Fuels and Mineral Commodities”](#).

The African Union has adopted the [African Mining Vision \(AMV\)](#) and has developed a UNFC based African Mineral and Energy Resources Classification and Management System (AMREC).

The MWG’s main target is to develop the specifications, guidelines, best practices and [case studies](#) for mineral resources.

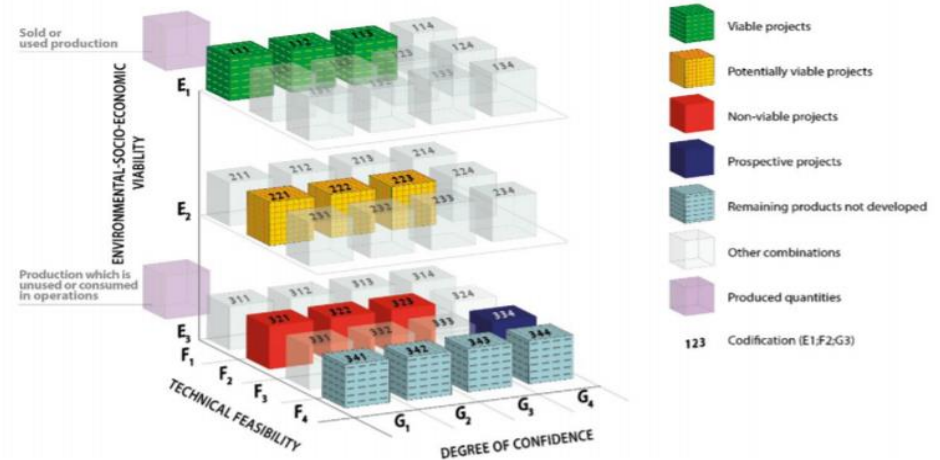
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- The Mineral Specifications and Guidelines for Minerals (draft version)
 - The major difference between UNFC and other mineral classification systems is the inclusion of the technical and the environmental-social-economic criteria as second and third axes in the sustainable evaluation of a exploration and mining project.
 - And its applicability for industrial, governmental and NGO's use in a universal assessment of mineral and other natural resources.

Stage Environmental-Social-Economic Assessment: reflects both, the economic assessment of the project as well as the environmental or social aspects within a project's lifecycle balanced against the SDGs.



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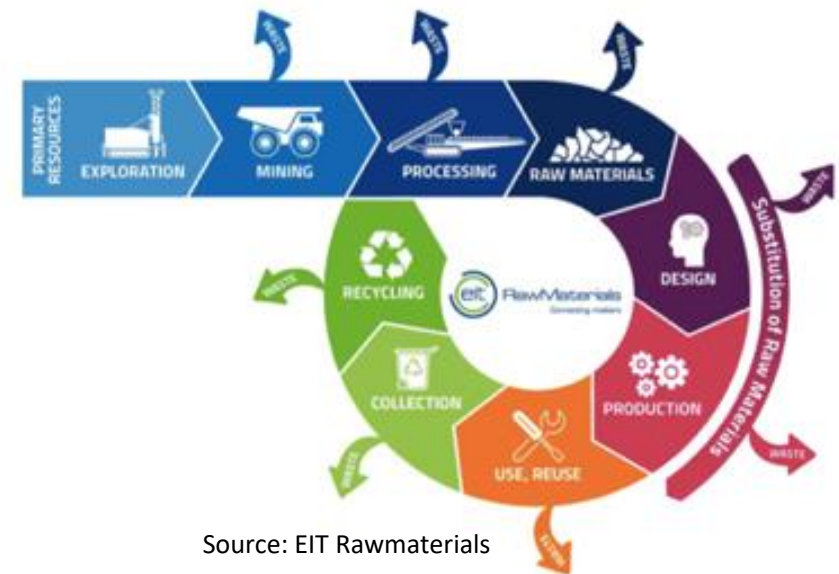


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The Mineral Specifications and Guidelines for Minerals (draft version)

This document outlines the United Nations Framework Classification for Resources (UNFC) specifications and guidelines for mineral resource management.

The objective is to promote the use of UNFC as a system for the sustainable management of all mineral resources. The mineral specifications and guidelines are intended to support the attainment of Sustainable Development Goals (SDGs) as relevant to the mineral industry through the entire mine life cycle from exploration over the production to mine site rehabilitation. Through their application the collective industry will be directed towards the shared global goals.



Source: EIT Rawmaterials

Of special importance is that the Mineral Specifications and Guidelines include environmental, economic and social factors (E-Axis) besides technical-financial (F-Axis) and scientific geological aspects.

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Category	Definition	Supporting Explanations
E1	Development and operation are confirmed to be environmentally-socially- economically viable.	<ul style="list-style-type: none"> • viable on the basis of current conditions and realistic assumptions of future conditions → <i>All necessary conditions have been met</i> (including relevant permitting and contracts) → or <i>there are reasonable expectations that all necessary conditions will be met within a reasonable timeframe</i> → and there are no impediments to the delivery of the product to the user or market • viability is not affected by short-term adverse conditions provided that longer-term forecasts remain positive.
E2	Development and operation are expected to become environmentally-socially-economically viable in the foreseeable future.	<ul style="list-style-type: none"> • Development and operation are <i>not yet confirmed to be environmentally-socially-economically viable</i> → but, on the basis of realistic assumptions of future conditions, there are <i>reasonable prospects</i> for environmental-socio-economic viability in the foreseeable future.
E3	Development and operation are not expected to become environmentally-socially-economically viable in the foreseeable future or evaluation is at too early a stage to determine environmental-socioeconomic viability.	<ul style="list-style-type: none"> • it is currently considered that <i>there are not reasonable prospects</i>; → or environmental-socio-economic viability <i>cannot yet be determined</i> due to insufficient information • Also included are estimates associated with projects that are forecast to be developed, but which will be unused or consumed in operations.

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The Competent Person / Evaluator Concept

- The Competent Person (CP) concept was developed in the mining industry after major frauds in the late 80ies and 90ies to protect the investors at the stock markets.
- Today it is the major standard to protect investors and the public in general against false reporting and disinformation.
- Therefore it is unavoidable to develop a guideline in UNFC to secure the qualification of the reporting person in public, industry, government and NGO institutions.
- Difference might be made between internal and external reporting.
- Part of this guideline should be the education and qualification of the reporting person in the specific field of work, his/her certification, the compliance to an ethic code and public disclosure of his/her qualifications.
- Guidelines will be provided in the specifications, in consultation with the Competent Person Task Force (CPTF).

Thank you

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