



EU Project on UNFC and UNRMS: Guidance to support the application of UNFC in Europe

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Sustainable Resource Management

UNECE

Committee on Sustainable Energy

Expert Group on Resource Management

- United Nations Framework Classification for Resources (UNFC) - **for classification and reporting**
- United Nations Resource Management System (UNRMS) - **sustainable transition pathway**





United Nations Framework Classification for Resources

Environmental-socio-economic viability

Technical feasibility

Degree of confidence

Project milestones

Project maturity

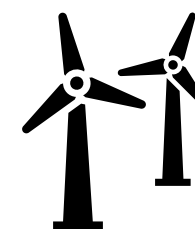
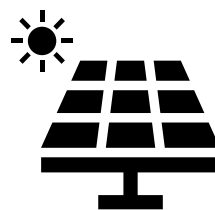
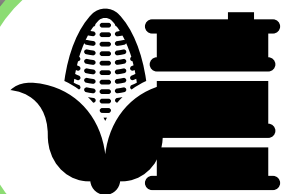
Project portfolios

Project pipelines

Resource reporting

Climate-related financial disclosures

Development of resources





Academia

Investor

Regulator

Project developer

Civil society

Policy makers

UNFC provides a basis for effective communication and cooperation

United Nations Resource Management System



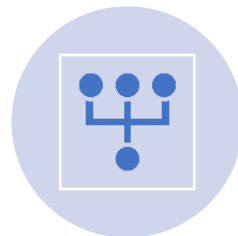
Framework for sustainable resource production and use



To support needs of governments to **support supply- and value-chains of natural resources**



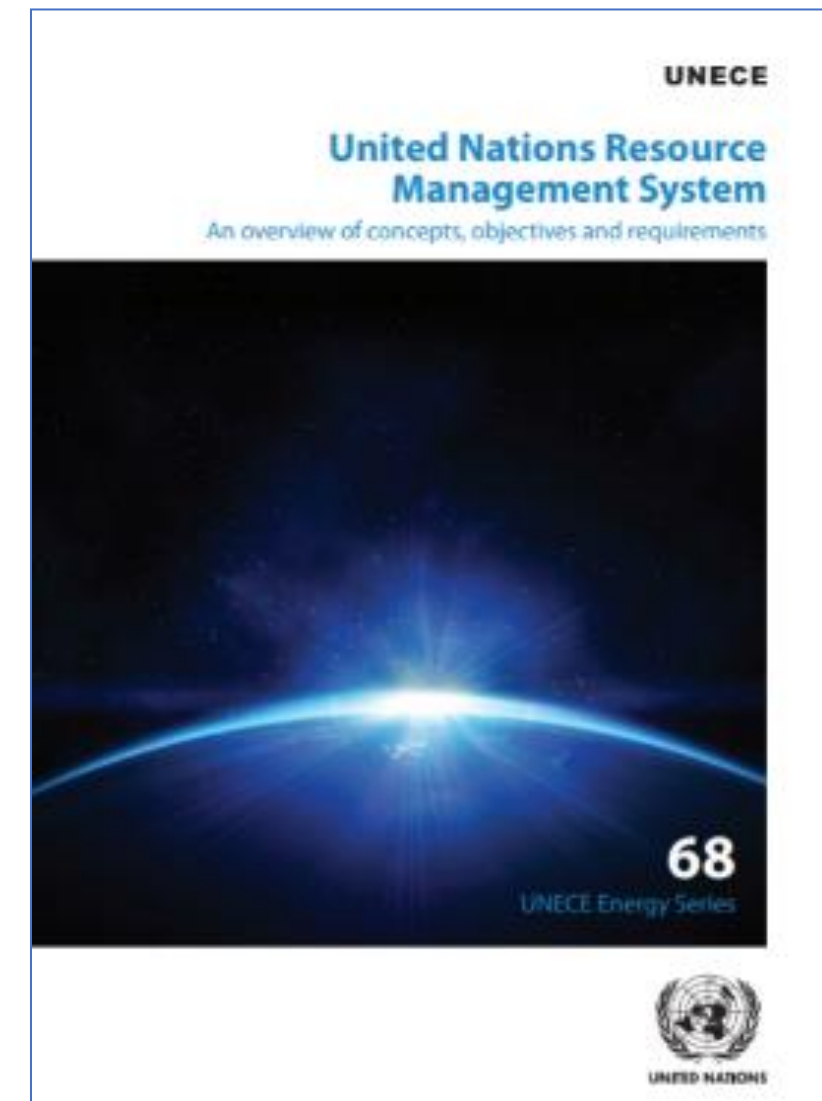
For **integrated**, sustainable and adaptive **development of resources**



Tool-kit (in progress) so could serve different needs of stakeholders

12 fundamental principles

12 requirements for consideration on a case by case basis



UNFC Guidance for Europe

Purpose

- Assist **regional and national authorities** to establish and maintain a project inventory of primary and secondary raw material projects in Europe based on UNFC
- Assist **qualified experts and resource estimate preparers** in Europe to classify primary AND secondary raw material projects
- Provide a **uniform raw materials data set** suitable for aggregated data across Europe for both primary and secondary raw materials
- Facilitate European resource management - ensure **coherent and consistent** national/regional raw materials project classification and resource management policies at European level
- Achieve alignment with the **Sustainable Development Goals**



UNFC Guidance for Europe

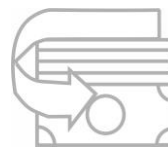
Why is a UNFC-based inventory important?



Public-sector decision-making ranging from onsite, municipality, regional, country and European level on aspects of the resource life cycle



Economic management for planning, organization, and leading activities of management of all **corporate** levels



Finance **investment** decision-making considering economic, environmental and social aspects of raw material projects



In **expertise, knowledge, and education**

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

UNFC GUIDANCE EUROPE

Guidance for the Application of the United Nations Framework Classification for Resources (UNFC) for Mineral and Anthropogenic Resources in Europe



75 |  UNECE

UNFC Guidance for Europe

Process

- **Started** in 2018 with DG GROW (Rodrigo Chanes) & UNECE (Hari Tulsidas)
- **Public Consultation (April–June 2022)**
- **Review Team**
 - **Janne Hokka, Geological Survey of Finland (Primary Reviewer)**
 - Alistair Jones, Imperial College London, United Kingdom
 - Hendrik Falck, Canadian Institute of Mining, Metallurgy and Petroleum & Geoscientists Canada
 - Pasi Eilu, Geological Survey of Finland
 - Sigurd Heiberg, Petronavitas, Norway
 - Ulrich Kral, Environment Agency Austria

UNFC Guidance for Europe

Structure

➤ UNFC Guidance for Europe

- Overview of UNFC Implementation for European & National Authorities
- Practical Guidance to Apply UNFC for Primary & Secondary Raw Materials
- ANNEX I: **UNFC Classes and Sub-classes and INSPIRE Code List**
- ANNEX II: Supplemental Guidance for **National Resource Reporting**
- ANNEX III: Supplemental Guidance for **Project Classification**
- ANNEX IV: Glossary of Terms
- ANNEX V: Additional Literature

Facilitate development of UNFC-based inventories across Europe and provide alignment with Infrastructure for Spatial Information in Europe (INSPIRE) for Mineral Resources

Approved by Expert Group on Resource Management 13th Session:

https://unece.org/sites/default/files/2022-10/Revised_UNFC_Guidance_Europe_as_of_19.October.2022.pdf

UNFC Classes defined by Categories and Sub-categories						INSPIRE Code list	TRL (Relevant to F axis)
Produced	Sold or used production						
	Production which is unused or consumed in operations <i>Future production that is either unused or consumed in the project operations is categorized as E3.1. These can exist for all classes of recoverable quantities^d</i>						
Total Products	Class	Sub-class	Categories			INSPIRE Code list	TRL
			E	F	G ^a		
Known Sources	Viable Projects <i>Estimates associated with Viable Projects are defined in many classification systems as Reserves, but there are some material differences between the specific definitions that are applied within different industries and hence the term is not used here.^d</i>	On Production	1	1.1	1, 2, (3) ^b	Operating Continuously Operating intermittently	9
		Approved for Development	1	1.2	1, 2, 3	Under development	8
		Justified for Development	1	1.3	1, 2, 3	Pending approval	5,6,7
	Potentially Viable Projects <i>Not all Potentially Viable Projects will be developed.^d</i>	Development Pending	2 ^c	2.1	1, 2, 3	Evaluation of Resources (Detailed Feasibility Study, Prefeasibility)	3,4
		Development OnHold	2	2.2	1, 2, 3	Care and maintenance Retention	
	Non-Viable Projects <i>Non-Viable Projects include those that are at an early stage of evaluation in addition to those that are considered unlikely to become viable developments within the foreseeable future.^d</i>	Development Unclassified	3.2	2.2	1, 2, 3	Assessment of Resources (Advanced exploration, Resources' definition, Prefeasibility, Scoping study (resources))	3,4
		Development NotViable	3.3	2.3	1, 2, 3	Closed Abandoned Historic	
	Remaining products not developed from identified projects <i>Remaining products not developed from identified projects or prospective projects may become developable in the future as technological or environmental-socio-economic conditions change. Some or all of these estimates may never be developed due to physical and/or environmental-socio-economic constraints.^a</i>		3.3	4	1, 2, 3		1,2
	Potential Sources	Prospective Projects	3.2	3.1	4	Subsurface exploration (Exploration Target Outline)	3,4
			3.2	3.2	4	Detailed surface exploration (Exploration)	3,4
3.2			3.3	4	Regional reconnaissance (Grassroots)	3,4	
Remaining products not developed from prospective projects		3.3	4.1	4		2	
		3.3	4.2	4		1	
		3.3	4.3	4			

Building capacity in member States to apply UNFC

EIT Raw Materials | Online Training | 2-3 February 2022

EU Member States | Online Training | 5-6 April 2022



Introduction of **UNFC** and its **application** with a focus on:

- Raw material exploration, mining, and processing projects
- Downstream projects (including anthropogenic resources and REEs)
- Other value chains

Introducing the functionalities of UNFC:

- Implementation of UNFC in EU Member States
- Focus on raw material exploration, mining and recycling projects
- Address financial and downstream value chain aspects
- Competency of individuals and authorities



- EIT Raw Materials and Partners (ERMA)
- EIT Innoenergy (EBA)
- Policy & Regulatory parts of ministries of EU MS
- Government Agencies (Geological Surveys)



Network of Practitioners Europe (NoPE)

- Membership of Network
 - National Contact Points
- Focus areas
 - Translation of UNFC into EU languages
 - UNFC training – exchange of practice
 - UNFC Guidance for Europe
- EU CRM database
- UNFC in Horizon Europe (HE) projects:
 - Geological Service for Europe
 - FutuRaM
 - SEMACRET
- Way forward in HE project: Geological Service for European Union / International Centre of Excellence on Sustainable Resource Management (ICE-SRM)





Save the date!
UNECE Resource Management Week 2023

Palais des Nations, Geneva, Switzerland

25-28 April 2023

For more information:

<https://unece.org/sustainable-energy/sustainable-resource-management>

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Thank you!

